

# Methamphetamine Trafficking Offenses in the Federal Criminal Justice System



United States Sentencing Commission  
*June 2024*



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**June 2024**





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# Introduction

Over the last 30 years methamphetamine has evolved from a “small problem confined primarily to several western states” to the most prevalent drug in the federal criminal justice system.<sup>1</sup> Congressional action in the late 1990s and early 2000s aimed to slow the spread of methamphetamine trafficking by limiting licit access to precursor chemicals and increasing penalties.<sup>2</sup> While domestic methamphetamine production waned in the years following this legislation, Mexican Transnational Criminal Organizations (TCOs) began producing highly pure methamphetamine on an industrial scale and exporting it to the United States. By fiscal year 2022, methamphetamine offenses accounted for approximately one-half of all drug trafficking offenses sentenced federally.

In addition to its dominance in the federal caseload, individuals sentenced for trafficking methamphetamine in fiscal year 2022 received longer sentences than individuals sentenced for trafficking fentanyl, heroin, or cocaine. This difference is largely driven by the statutory and guideline penalty provisions, which provide different sentences based on the purity of methamphetamine involved in the offense. These statutory penalties effectively produce a 10-to-1 ratio of actual methamphetamine to methamphetamine mixture, meaning it takes ten times less pure methamphetamine to trigger the same penalty than a mixture containing a detectable amount of methamphetamine. Laboratory testing determines the purity, and therefore type and quantity of methamphetamine mixture, actual, or Ice involved in the offense. Therefore, testing results also play an important role in establishing the statutory mandatory minimum penalties and base offense levels under the drug trafficking guideline.

**Kristin M. Tennyson, Ph.D.**  
*Deputy Director*  
*Office of Research and Data*

**Melissa K. Reimer**  
*Research Associate*  
*Office of Research and Data*

**Tessa Guiton, M.A.**  
*Research Associate*  
*Office of Research and Data*

**Charles S. Ray, J.D.**  
*Assistant General Counsel*  
*Office of General Counsel*

As a result of this underlying penalty structure, some sentencing courts have recently criticized the methamphetamine penalties as overly punitive and contributing to unwarranted sentencing disparity.<sup>3</sup> Critics claim this emphasis on drug purity for methamphetamine offenses can create unwarranted sentencing disparity because it is dependent on drug testing practices which are not performed consistently across the 94 federal districts.<sup>4</sup> Therefore, sentences imposed may reflect inconsistencies in local drug testing practices rather than the purity of the methamphetamine in the offense.

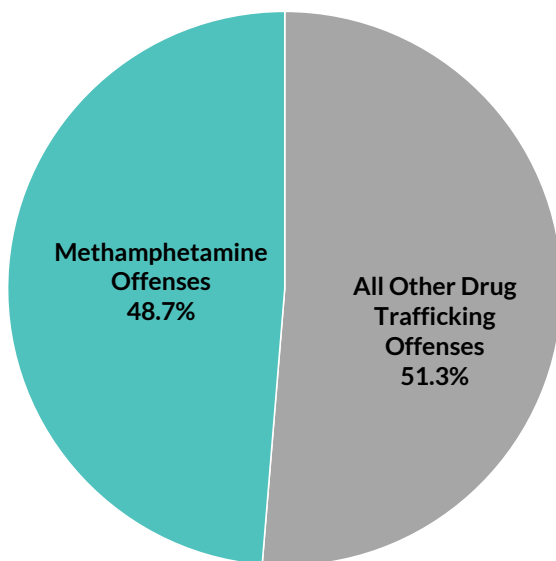
This report explores these concerns by examining the purity level of methamphetamine cases sentenced in fiscal year 2022. When Congress established the different statutory penalties for actual methamphetamine and methamphetamine mixture in the Anti-Drug Abuse Act of 1988,<sup>5</sup> the average purity of the methamphetamine being trafficked in the United States was seldom greater than 50 percent.<sup>6</sup> At the time, individuals sentenced for trafficking highly pure methamphetamine were considered to have a higher function in a drug distribution chain, and therefore greater culpability in the offense.<sup>7</sup>

Since then, however, the purity of the methamphetamine trafficked in the United States has increased substantially and it now is rare to find methamphetamine that tests lower than 90 percent pure. Rather, Commission data finds that two-thirds of the methamphetamine tested in federal drug trafficking offenses is at least 96 percent pure.

The increasing purity of methamphetamine has caused some courts to question whether the guidelines distinction between pure or actual methamphetamine and methamphetamine mixture serves as a reliable proxy for the sentenced individual's culpability.<sup>8</sup> This report examines recent trends in methamphetamine trafficking offenses and sentencing to assess the impact of legislation and the Commission's subsequent guideline amendments. To that end, the Commission analyzed 20 years of sentencing data on methamphetamine offenses and conducted a special data collection project examining the purity of methamphetamine trafficked and offense conduct of individuals sentenced for trafficking methamphetamine in fiscal year 2022.

## Key Findings

**1** Methamphetamine has been the predominant drug in the federal caseload since fiscal year 2014 and comprised approximately one-half (48.7%; n=9,555) of all drug trafficking offenses in fiscal year 2022.



**3** Methamphetamine is highly and uniformly pure.

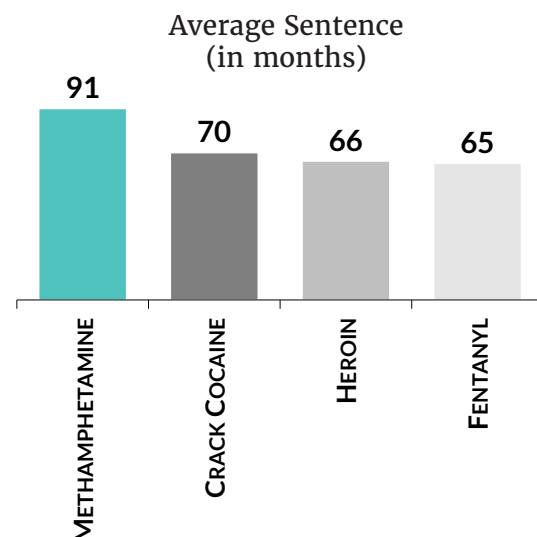
- The methamphetamine tested in fiscal year 2022 was on average over 90 percent pure (93.2%) with a median purity of 98.0 percent.

- The methamphetamine tested in fiscal year 2022 was uniformly highly pure regardless of whether it was sentenced as methamphetamine mixture (91.0% pure on average), methamphetamine actual (92.6%), or Ice (97.6%).

**2** In fiscal year 2022, individuals sentenced for trafficking methamphetamine received average sentences of 91 months, the longest among all persons sentenced for a federal drug trafficking offense.

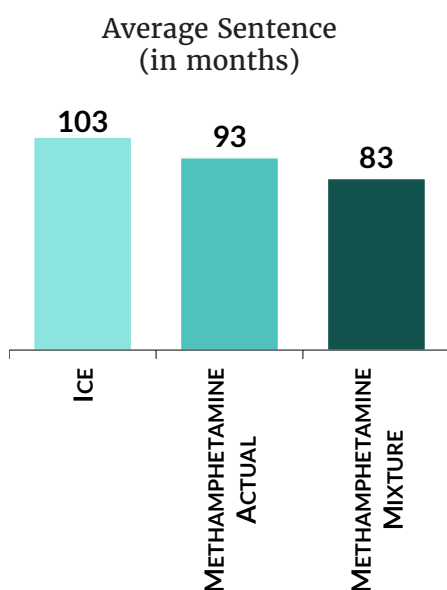
- Methamphetamine trafficking was more severely sentenced than crack cocaine (70 months), heroin (66 months), or fentanyl trafficking (65 months).

- Individuals sentenced for trafficking methamphetamine were convicted of an offense carrying a mandatory minimum penalty more often than all other individuals sentenced for drug trafficking (74.2% compared to 56.6%). However, they received relief from mandatory minimum penalties at similar rates (54.7% and 58.4%, respectively).



**4** Because the statutory and guideline penalties for methamphetamine are based in part on purity, sentences imposed are impacted by laboratory testing practices which vary across the nation.

- Individuals sentenced for trafficking methamphetamine mixture received shorter average sentences (83 months) than individuals sentenced for trafficking methamphetamine actual (93 months) or Ice (103 months).
- Laboratory testing to determine purity was performed in three-quarters (75.6%) of the methamphetamine offenses in this study and varied geographically.
- Border districts had higher rates of drug testing (86.4%) compared to non-border districts (71.2%).
- Testing also varied by judicial circuit. More than 85 percent (85.6%) of methamphetamine offenses sentenced in the Ninth Circuit involved laboratory testing, compared to 58.0 percent of methamphetamine offenses sentenced in the Seventh Circuit.



**5** Sentencing guideline enhancements targeted at domestic methamphetamine production rarely apply, as the production of the drug has shifted outside the United States.

- In fiscal year 2022, only ten individuals received an enhancement related to harm to persons or the environment.
- This study identified only 19 methamphetamine laboratories, used solely to convert liquid methamphetamine into a crystal form.

**6** Sentencing guideline adjustments related to the individual's role in the offense have a greater impact in methamphetamine offenses compared to all other drug trafficking offenses.

- A greater percentage of individuals sentenced for methamphetamine trafficking received a mitigating role adjustment under §3B1.2 for having minimal or minor participation in the drug offense (23.5%) compared to those trafficking other drugs (17.0%).

- Nearly thirty percent (27.2%) of individuals who trafficked methamphetamine actual received a mitigating role adjustment, more than individuals who trafficked either methamphetamine mixture (19.7%) or Ice (18.3%).

# Characteristics of Methamphetamine

Methamphetamine<sup>9</sup> is a Schedule II stimulant under the Controlled Substances Act (or “CSA”).<sup>10</sup> It is one of a class of mostly synthetic substances called amphetamine-type stimulants that increase activity in the central nervous system<sup>11</sup> when ingested orally, snorted, injected, or smoked.<sup>12</sup> Methamphetamine triggers the release of the monoamine neurotransmitters dopamine, serotonin, and norepinephrine that overwhelm the pleasure center of the brain and provide a sensation of euphoria, or a “high,” which can affect the user for up to 15 hours.<sup>13</sup> Methamphetamine also blocks the re-uptake of dopamine, which contributes to a higher concentration of dopamine and the addictiveness of the drug.<sup>14</sup>

In addition to the feeling of euphoria, methamphetamine can cause both short and long-term adverse effects. As a Schedule II controlled substance,

methamphetamine has a “high potential for abuse and the potential to create severe psychological and/or physical dependence.”<sup>15</sup> Methamphetamine may result in tachycardia (i.e., rapid heartbeat), hypertension (i.e., high blood pressure), anxiety or agitation, and even death.<sup>16</sup> Long-term use of methamphetamine can cause damage to the brain and permanent neurological damage, manifesting in paranoia, violent behavior, insomnia, and hallucinations.<sup>17</sup> Taken in large doses, methamphetamine may result in an overdose death from stroke, heart attack,<sup>18</sup> or organ failure caused by overheating.<sup>19</sup>

According to data from the Centers for Disease Control and Prevention (CDC) overdose deaths from psychostimulants, comprised mostly of methamphetamine, increased 703 percent from 2011 to 2021 (Figure 1).<sup>20</sup>

**Figure 1. Overdose Deaths Involving Psychostimulants (Primarily Methamphetamine), 1999–2021<sup>21</sup>**

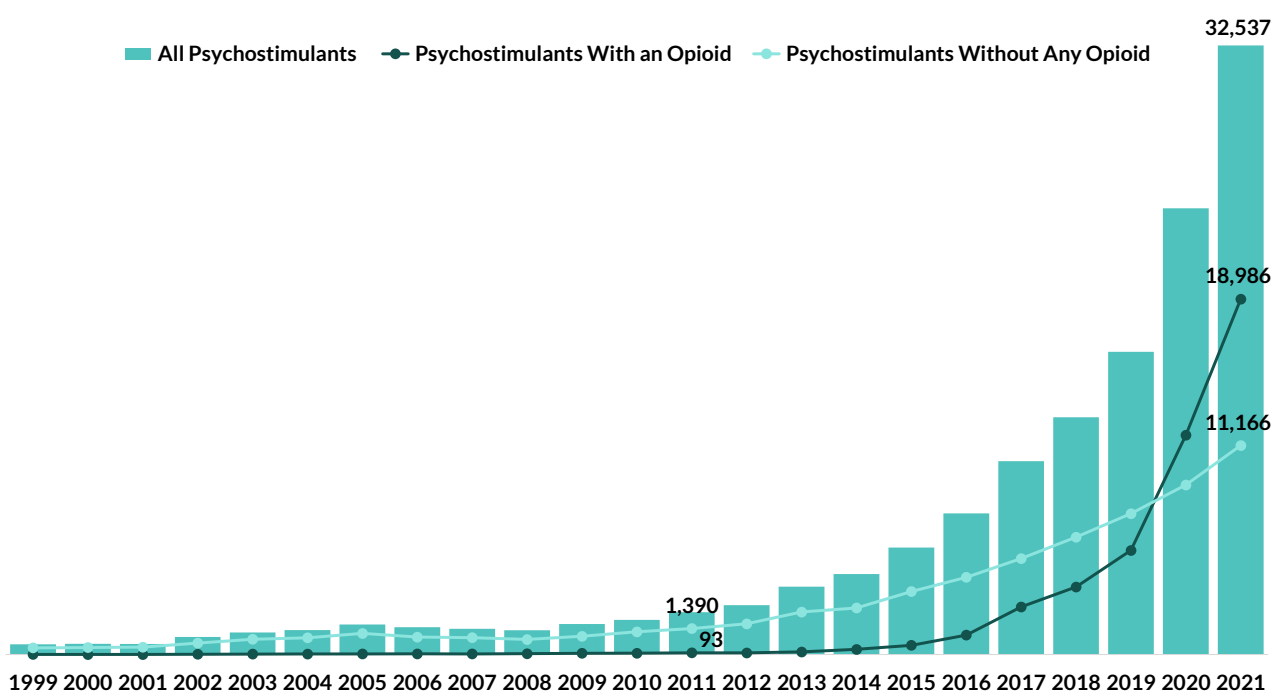


Figure 2. Methamphetamine Tablets<sup>22</sup>



*Legitimate Adderall tablets (left) and counterfeit tablets containing methamphetamine (right)*  
Source: National Drug Threat Assessment Report

## Licit Methamphetamine

As a Schedule II controlled substance, methamphetamine is accepted for medical use in Food and Drug Administration (FDA)-approved products.<sup>23</sup> Desoxyn is the only FDA-approved drug containing methamphetamine.<sup>24</sup> It is available by prescription-only and used to treat obesity and attention deficit hyperactivity disorder (ADHD).<sup>25</sup>

## Illicit Methamphetamine

Illicitly manufactured methamphetamine is available in different forms, including liquid, powder, crystals, and pills. Methamphetamine is most frequently encountered in powder or crystal form as a hydrochloride salt.<sup>26</sup> In this hydrochloride state, methamphetamine has garnered the street name of “crystal” or “ice,” because it resembles glass fragments or shiny rocks.<sup>27</sup>

Like other illicitly manufactured substances, such as fentanyl, methamphetamine is commonly pressed and trafficked in pill format. In 2019, the DEA began to encounter methamphetamine in pill format across ten of its 23 field offices.<sup>28</sup> In

some instances, the methamphetamine was pressed to resemble legitimate prescription drugs such as Adderall (Figure 2).<sup>29</sup> Illegitimately manufactured pills pose unique dangers to drug users as the dosages of illicit substances are unknown and the pills often include other substances, including fentanyl or fentanyl analogues.<sup>30</sup>

Methamphetamine is also trafficked as a liquid solution because it easily dissolves in other liquids including water, alcoholic beverages, and even gasoline.<sup>31</sup> This allows large quantities of methamphetamine to be trafficked using tankers, large capacity barrels, or car and truck fuel tanks.<sup>32</sup> Methamphetamine solution is rarely sold on the streets, rather, the drug is extracted from the liquid solution and converted to crystal form prior to retail sale.<sup>33</sup>

Increasingly, the DEA has seized methamphetamine mixed with small amounts of fentanyl and fentanyl analogues.<sup>34</sup> In 2014, only four of the drug samples tested by the DEA contained fentanyl and methamphetamine.<sup>35</sup> By 2019, that number had increased to 1,618 tested samples containing both fentanyl and methamphetamine.<sup>36</sup>

**Overdose deaths from psychostimulants, comprised mostly of methamphetamine, increased 703 percent from 2011 to 2021 according to data from the CDC.**

## Methamphetamine Potency and Purity

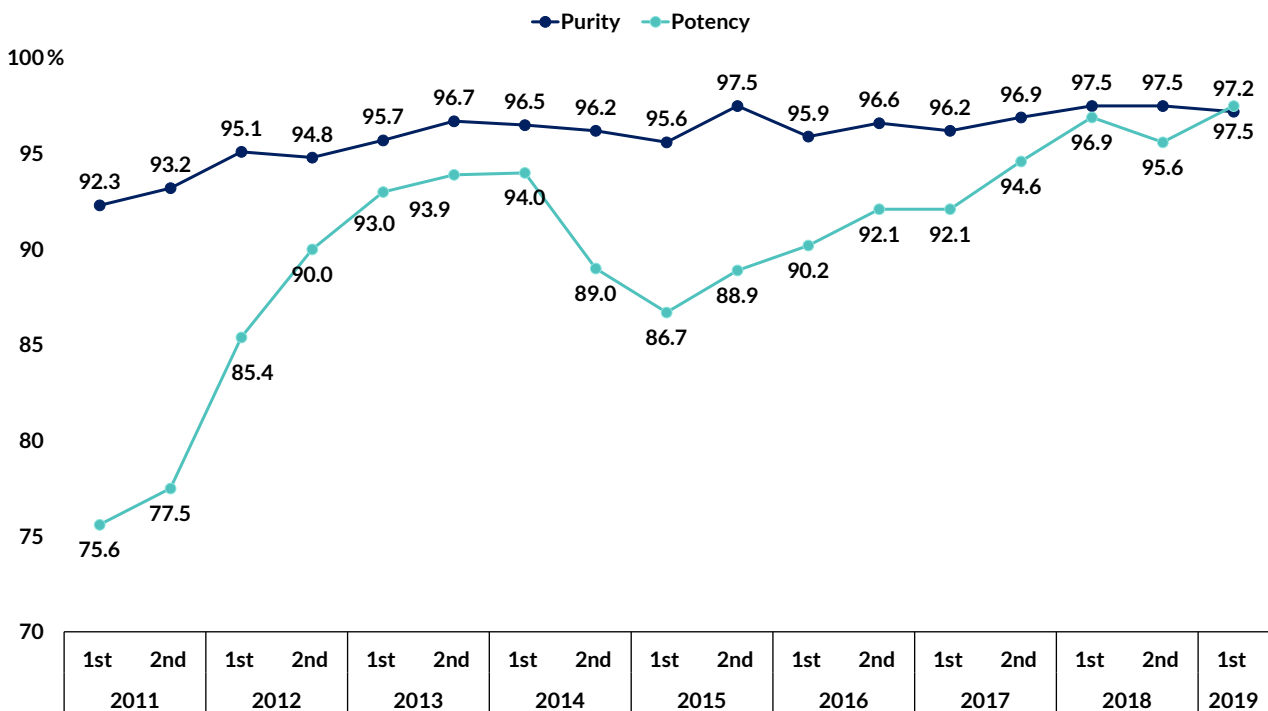
Illicitly manufactured methamphetamine can vary considerably in its potency. Potency refers to the quantity of drug needed to produce the desired outcome—in this case, a “high.”<sup>37</sup> Highly potent drugs achieve their desired effect with very little quantity of the substance.

The potency of illicit methamphetamine is dependent upon its molecular structure. Methamphetamine has two isomers:<sup>38</sup> dextro methamphetamine (*d*-methamphetamine) and levo methamphetamine (*l*-methamphetamine). Almost all trafficked forms of methamphetamine contain some quantity of *d*-methamphetamine, which is a powerful central nervous system stimulant.<sup>39</sup> The most potent and prevalent forms of methamphetamine on the street consist of pure *d*-methamphetamine.

On its own, *l*-methamphetamine, does not activate the central nervous system to create a “high” sensation; however, it is an active ingredient in over-the-counter medications, such as nasal inhalers and decongestants.<sup>40</sup> Additionally, *l*-methamphetamine is a byproduct in the illicit manufacturing of *dextro-levo* methamphetamine (or “*d,l*-methamphetamine”), which is a combination of the drug’s two isomers.<sup>41</sup> The proportion of *d*-methamphetamine in the substance determines its potency,<sup>42</sup> therefore, *d,l*-methamphetamine historically has been less prevalent among users because it is less potent than *d*-methamphetamine.<sup>43</sup>

According to the DEA, the average purity of methamphetamine samples tested increased from 57.4% in 2003 to 97.2% in the first half of 2019



Figure 3. Purity and Potency of Methamphetamine Tested, 2011–2019<sup>44</sup>

Source: National Drug Threat Assessment Reports

According to the DEA, the average potency of methamphetamine trafficked in the United States in the first half of 2019 was 97.5 percent.<sup>45</sup> This represents a roughly 30 percent increase in the average potency of trafficked methamphetamine since 2011 (Figure 3). The high potency of methamphetamine currently being trafficked means that smaller quantities are required to achieve the drug's desired effect.

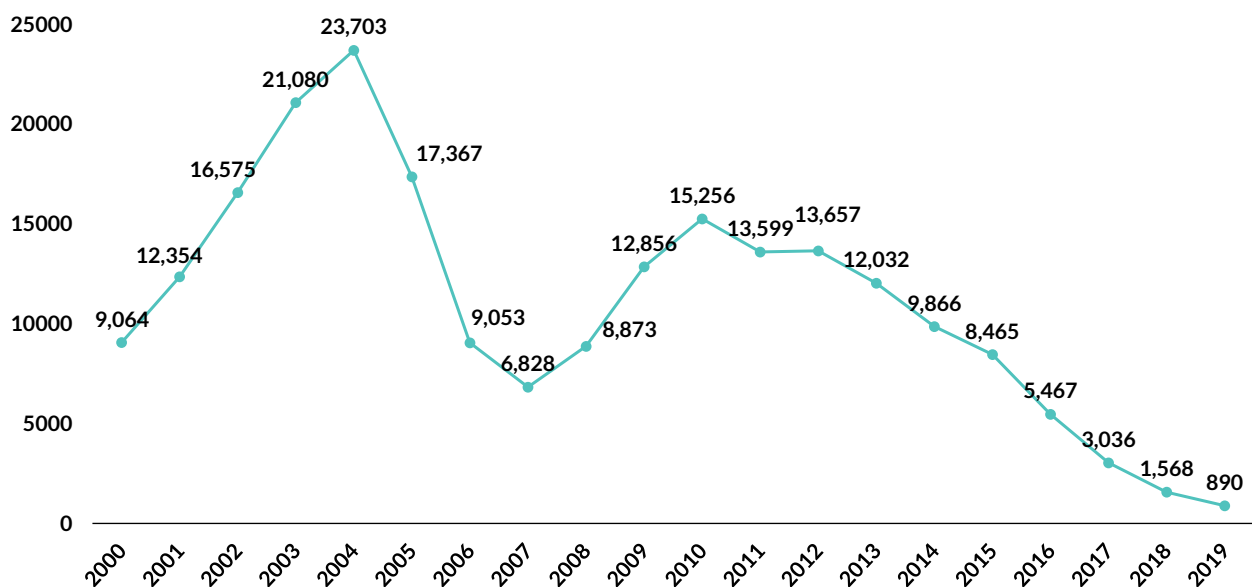
In addition to the potency of the drug, methamphetamine also has varying levels of purity, which affects the statutory and guideline provisions for a methamphetamine trafficking offense.<sup>46</sup> Purity is a measure of the amount of an illicit substance, here methamphetamine, present in a sample compared to other substances in the sample such as adulterants, diluents, or solvents. When distributed, methamphetamine can be mixed with inert substances, over-the-counter medications, or other illicit drugs, reducing its purity. In the last two decades the purity of illicit methamphetamine distributed in the United States has increased precipitously. According to the DEA, the average purity of methamphetamine samples tested in 2003 was 57.4 percent.<sup>47</sup> The average purity of methamphetamine tested in the first half of 2019 was 97.2 percent.<sup>48</sup>

## Domestic Production

Illicit methamphetamine production plummeted domestically following the enactment of the Combat Methamphetamine Epidemic Act (or “CMEA”) in 2006, which placed restrictions on key precursors, like ephedrine and pseudoephedrine.<sup>49</sup> According to the DEA, the method used to manufacture methamphetamine is largely driven by the availability of the precursor chemicals

involved in the process.<sup>50</sup> Consequently, methamphetamine laboratory seizures across the United States decreased from a high of 23,703 labs in 2004 to a low of 890 in 2019 (Figure 4). Not only are there fewer production labs in the United States, compared to the pre-CMEA era, but these labs produce on a very small scale. In 2019, 84.8 percent of all methamphetamine laboratories seized in the United States were small laboratories capable of producing two ounces or less of methamphetamine.<sup>51</sup>

Figure 4. Number of Domestic Methamphetamine Laboratory Incidents, 2000–2019<sup>52</sup>



Source: National Drug Threat Assessment

### Conversion Laboratories

In addition to production laboratories, methamphetamine conversion laboratories are used to either convert powder methamphetamine into crystal, enrich the drug's purity, mix it with other substances, or press it into tablets.<sup>53</sup> As discussed, methamphetamine can be trafficked in large quantities in a soluble format. Once the liquid methamphetamine is in the United States, these conversion laboratories—also known as recrystallization labs—extract the methamphetamine from the solution and turn it into a crystal that can be sold on the streets. In 2019, 17 of the 890 laboratories identified in the United States were conversion labs.<sup>54</sup>

### Methamphetamine Importation

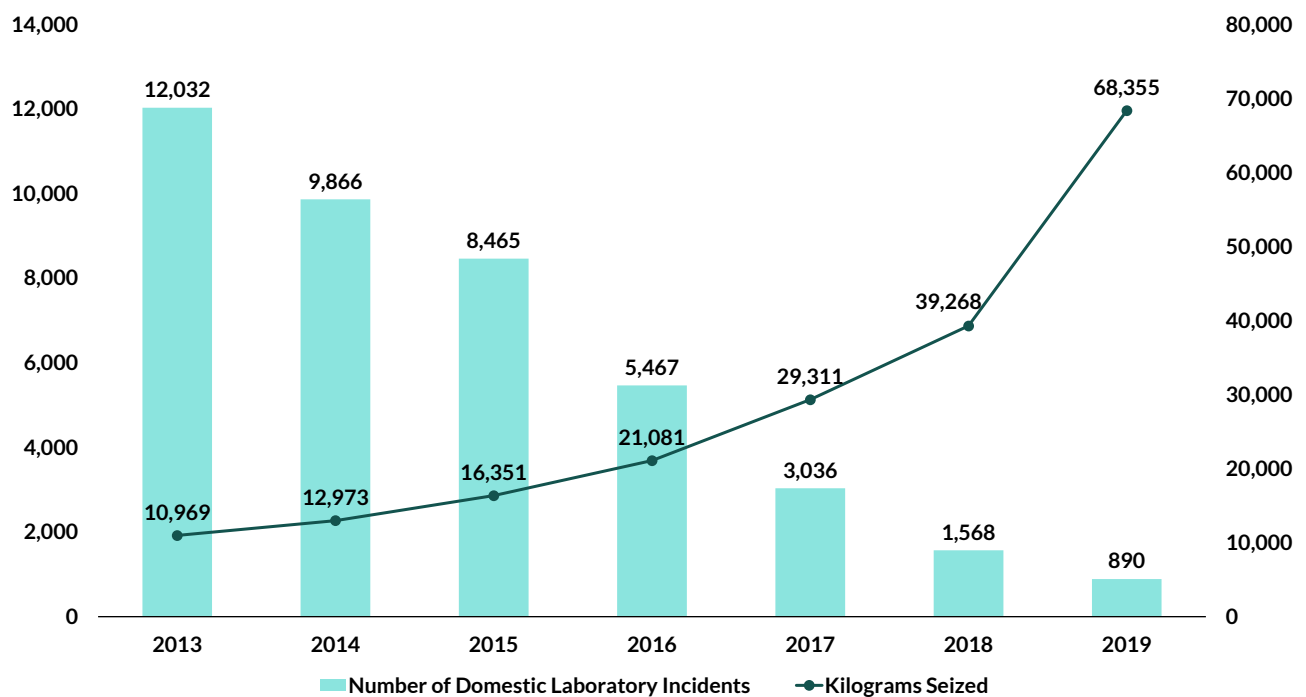
As domestic production of methamphetamine decreased in the early 2000s, Mexican Transcontinental Criminal Organizations (TCOs) ramped up importation of higher quality, lower cost methamphetamine produced on an industrial scale (Figure 5). Methamphetamine production shifted to Mexico as precursor chemicals became highly regulated in the United States. Mexican TCOs found ways to bypass these restrictions by either using uncontrolled precursor chemicals or clandestinely importing or producing controlled precursors.<sup>55</sup> Today, most of the methamphetamine sold in the United States is produced in large laboratories in Mexico, which the DEA calls “super laboratories,” capable of producing multiple kilogram quantities of highly pure methamphetamine which is then shipped across the border.<sup>56</sup> Once in the United States, Mexican criminal organizations also control most of the wholesale distribution of methamphetamine and largely control domestic retail distribution.<sup>57</sup>

**Most methamphetamine sold in the U.S. is produced in large laboratories in Mexico, which the DEA calls “super laboratories,” capable of producing industrial quantities of highly pure methamphetamine, which is shipped across the border.**

This shift in production is evidenced by the growing quantity of methamphetamine seizures at the border (Figure 5). As domestic production of methamphetamine decreased, methamphetamine seizures along the southwest border increased precipitously. In fiscal year 2013, U.S. Customs and Border Protection (CBP) seized just under 11,000 pounds of methamphetamine.<sup>58</sup> In fiscal year 2023, CBP seized more than ten times that amount, recovering 140,000 pounds of methamphetamine at the southwest border.<sup>59</sup>

The majority of methamphetamine entering the United States is smuggled across the southwestern border through various means, including human couriers, parcel services, and commercial trucking.<sup>60</sup> Large quantities of methamphetamine are trafficked in fuel tanks carrying liquid methamphetamine.<sup>61</sup> Couriers import kilo-sized quantities, often concealing the methamphetamine in tires or the doors of vehicles.<sup>62</sup> Couriers will conceal smaller parcels of methamphetamine in or on their persons when crossing the southwest border into the United States.<sup>63</sup>

Figure 5. Methamphetamine Laboratory Incidents and Methamphetamine Seizures on Southwest Border, 2013–2019<sup>64</sup>



In FY13, CBP seized just under 11,000 pounds of methamphetamine. In FY23, CBP seized 140,000 pounds of methamphetamine at the southwest border.

# Methamphetamine Statutory Scheme

The most commonly prosecuted drug offenses are violations of 21 U.S.C. §§ 841(a) and 960(a). These statutes prohibit the distribution, manufacture, importation, and possession with intent to distribute specific controlled substances. Under both provisions, mandatory minimum penalties are tied to the type and quantity of the controlled substance involved in the offense.<sup>65</sup> When certain quantity thresholds are met, a five-year mandatory minimum penalty and a maximum term of 40 years applies. Larger amounts increase the mandatory minimum to ten years, with a maximum of life imprisonment. Higher penalty ranges apply if death or serious bodily injury result from use of the controlled substance, the individual has one or more prior qualifying convictions, or both.<sup>66</sup>

While the statutory penalties for most drug types are based solely on drug quantity, the statutory penalties for methamphetamine are also based on the purity of the substance involved in the offense.<sup>67</sup> Sections 841 and 960 provide quantity threshold triggers for the five- and ten-year mandatory minimums for both methamphetamine (actual), and methamphetamine (mixture), “a mixture or substance containing a detectable amount of methamphetamine.”<sup>68</sup> Table 1 provides a list of the five- and ten-year mandatory minimum threshold trigger quantities for methamphetamine (actual) and methamphetamine (mixture) along with several other most commonly distributed controlled substances.<sup>69</sup>

**Table 1. Quantity Thresholds Triggering Mandatory Minimum Penalties for Common Controlled Substances under 21 U.S.C. §§ 841(b)(1) and 960(b)**

Quantity Thresholds Triggering Mandatory Minimum Penalties for Common Controlled Substances under 21 U.S.C. §§ 841(b)(1) and 960(b)		
Controlled Substance	5 Year Minimum	10 Year Minimum
Methamphetamine (actual)	5 g	50 g
Fentanyl analogue	10 g	100 g
Cocaine base	28 g	280 g
Fentanyl	40 g	400 g
Methamphetamine (mixture)	50 g	500 g
Heroin	100 g	1 kg
Cocaine	500 g	5 kg
Marijuana	100 kg	1,000 kg

As the quantity thresholds indicate, two different 10-to-1 quantity ratios set the mandatory minimum penalties for methamphetamine trafficking offenses. First, the quantity of substance triggering the ten-year minimum is ten times the quantity triggering the five-year minimum. Secondly, the quantity of methamphetamine mixture triggering each mandatory minimum is set at ten times the quantity of the pure controlled substance triggering that same statutory minimum penalty. The effect of this 10-to-1 quantity ratio is that the weight of the pure substance will control the statutory penalty whenever the purity of a methamphetamine mixture exceeds ten percent.

The mandatory minimum threshold quantity for methamphetamine (actual) is the lowest threshold quantity among commonly distributed controlled substances.

## Statutory and Guideline Penalty Schemes

Individuals convicted of violating sections 841(a) and 960(a) are sentenced under Part D of Chapter Two of the *Guidelines Manual*.<sup>70</sup> The principal drug trafficking guideline is §2D1.1 (Unlawful Manufacturing, Importing, Exporting, or Trafficking), which typically applies to convictions for distributing, manufacturing, importing, or possessing with intent to distribute controlled substances. Section 2D1.1 has five alternate base offense levels. Sections 2D1.1(a)(1)-(4) provide for enhanced sentencing ranges when an offense involves death or serious bodily injury.<sup>71</sup>

Section §2D1.1(a)(5) ties the base offense level to the type and quantity of drugs involved in the offense, ranging from an offense level of 6 to offense level 38.<sup>72</sup> For offenses that involve drug quantities triggering the five- and ten-year mandatory minimum penalties,<sup>73</sup> the Commission has

established guideline ranges that incorporate the mandatory minimum penalty.<sup>74</sup> Drug quantity determines the sentences for the vast majority of drug trafficking individuals sentenced under §2D1.1.

## Guideline Sentences for Methamphetamine Offenses

Methamphetamine is one of the few substances for which the base offense level varies by purity.<sup>75</sup> Specifically, the Drug Quantity Table differentiates among:

A) “Ice,” defined as “a mixture or substance containing d-methamphetamine hydrochloride of at least 80% purity”;<sup>76</sup>

B) “Methamphetamine (actual),” referring to the actual weight (purity) of the methamphetamine contained in the mixture;<sup>77</sup> and

C) Methamphetamine, which includes the entire weight of the mixture or substances.<sup>78</sup>

As previously noted, the statutory penalties for methamphetamine mixture and methamphetamine (actual) have a 10:1 quantity ratio, such that it takes ten times more methamphetamine mixture than methamphetamine actual to trigger the five- and ten-year mandatory minimum penalties.<sup>79</sup> The sentencing guidelines reflect this 10:1 quantity ratio between methamphetamine mixture and methamphetamine (actual).<sup>80</sup>

Ice is not a statutorily defined substance but is included in the guidelines in response to a congressional directive in 1990 that offense levels in cases involving smokable crystal methamphetamine (popularly known as “Ice”) be two levels above those for other forms of methamphetamine.<sup>81</sup> “Ice” had appeared primarily on the West Coast and Congress was concerned that this form of methamphetamine would quickly spread to other communities across the Nation.<sup>82</sup> In response to this directive, the Commission amended the

guidelines in 1990 to add a definition for “Ice” as “a mixture or substance containing d-methamphetamine hydrochloride of at least 80% purity.”<sup>83</sup> The Commission set the base offense levels for quantities of Ice equal to the base offense levels for the same quantities of methamphetamine (actual). Courts have treated Ice as 100 percent pure methamphetamine and apply the mandatory minimum penalties for methamphetamine (actual) in those cases.

### *Specific Offense Characteristics and Departures for Methamphetamine Offenses*

Section 2D1.1 provides for several enhancements and departures that can be applied in methamphetamine offenses. Subsection §2D1.1(b)(5) provides for a two-level increase if (A) the offense involved the importation of, or manufacture of methamphetamine from, listed chemicals that the defendant knew were imported unlawfully, and (B) the defendant is not subject to a mitigating role adjustment under §3B1.2 (Mitigating Role).<sup>84</sup> Subsection §2D1.1(b)(6) provides for a two-level increase if the individual is convicted under 21 U.S.C. § 865 (Smuggling methamphetamine or methamphetamine precursor chemicals into the United States while using facilitated entry programs).<sup>85</sup> Section 2D1.1 also provides for an upward departure in cases of “unusually high purity” for some controlled substances, including methamphetamine.<sup>86</sup>

The chemical processes used to manufacture methamphetamine both involve and produce hazardous materials that are dangerous to people near methamphetamine manufacturing sites and to law enforcement investigating the sites and remediation crews cleaning the sites, along with harm to the environment. To address these heightened health and environmental harms, the guidelines provide a tiered enhancement at §2D1.1(b)(14) of two-, three-, and six-levels based on the status of the person (e.g.,

a minor or incompetent) exposed to the health harms and the level of environmental harm caused by the methamphetamine manufacturing process.<sup>87</sup> This enhancement also provides for minimum offense levels of 14, 27, or 30 levels based on the specific harm involved.<sup>88</sup> Additionally, both §§2D1.11(b)(3) and 2D1.12(b)(2) provide a two-level enhancement where a chemical precursor is unlawfully discharged into the environment.<sup>89</sup>

## Precursor Chemicals

Methamphetamine is a “synthetic” drug manufactured using chemicals or “precursors,” such as acetone, anhydrous ammonia (fertilizer), ether, red phosphorus, and lithium.

Most methamphetamine precursors are tightly controlled because they are hazardous materials in addition to their use in illicit drug manufacturing.

Violations of these controls are criminal offenses. Offenses involving the illicit use or unlawful distribution of precursor chemicals or the equipment used to manufacture methamphetamine are referenced in the *Guidelines Manual* to §2D1.11 (Unlawfully Distributing, Importing, Exporting or Possessing a Listed Chemical; Attempt or Conspiracy); §2D1.12 (Unlawful Possession, Manufacture, Distribution, Transportation, Exportation, or Importation of Prohibited Flask, Equipment, Chemical, Product, or Material; Attempt or Conspiracy); and, §2D1.13 (Structuring Chemical Transactions or Creating a Chemical Mixture to Evade Reporting or Recordkeeping Requirements; Presenting False or Fraudulent Identification to Obtain a Listed Chemical; Attempt or Conspiracy).



# Methamphetamine Offenses

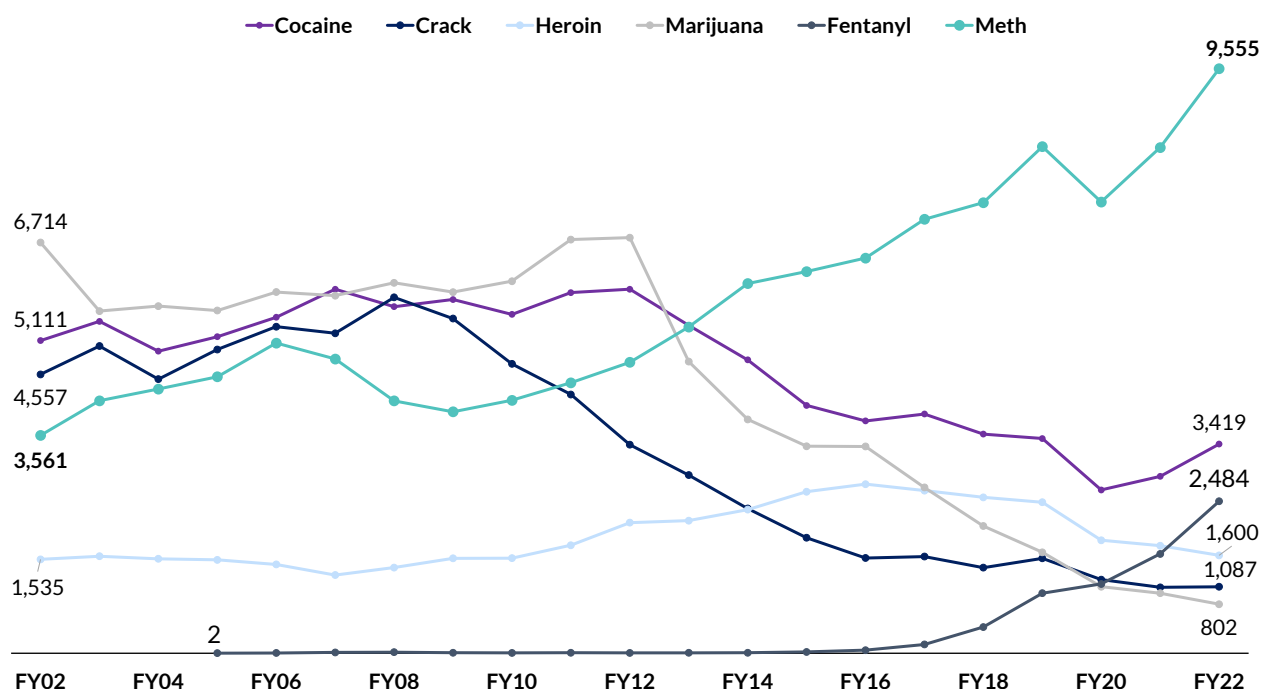
## Prevalence of Methamphetamine Drug Trafficking Cases

The proportion of cases involving methamphetamine in the overall federal drug trafficking caseload has steadily increased over the past 20 years, becoming the predominant drug trafficked in the last decade. As depicted in Figure 6, methamphetamine cases increased annually from fiscal year 2002 to fiscal year 2006. Following a brief decline,

the number of methamphetamine cases started to climb again in fiscal year 2010, and methamphetamine has been the predominate drug in the federal drug trafficking caseload since 2014.

To put these figures in context, at the time of the Commission's 1999 report, there were only 2,292 individuals sentenced for trafficking methamphetamine in fiscal year 1998.<sup>90</sup> Since then, methamphetamine cases have increased 317 percent to 9,555 in fiscal year 2022, accounting for approximately half (48.7%) of all drug trafficking offenses sentenced that year.<sup>91</sup>

Figure 6. Number of Drug Trafficking Cases Over Time, Fiscal Years 2002–2022

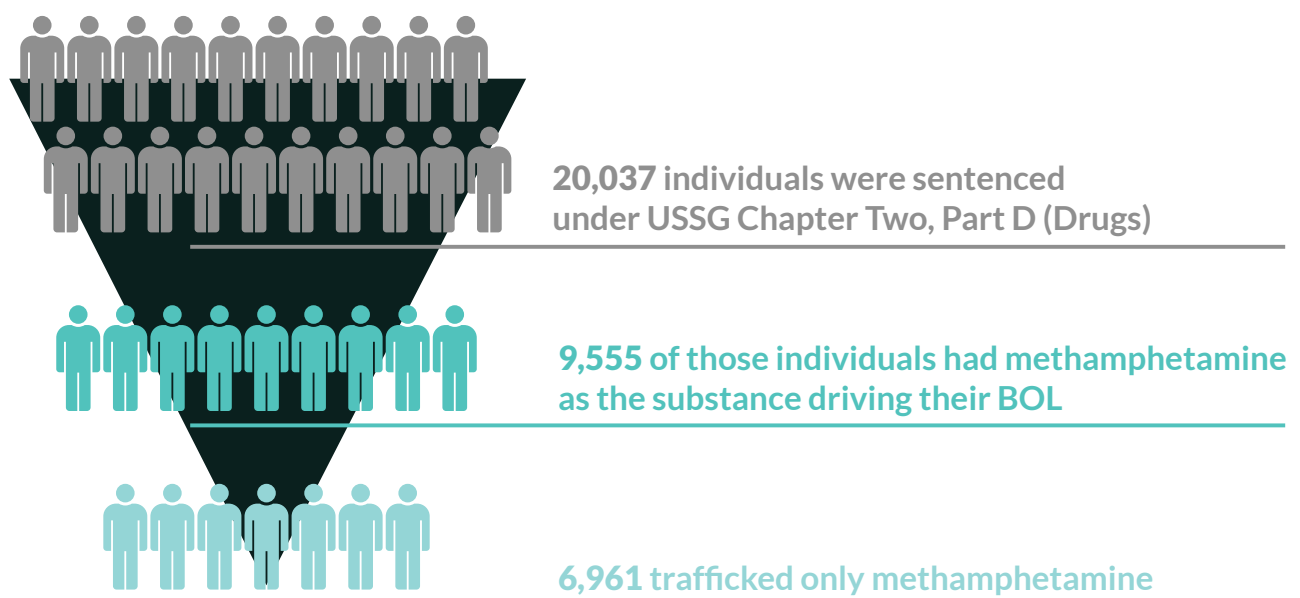




Approximately three-quarters (72.9%; n=6,961) of the individuals sentenced for trafficking methamphetamine in fiscal year 2022 had no other drug types involved in their offense (Figure 7). The analyses in the

remainder of this report focus on the 6,961 people who were sentenced in the federal system for trafficking methamphetamine and no other drug types in fiscal year 2022.<sup>92</sup>

Figure 7. Methamphetamine Cases, Fiscal Year 2022



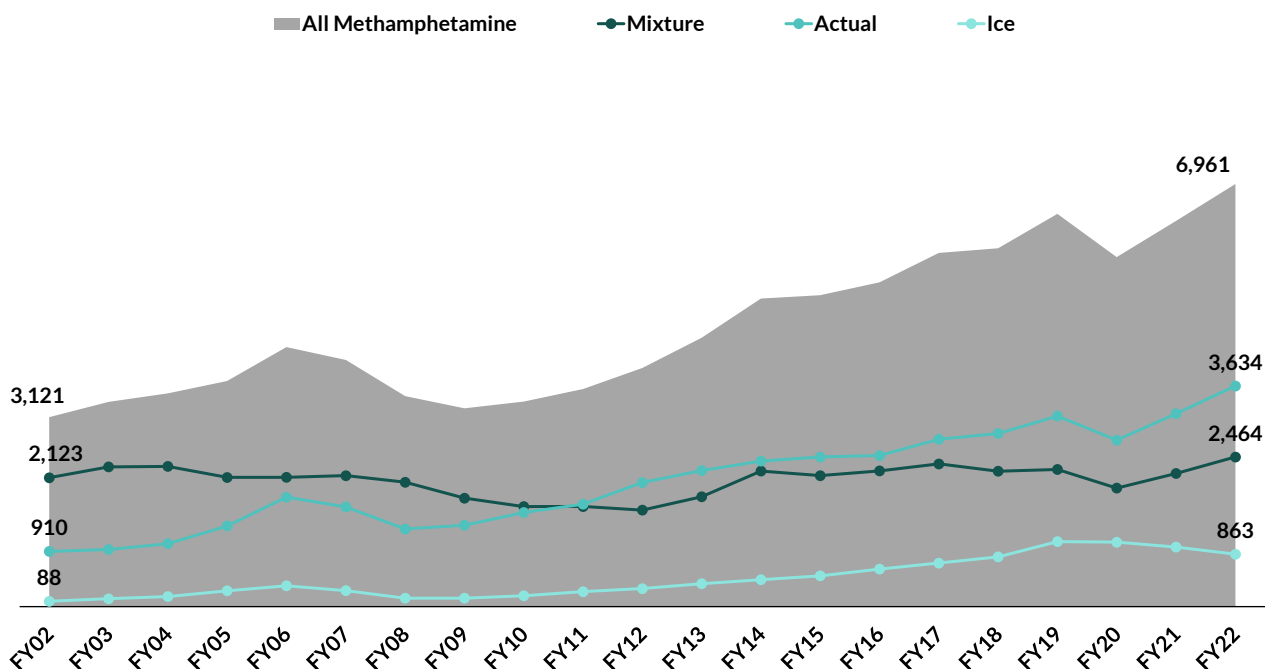
**Methamphetamine cases have increased 317% since FY98, accounting for approximately half (48.7%) of all drug trafficking offenses in FY22.**

While the total number of methamphetamine trafficking cases has increased, so also has the proportion of the caseload that involve methamphetamine actual and Ice (hereinafter, “actual offenses” and “Ice offenses”) (Figure 8). By fiscal year 2011, actual offenses overtook methamphetamine mixture (hereinafter, “mixture offenses”) in the federal caseload, and methamphetamine actual remains the most common type of methamphetamine. In fiscal year 2002, more than two-thirds (68.0%) of methamphetamine offenses were mixture offenses. Since then, mixture offenses have remained relatively stagnant, increasing 16 percent from fiscal year 2002 to fiscal year 2022. By comparison, methamphetamine actual offenses increased

299 percent from 910 offenses in fiscal year 2002 to 3,634 offenses in fiscal year 2022. As a result, in fiscal year 2022 actual offenses accounted for more than half (52.2%) and mixture offenses comprised roughly a third (35.4%) of all methamphetamine offenses.

Ice offenses continue to make up the smallest proportion of all methamphetamine cases. However, Ice offenses have also risen precipitously over the past 20 years. In fiscal year 2002, there were only 88 Ice offenses in the federal caseload, but that number has risen by 881 percent to 863 Ice offenses in fiscal year 2022. Ice offenses now make up more than ten percent (12.4%) of all methamphetamine cases.

Figure 8. Methamphetamine Only Drug Trafficking Cases, Fiscal Years 2002–2022

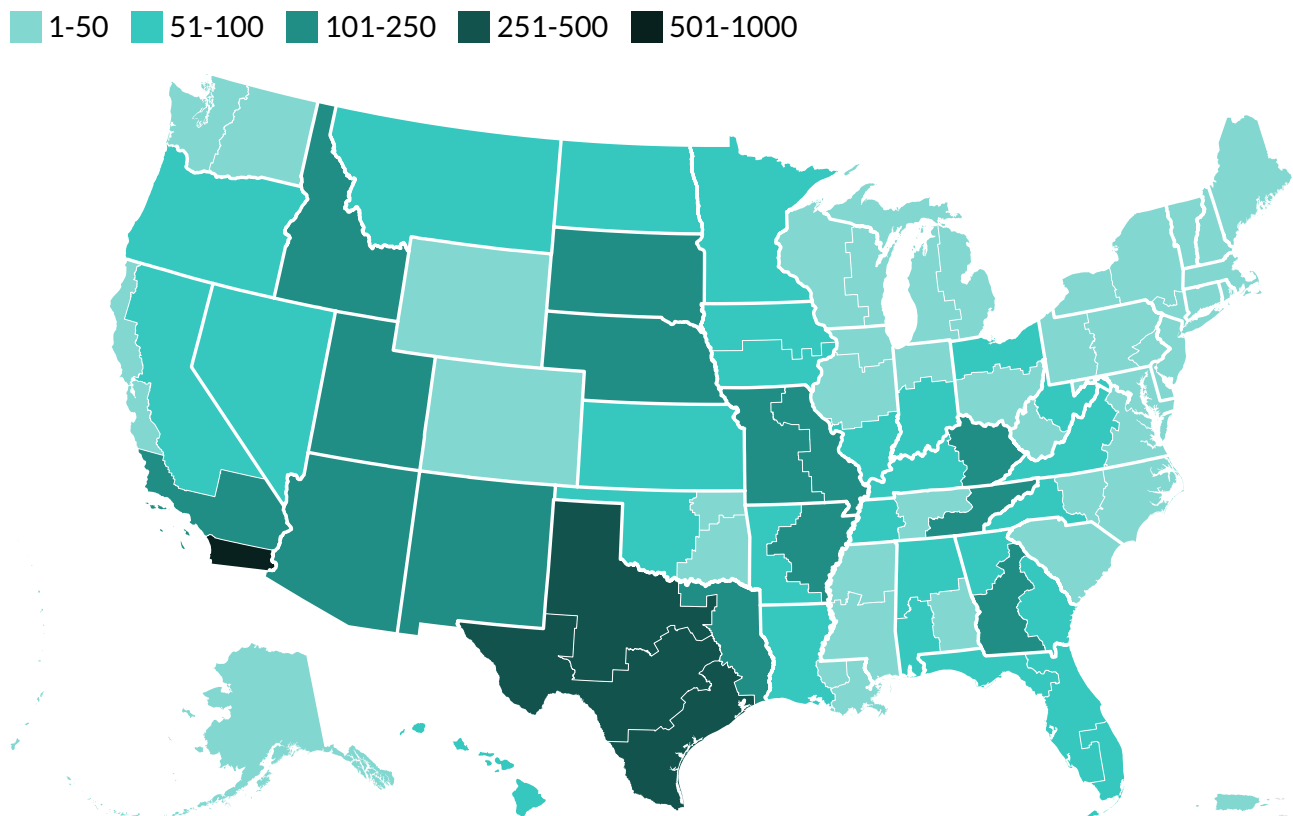


### *Geographic Dispersion of Methamphetamine Cases*

Generally, methamphetamine cases are concentrated in districts along the southwestern border (Figure 9). Four of the top five districts for methamphetamine-

only cases were on or near the southern border: the Southern District of California, Western District of Texas, Northern District of Texas, and Southern District of Texas. The fifth largest number of methamphetamine-only cases was in the Eastern District of Tennessee.

Figure 9. Geographic Dispersion of Methamphetamine Only Cases, Fiscal Year 2022



As a proportion of their overall drug trafficking caseload, midwestern districts had the highest rate of methamphetamine offenses (Table 2). Approximately three-quarters of the drug trafficking offenses in the Western District of Arkansas

(77.8%), District of Nebraska (77.6%), and District of South Dakota (75.0%) were methamphetamine offenses. More than two-thirds of drug trafficking offenses in the Eastern District of Oklahoma (71.4%) and the District of Hawaii (70.7%) were methamphetamine offenses.

**Table 2. Top Districts for Methamphetamine Only Cases, Fiscal Year 2022**

District	#	District	%
Southern California	969	Western Arkansas	77.8%
Western Texas	366	Nebraska	77.6%
Northern Texas	348	South Dakota	75.0%
Southern Texas	291	Eastern Oklahoma	71.4%
Eastern Tennessee	244	Hawaii	70.7%

## Demographic Characteristics of Individuals Sentenced for Trafficking Methamphetamine

Race, gender, and citizenship patterns differed between methamphetamine drug traffickers and all other drug traffickers (Table 3). A larger proportion of individuals who trafficked methamphetamine were White (41.8%) compared to individuals who trafficked other drugs (14.3%). Conversely, a smaller proportion of methamphetamine drug traffickers were Black (14.3%), compared to all other drug traffickers (37.9%). Nearly twice as many people

who trafficked methamphetamine were of Other races (4.5%), compared to people who trafficked other drugs (2.4%). The methamphetamine drug traffickers of other races were predominately Native American and Asian or Pacific Islander (48.3% and 48.6%, respectively).

A smaller proportion of males (76.3%), compared to people who trafficked all other drugs (86.2%), and therefore a greater proportion of females were sentenced for trafficking methamphetamine. U.S. citizens were more prominent among methamphetamine drug traffickers (88.6%), compared to all other drug traffickers (80.5%).

Table 3. Demographic Characteristics of Sentenced Individuals by Drug Type, Fiscal Year 2022

Demographic Characteristic	Methamphetamine Only (n=6,961)	All Other Drugs (n=10,059)
<b>Race (%)</b>		
White	41.8	14.3
Black	14.3	37.9
Hispanic	39.4	45.4
Other	4.5	2.4
<b>U.S. Citizens (%)</b>	88.6	80.5
<b>Male (%)</b>	76.3	86.2
<b>Mean Age (years)</b>	38	37

## Chapter Two Specific Offense Characteristics

### *Weapon Enhancement*

Roughly one-quarter (24.9%) of individuals sentenced for trafficking methamphetamine in fiscal year 2022 received a weapon enhancement for possession of a dangerous weapon (including a firearm) during the commission of the offense.<sup>93</sup> This is nearly the same proportion of individuals sentenced for trafficking all other drugs who received this sentencing enhancement (24.4%).<sup>94</sup>

### *Importation*

As discussed, an individual sentenced under §2D1.1 can receive a 2-level increase for importing methamphetamine or manufacturing methamphetamine from listed chemicals that the defendant knew were imported unlawfully.<sup>95</sup> In fiscal year 2022, 7.6 percent of individuals who trafficked methamphetamine received this sentencing enhancement for importation.

### *Harm to Persons and the Environment*

Only four individuals received a sentencing enhancement for risk of harm to persons or the environment. Three individuals received a sentencing enhancement for the treatment or storage of hazardous waste,<sup>96</sup> and one individual received an enhancement for risk to the environment.<sup>97</sup>

In addition, only six individuals received sentencing enhancements for potential harm to a minor. One individual received an enhancement for distribution or possession of methamphetamine where a minor was present<sup>98</sup> and five received an increase for manufacturing methamphetamine where a minor was present or risk of harm to a minor.<sup>99</sup>

## Chapter Three Role Adjustments

Individuals sentenced for trafficking methamphetamine received an aggravating role adjustment under §3B1.1 for being an organizer, leader, manager, or supervisor less frequently than all other individuals sentenced for drug trafficking (3.9% compared to 7.3%, respectively).<sup>100</sup>

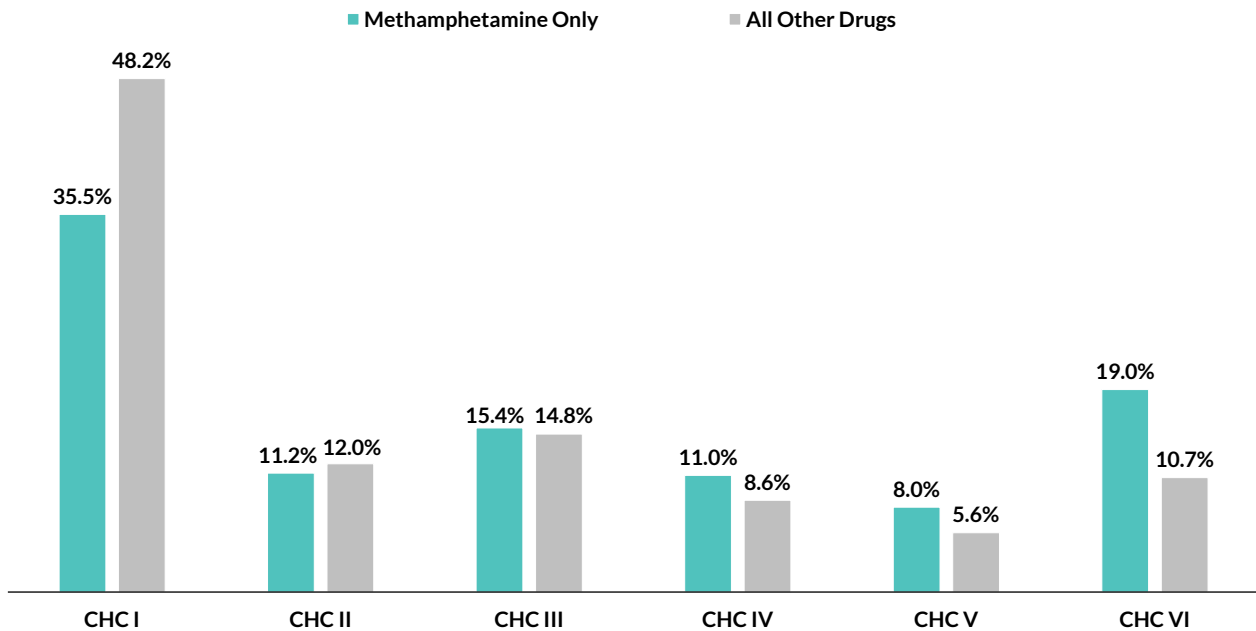
Conversely, a greater percentage of methamphetamine traffickers received a mitigating role adjustment under §3B1.2 for having minimal or minor participation in the drug offense (23.5%) compared to all other drug traffickers (17.0%). A larger proportion of individuals who trafficked actual received a mitigating role adjustment (27.2%) compared to individuals who trafficked either mixture (19.7%) or lce (18.3%).

## Criminal History

Individuals sentenced for trafficking methamphetamine had more extensive criminal histories than individuals sentenced for all other drug trafficking offenses (Figure 10). In fiscal year 2022, approximately one-third (35.5%) of individuals sentenced for trafficking methamphetamine were assigned the lowest Criminal History Category, (CHC I), compared to approximately one-half (48.2%) of individuals sentenced for all other

drug trafficking offenses.<sup>101</sup> Conversely, nearly one-fifth (19.0%) of individuals sentenced for trafficking methamphetamine were assigned to the highest criminal history category (CHC VI), compared to one-tenth (10.7%) of those sentenced for all other drug trafficking offenses. The Armed Career Criminal Act<sup>102</sup> and the “Career Offender” guideline<sup>103</sup> applied to nearly identical proportions of individuals sentenced for methamphetamine trafficking offenses and all other drug trafficking offenses.

Figure 10. Criminal History Category of Individuals Sentenced for Drug Trafficking, Fiscal Year 2022



### *Demographic Characteristics: Mixture, Actual, and Ice Traffickers*

Among individuals sentenced for trafficking methamphetamine, White individuals represented the largest group in both mixture (47.4%) and Ice offenses (35.7%). However, 45.3 percent of individuals sentenced for actual offenses were Hispanic, the largest group among this type of methamphetamine. There was also a significantly higher proportion of Black individuals (21.7%) sentenced in Ice offenses compared to either mixture (14.3%) or actual (12.5%) offenses.

Individuals sentenced for all three methamphetamine types were very similar in terms of citizenship, gender, and age (Table 4). Approximately nine-in-ten individuals sentenced for trafficking mixture (90.5%), actual (87.5%), or Ice (87.3%) were U.S. Citizens. Males constituted 75 to 80 percent of individuals sentenced for all three types of methamphetamine offenses. The mean age was 38 years for individuals sentenced for trafficking mixture and actual and 39 for individuals sentenced for trafficking Ice.

**Table 4. Demographic Characteristics of Sentenced Individuals by Methamphetamine Type, Fiscal Year 2022**

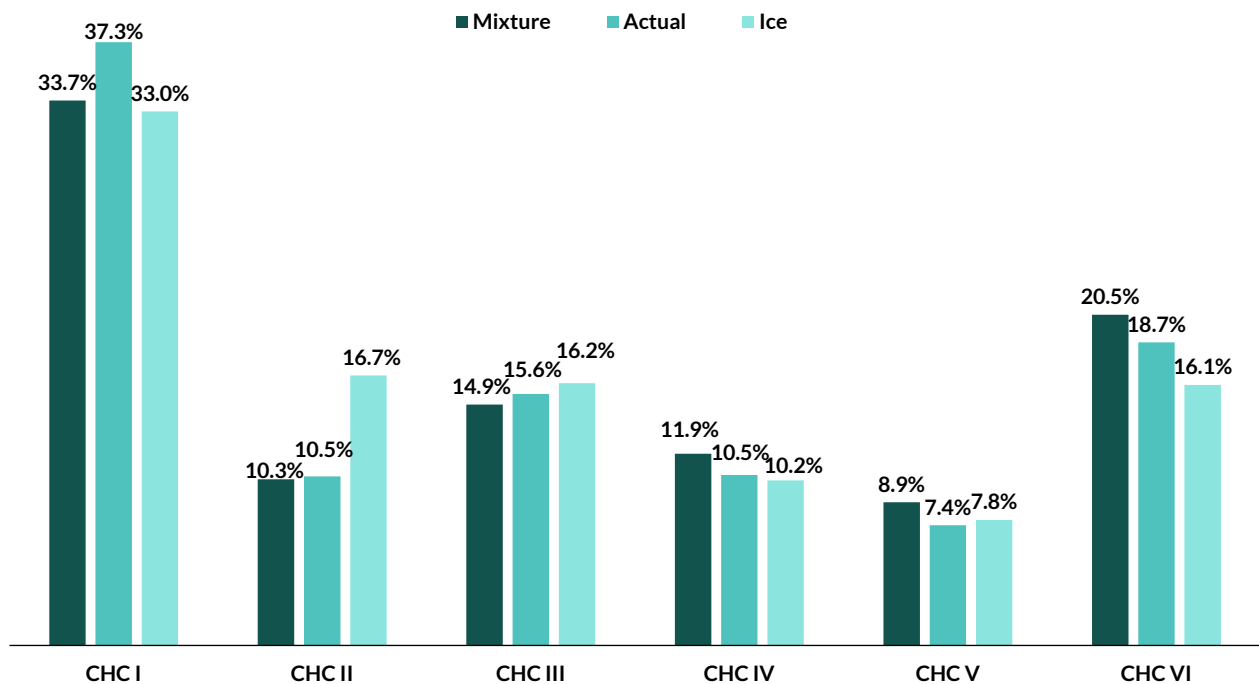
Demographic Characteristic	Mixture (n=2,464)	Actual (n=3,634)	Ice (n=863)
<b>Race (%)</b>			
White	47.4	39.5	35.7
Black	14.3	12.5	21.7
Hispanic	32.6	45.3	33.8
Other	5.8	2.7	8.8
<b>U.S. Citizens (%)</b>	90.5	87.5	87.3
<b>Male (%)</b>	76.0	75.9	79.1
<b>Mean Age (years)</b>	38	38	39



There was little variation in criminal history among individuals sentenced for trafficking the different types of methamphetamine. Approximately one-third of individuals sentenced for trafficking each type of methamphetamine were assigned to CHC I (33.7% for mixture,

37.3% for actual, and 33.0% for Ice) (Figure 11). Although, slightly more individuals sentenced for trafficking mixture were assigned to CHC VI, the highest criminal history category (20.5% compared to 18.7% for actual and 16.1% for Ice), a similar proportion of individuals were sentenced as “Career Offenders” (5.7% for mixture, 5.3% for actual, and 6.0% for Ice).

Figure 11. Methamphetamine Criminal History Categories, Fiscal Year 2022



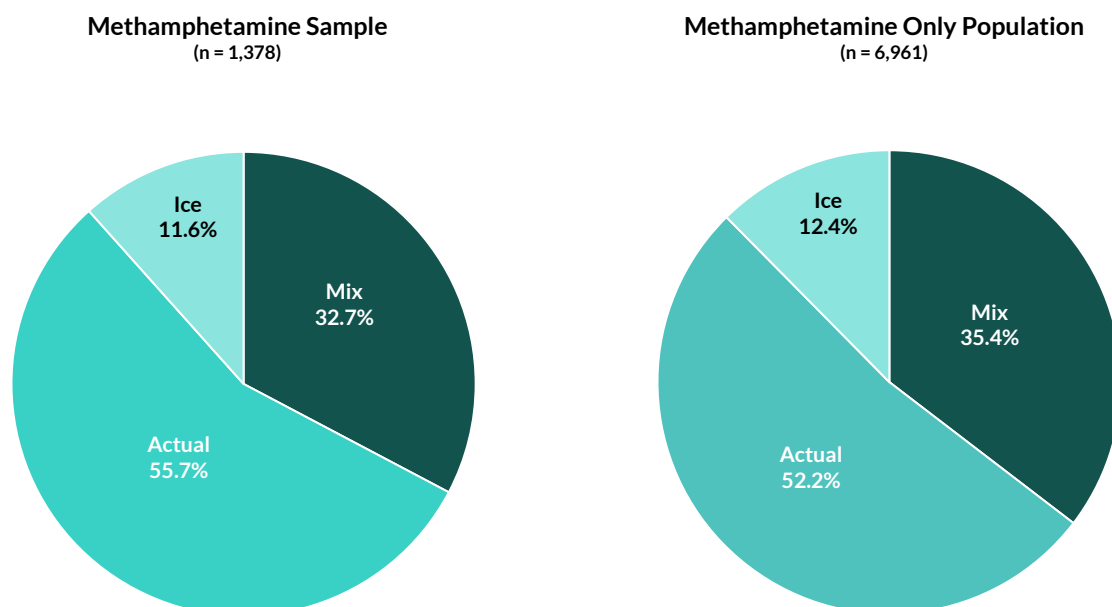
## Methamphetamine Offense Characteristics

The Commission conducted a special coding project to collect additional information on the individuals sentenced in methamphetamine offenses and their offense conduct. The Commission collected data on drug testing and purity, the function of the sentenced individual, presence of laboratories, and other information relevant to sentencing methamphetamine trafficking offenses. This information was collected

from the presentence investigation reports (PSR), statement of reasons (SOR), plea agreements, and charging documents provided by the court.<sup>104</sup>

For this project, the Commission selected a 20 percent random sample of the 6,961 individuals who had methamphetamine as the only drug involved in their offense, which resulted in a sample of 1,378 individuals sentenced in fiscal year 2022 (Figure 12).<sup>105</sup> The ratio of mixture (32.7%), actual (55.7%), and Ice offenses (11.6%) in this sample was proportionate to the ratio found among all methamphetamine-only offenses.

Figure 12. Methamphetamine Special Coding Project Sample, Fiscal Year 2022

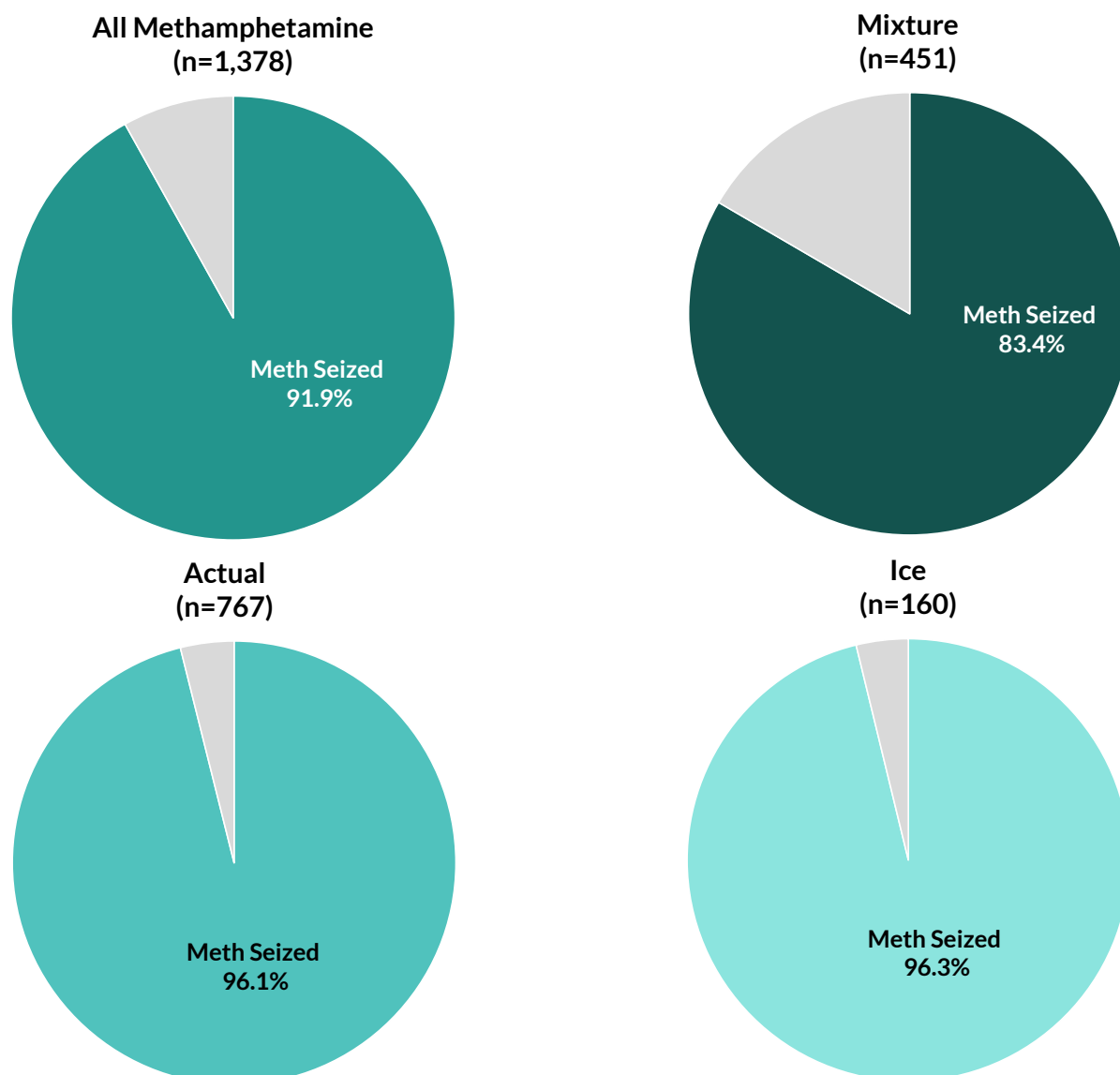


## Drug Quantities

In most cases, sentences for drug trafficking offenses were primarily based on the type and quantities of controlled substances involved in the offense.<sup>106</sup> In nearly all (91.9%) of methamphetamine offenses, some quantity of the drug involved was seized by law enforcement (Figure 13). In these cases, the drug quantity ranged from 0.15 grams to 443 kilograms, with an average drug weight of 8.8 kilograms (median 635 grams). The average drug weight was approximately five kilograms in both mixture (5.5 kilograms, median 399 grams) and Ice offenses (5.2 kilograms, median 767 grams). The average drug weight was nearly twice as great in actual offenses, at 11.2 kilograms (median 836 grams).

When no physical drugs are seized by law enforcement, the court is required to approximate the quantity of controlled substances involved by considering, for example, “the price generally obtained for the controlled substance, financial or other records, similar transactions in controlled substances by the defendant, and the size or capability of any laboratory involved.”<sup>107</sup> In the sentencing documents reviewed for this study, the courts typically relied on statements made by the sentenced individual, intercepted conversations, eyewitness testimony, or recovered profits. Less than ten percent (8.1%) of individuals in this study were sentenced solely using such approximations.

Figure 13. Drugs Seized by Primary Methamphetamine Type, Fiscal Year 2022

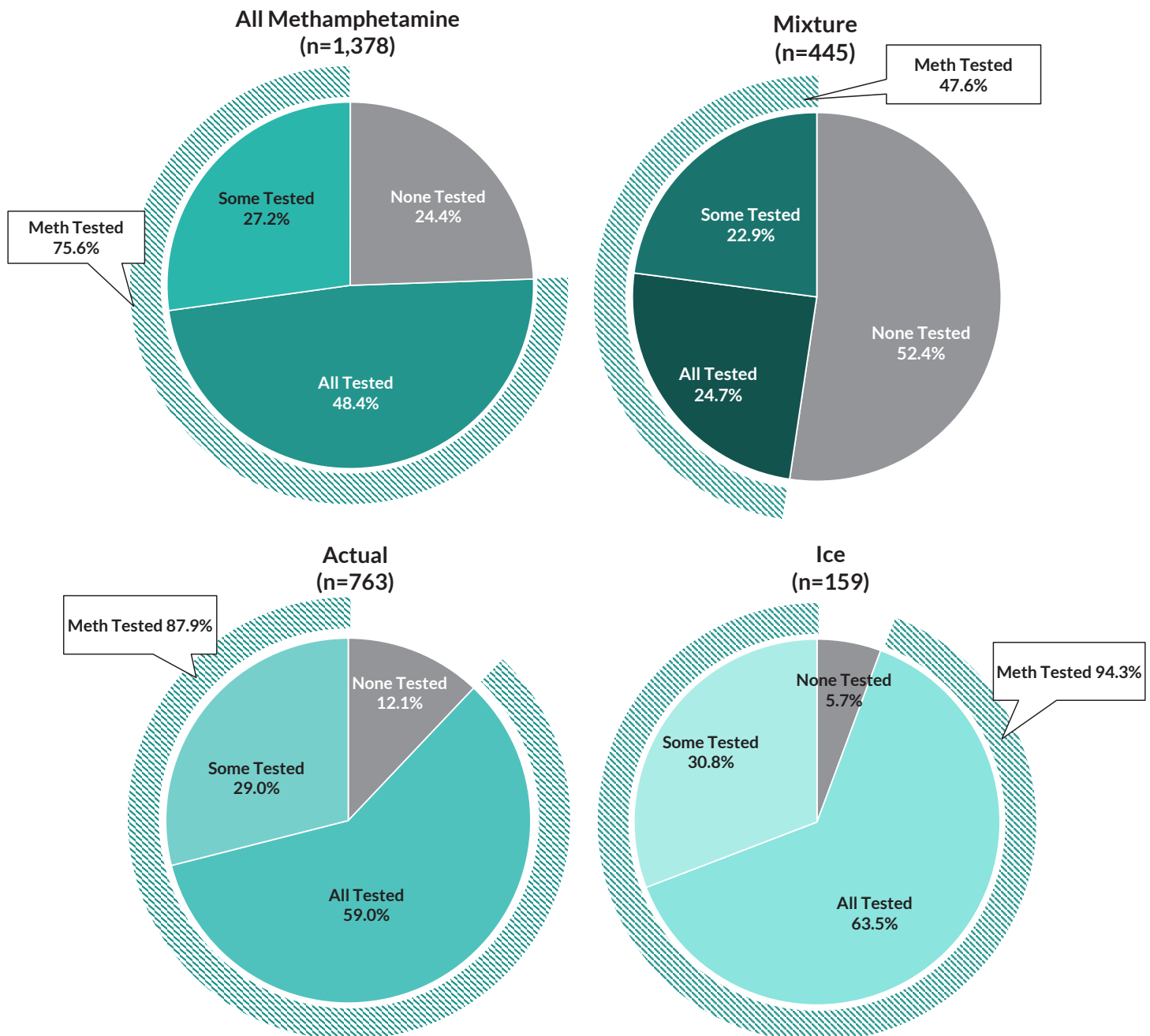


## Laboratory Testing and Drug Purity

The rate of drug seizures impacts sentencing of methamphetamine offenses. Although courts can make a finding at sentencing as to the type of methamphetamine involved in the offense by a preponderance of evidence, the courts generally require testing of a physical sample of the drug to classify a substance

as methamphetamine actual or Ice.<sup>108</sup> Laboratory testing was performed in three-quarters (75.6%) of the methamphetamine offenses in this study (Figure 14), while testing was not performed in approximately one-quarter (24.4%) of the offenses in this study. In just under half (48.4%) of the offenses, all the substances seized were tested at a laboratory. In an additional 27.2 percent of methamphetamine offenses, some but not all of the drugs seized were tested.

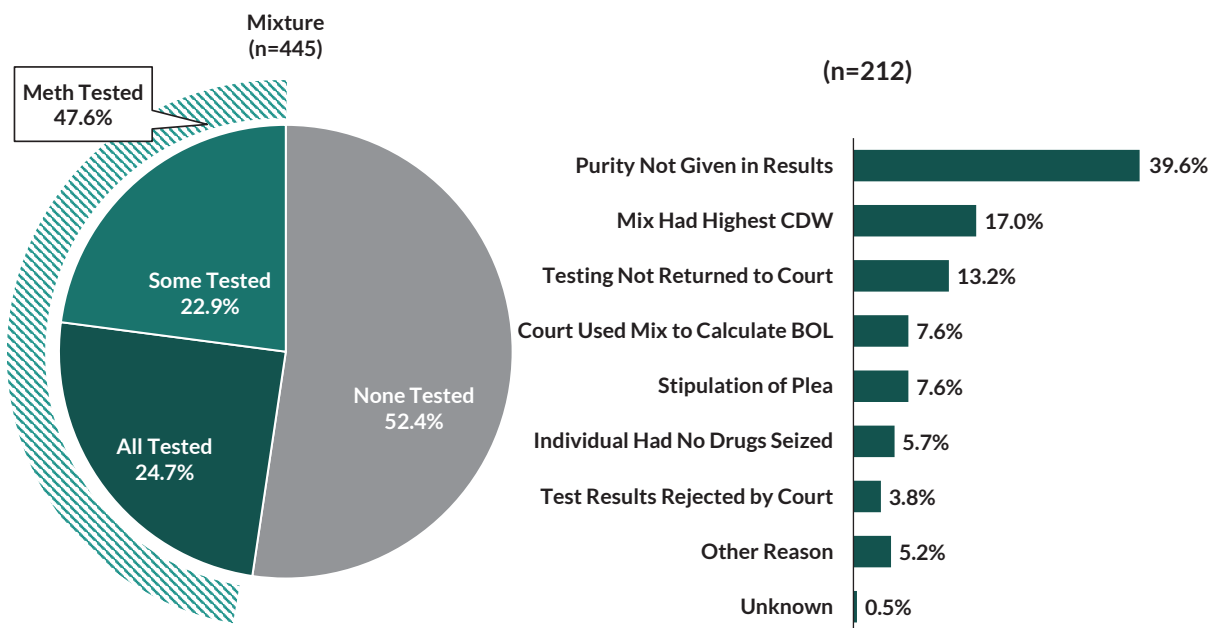
Figure 14. Laboratory Testing and Drug Purity in Methamphetamine Offenses, Fiscal Year 2022



Laboratory testing was far more common in actual and Ice offenses, compared to mixture offenses. Most actual (87.9%) and Ice offenses (94.3%) involved drug testing, and in these offenses all of the substances seized were tested in a majority of the offenses (Figure 14). Laboratory testing occurred in less than half (47.6%) of the mixture offenses in this study. When

laboratory testing was performed, the most common reasons why mixture remained the primary drug were because the purity was not included in the laboratory results (39.6%), an approximated amount of mixture resulted in the highest converted drug weight ("CDW") under the guidelines (17.0%), or the lab results were not returned to the court in time for sentencing (13.2%) (Figure 15).

Figure 15. Laboratory Testing in Mixture Offenses, Fiscal Year 2022

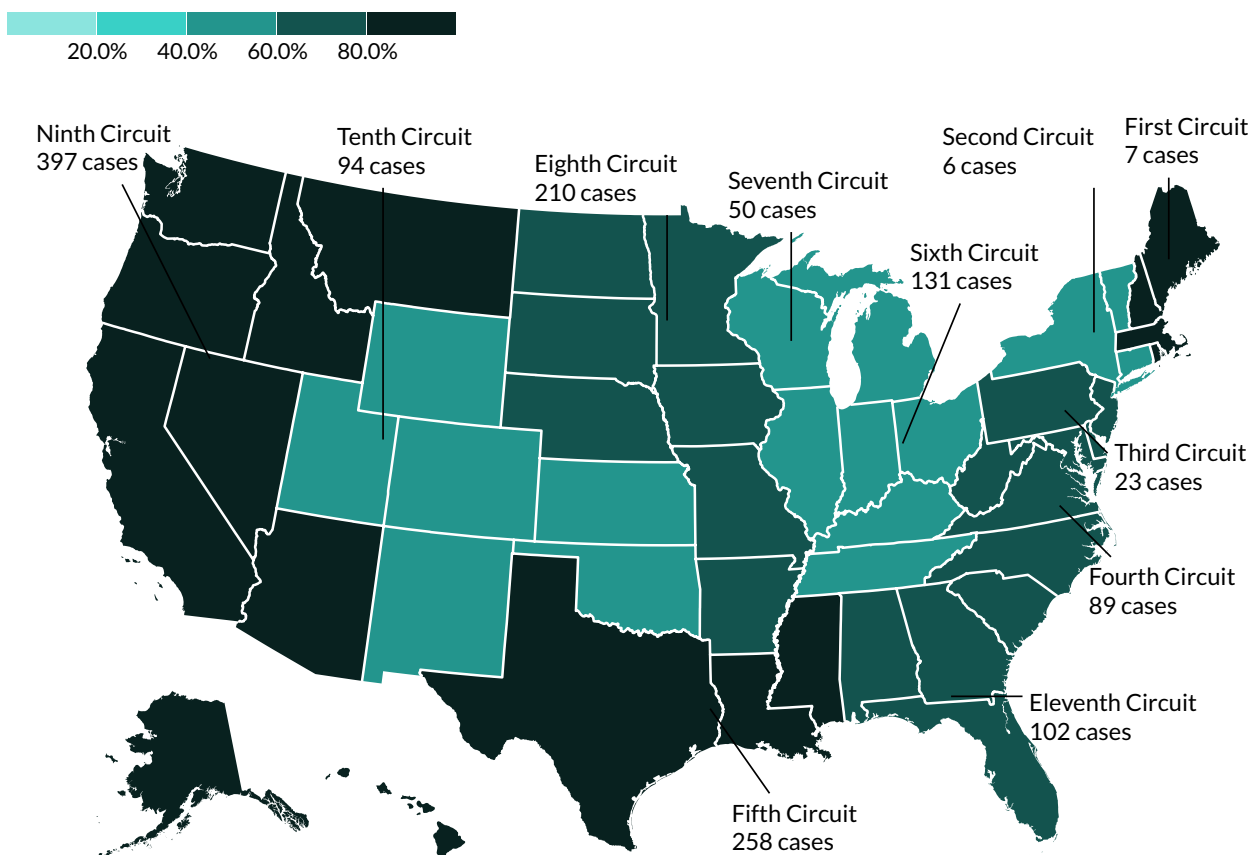


### Geographic Differences in Drug Purity Testing

Drug testing was inconsistent across judicial circuits and geographic regions (Figure 16). The proportion of methamphetamine offenses involving laboratory testing ranged from less than 60 percent of the offenses sentenced in the district courts of the Sixth, Seventh, and Tenth Circuits, to more than 80 percent of the offenses sentenced in district courts of the Fifth and Ninth circuits.<sup>109</sup>

Relatedly, the Commission also explored whether methamphetamine found closer to the border, and therefore more likely to be imported, had higher levels of testing compared to non-border districts. Nearly a quarter (23.2%; n=319) of individuals in this study imported methamphetamine during their offense conduct through various means. All the individuals who imported methamphetamine into the United States obtained the drugs from Mexico, most (87.2%; n=278) via courier across the southwestern border.

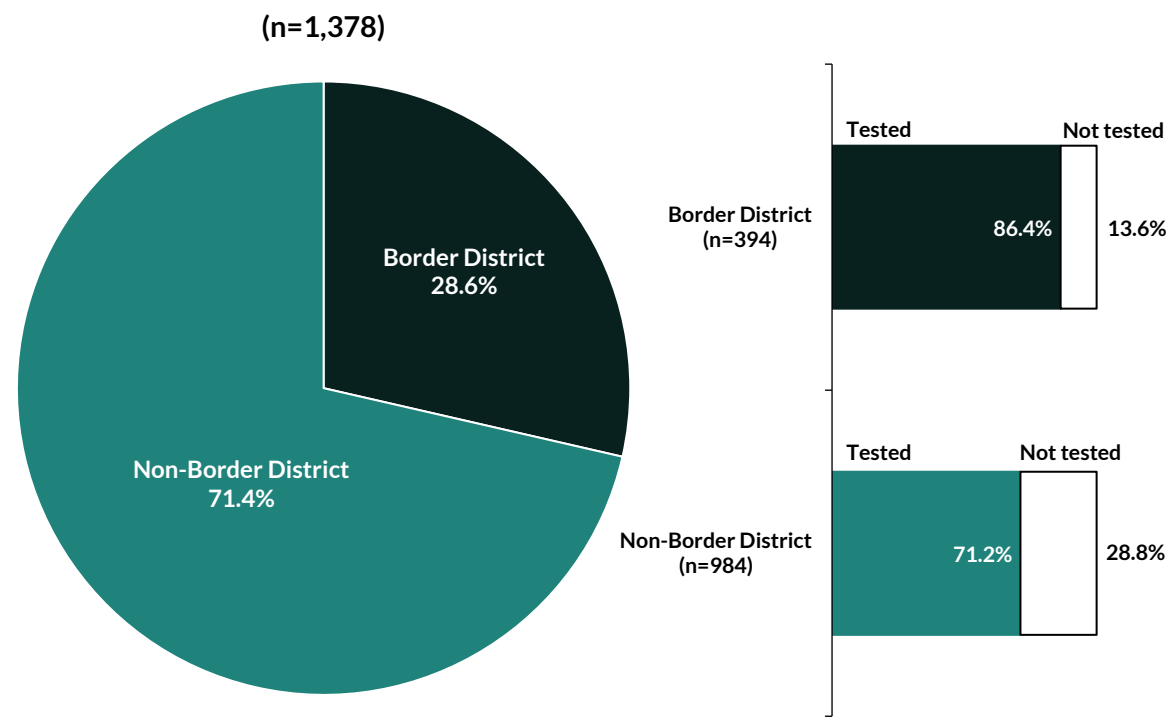
Figure 16. Rate of Drug Testing by Federal Circuit, Fiscal Year 2022



Results from this analysis showed that individuals sentenced for methamphetamine drug trafficking were significantly more likely to have their drugs tested for purity in border districts than non-border

districts.<sup>110</sup> More than 85 percent (86.4%) of methamphetamine offenses in border districts involved laboratory testing for purity compared to approximately 70 percent (71.2%) in non-border districts (Figure 17).

Figure 17. Rate of Drug Testing in Border Districts, Fiscal Year 2022

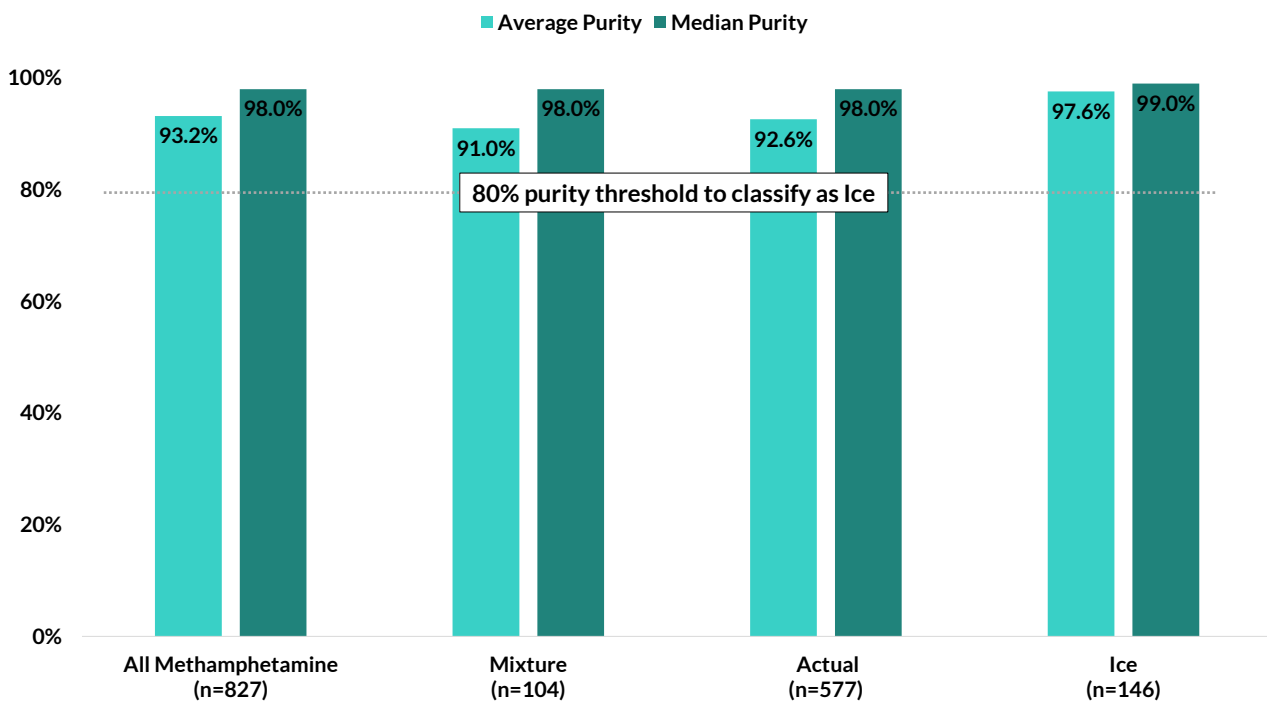


### Drug Purity

When the methamphetamine in this study was tested, the average drug purity was well above 80 percent and did not vary statistically, regardless of the primary methamphetamine type in the offense (Figure 18). Rather, in the 75.6 percent of offenses where laboratory testing

took place, the methamphetamine was, on average, more than 90 percent pure (93.2% average, 98.0% median). The purity of methamphetamine tested in this study ranged from 2.5 percent to 100 percent pure methamphetamine. Most (83.3%) methamphetamine tested was more than 80 percent pure, and approximately two-thirds (67.0%) of the methamphetamine tested was at least 96 percent pure (Figure 19).

Figure 18. Average and Median Drug Purity by Methamphetamine Type, Fiscal Year 2022

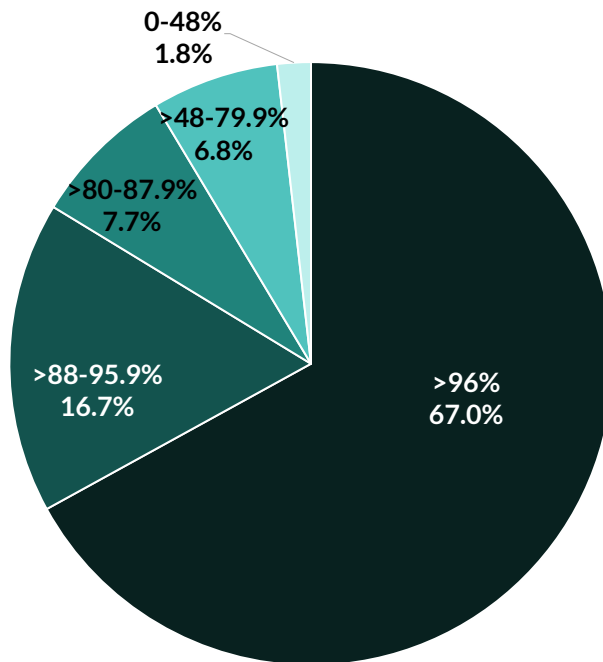




Purity did not vary statistically by the primary type of methamphetamine in the offense.<sup>111</sup> In offenses where mixture was the primary drug, the average purity was

91.0 percent (median 98.0%), compared to 92.6 percent (median 98.0%) for actual. The average purity was 97.6 percent for Ice offenses (median 99.0%).

Figure 19. Distribution of the Purity of Methamphetamine Tested, Fiscal Year 2022

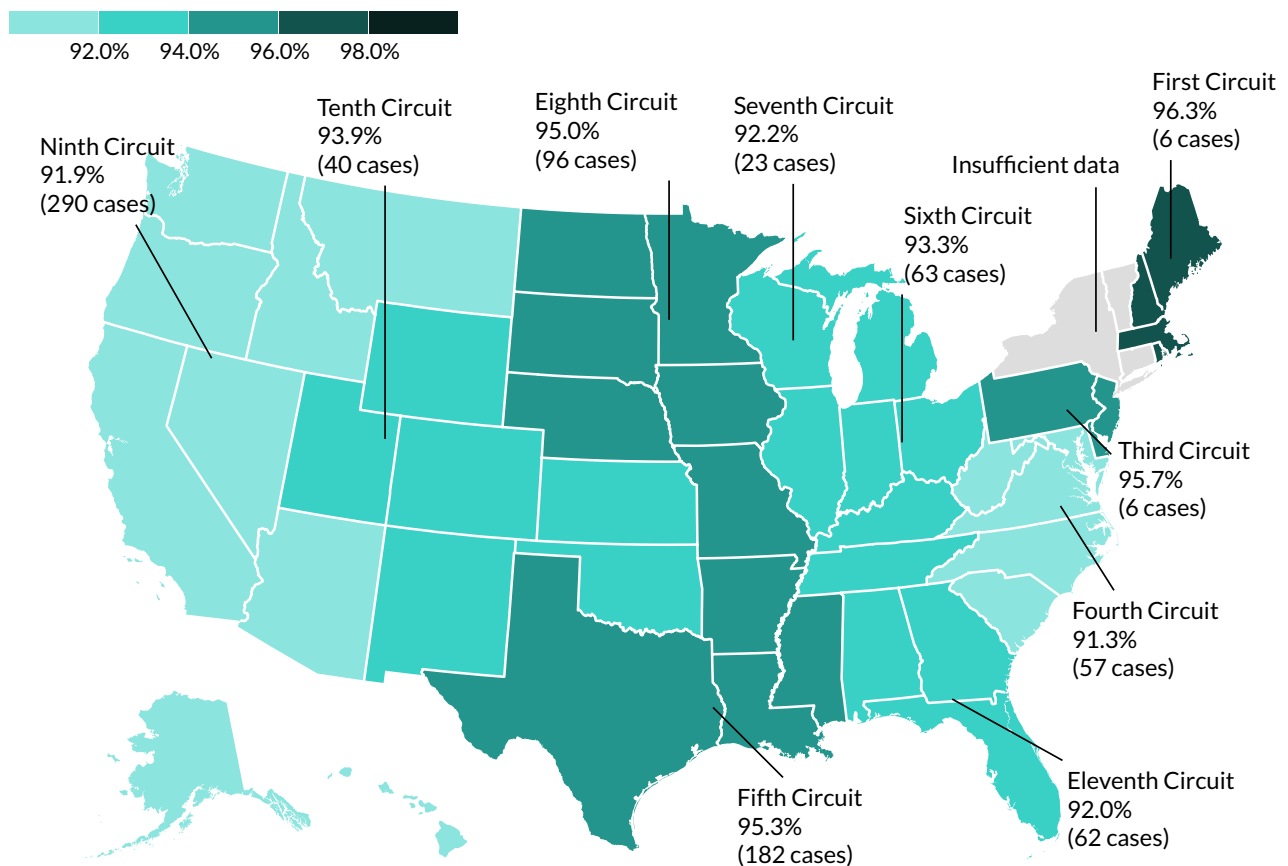


### Drug Purity by Geographic Region

While testing practices varied across federal circuits, this study revealed that when testing did occur the average methamphetamine purity was consistent regardless of geographic region (Figure

20). Across all federal circuits, the methamphetamine tested was above 90 percent pure.<sup>112</sup> The purity of methamphetamine ranged from an average of 91.3 percent in the Fourth Circuit to 96.3 percent purity in the First Circuit.<sup>113</sup>

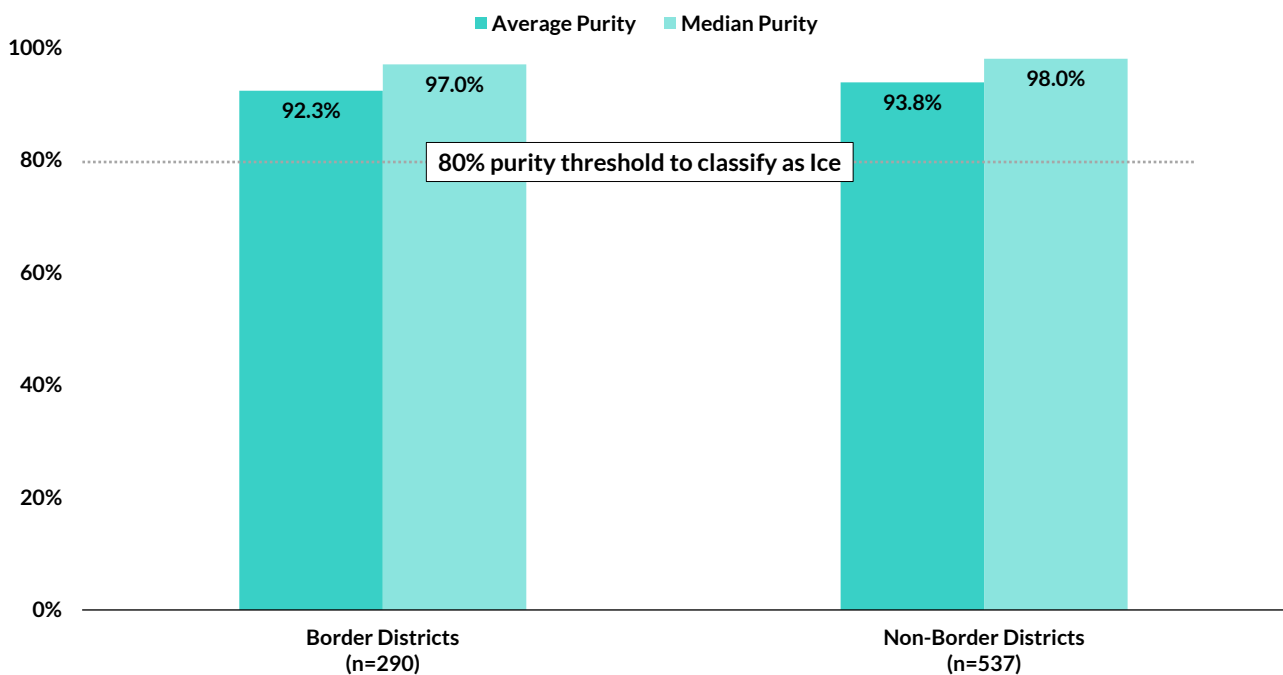
Figure 20. Methamphetamine Purity by Federal Circuit, Fiscal Year 2022



Nearly all methamphetamine trafficked in the United States is imported from Mexico.<sup>114</sup> Consequently, there was no statistically significant difference in the purity of the methamphetamine seized in

border districts compared to non-border districts (Figure 21). The average purity of methamphetamine tested in border districts (92.3%) was nearly the same as the average in non-border districts (93.8%).<sup>115</sup>

Figure 21. Laboratory Testing and Drug Purity in Border and Non-Border Districts, Fiscal Year 2022



## Function of Sentenced Individuals

Individuals sentenced for drug trafficking usually engage in specific activities, often related to the hierarchical structure of the organizations of which they are a part. As part of the special coding project conducted for this study, the Commission analyzed each sentenced individual's activity and determined the individual's most serious function in the drug trafficking offense (Table 5)<sup>116</sup> using a classification system developed for prior Commission reports.<sup>117</sup> The functions are ranked by the seriousness of the conduct from a high-level supplier to a low-level employee.

Based on the conduct detailed in the presentence report, approximately one-half (50.5%) of the individuals in this study held high-level functions in their drug organization; more than one-third (36.6%) were wholesalers and 13.9 percent were high level suppliers. Just over ten percent (12.3%) were street level dealers, selling user quantities of methamphetamine. Approximately a quarter (23.4%) acted as couriers, transporting drugs in or on their person, and less than ten percent acted as brokers (4.1%) or low-level employees within their organization (5.6%).

**Table 5. Most Serious Function in Methamphetamine Trafficking Offense, Fiscal Year 2022**

### High Level Supplier

13.9% (n=192)

Supplies large quantities of drugs, usually to other drug distributors; is near the top of the distribution chain; and generally, does not deal in retail amounts; may employ no or very few subordinates; **owns the drugs**.

### Organizer/Leader

0.4% (n=6)

Organizes, leads, directs, or otherwise runs a drug distribution organization; has the largest share of the profits and the most decision-making authority; **owns the drugs**.

### Wholesaler

36.6% (n=504)

Buys and sells more than retail/user-level quantities in a single transaction; sells any amount to another dealer; **owns the drugs**.

### Manager/Supervisor

0.7% (n=9)

Serves as a “lieutenant” in a drug organization; manages or supervises a portion of the drug operation (manufacturing, importation, or distribution); takes instructions from a superior and conveys them to subordinates; supervises at least one other co-participant in an organization; **does not own the drugs**.

### Street-Level Dealer

12.3% (n=170)

Distributes retail/user quantities directly to the user; **owns the drugs**.

### Broker/Go-Between

4.1% (n=56)

Arranges for two parties to buy/sell drugs or directs potential buyers to a potential seller; **does not own the drugs**.

### Courier

23.4% (n=323)

Transports or carries drugs in or on their person or with the assistance of a vehicle or other equipment; **does not own the drugs**.

### Renter/Storer

0.9% (n=13)

Provides own residence (barns, storage bins, buildings), land, or equipment for use to further the offense in exchange for payment or compensation; **does not own the drugs**.

### Employee

5.6% (n=77)

Performs very limited, low-level function in the offense including running errands, answering the telephone, scouting, receiving packages, packaging the drugs, acting as a lookout, or acting as a deckhand or crew member on a vessel or aircraft transporting drugs; **does not own the drugs**.

### Other Function

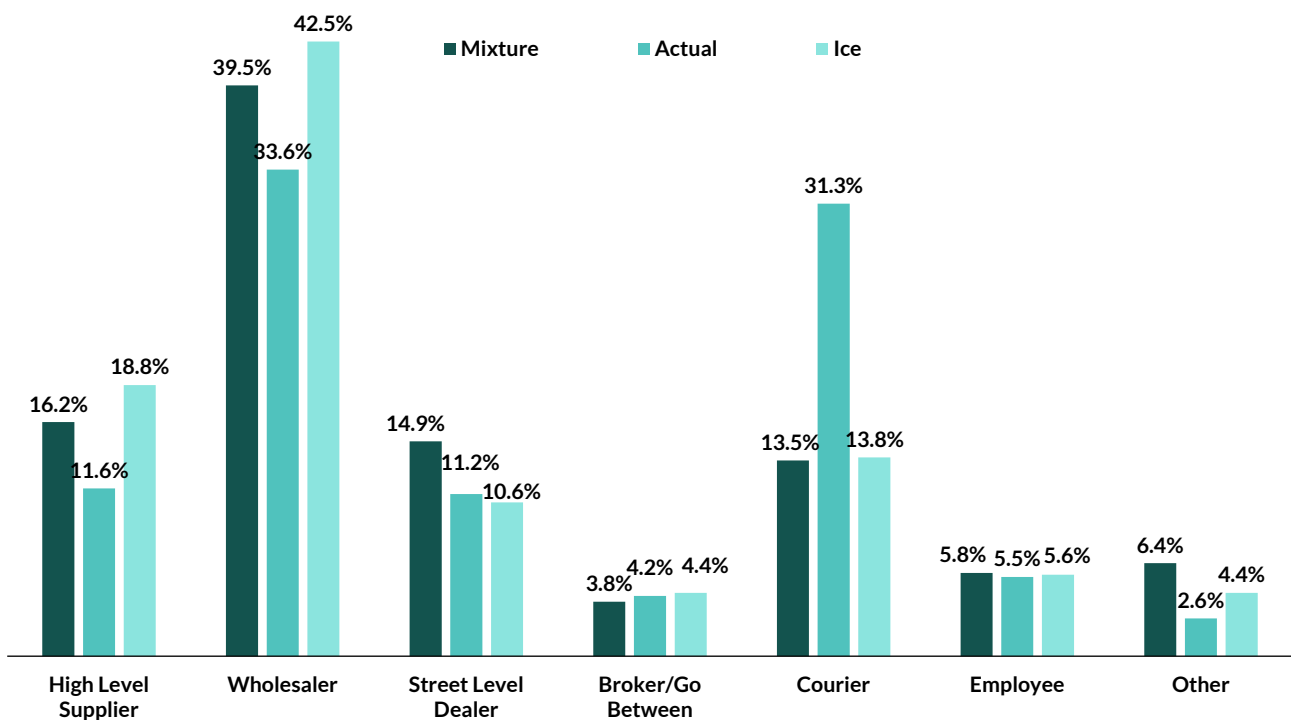
2.0% (n=28)

Performed some other function, such as couriering money for a drug trafficking organization, working as a bodyguard, or financing a drug organization.

An individual's function varied little by the primary type of methamphetamine involved in the offense, with the exception of the function of a drug courier (Figure 22). The rate of individuals sentenced for trafficking actual that acted as couriers (31.3%) was

twice that compared to either mixture (13.5%) or Ice (13.8%). Mixture and Ice traffickers also were slightly more likely to hold higher positions in a drug organization, acting as high-level suppliers or wholesalers.

Figure 22. Functions Performed by Individuals and Primary Methamphetamine Type Trafficked, Fiscal Year 2022



### Function, Drug Purity, and Drug Quantity

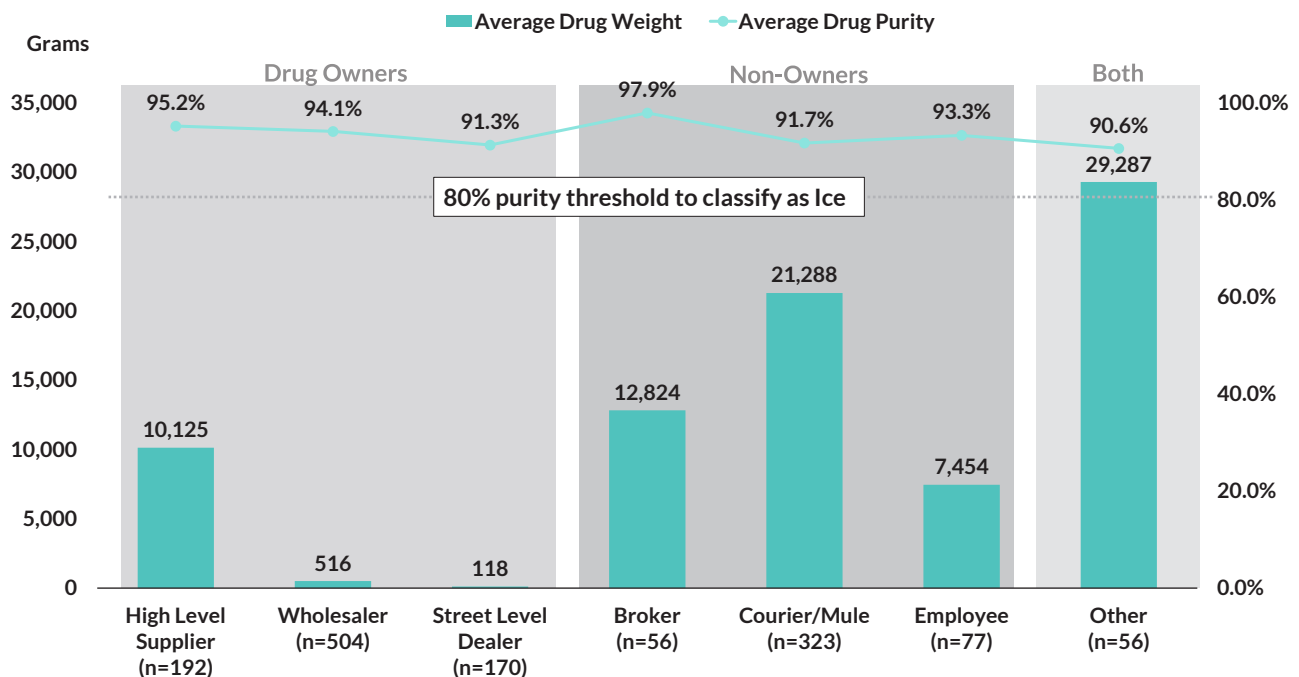
The weight of the drugs in an offense is one measure of culpability both in the statutory punishments that apply and in the sentencing ranges determined using the federal sentencing guidelines. The function that an individual serves in a drug trafficking organization and the purity of the drugs that they are selling also serve as proxy measures for levels of culpability in the offense.

Typically, individuals higher in the drug distribution chain exercise control over larger quantities of drugs. Individuals trafficking highly pure methamphetamine have been presumed to be higher up in the chain of distribution. However, in this study, there were no statistically significant differences in the purity of

methamphetamine based on the function of the individual drug trafficker (Figure 23). High level suppliers had drugs that were, on average, 95.2 percent pure and drug organization employees had methamphetamine that was 93.3 percent pure.

On the other hand, drug weight did vary significantly by the function an individual trafficker performed.<sup>118</sup> High level suppliers had an average of ten kilograms, the largest drug quantity among individuals who owned the methamphetamine they were trafficking. Couriers had double the quantity of methamphetamine, compared to high level suppliers (an average of 21 kilograms); however, they did not own the drugs they were trafficking.

Figure 23. Average Drug Quantity Seized and Average Drug Purity by Function Performed, Fiscal Year 2022

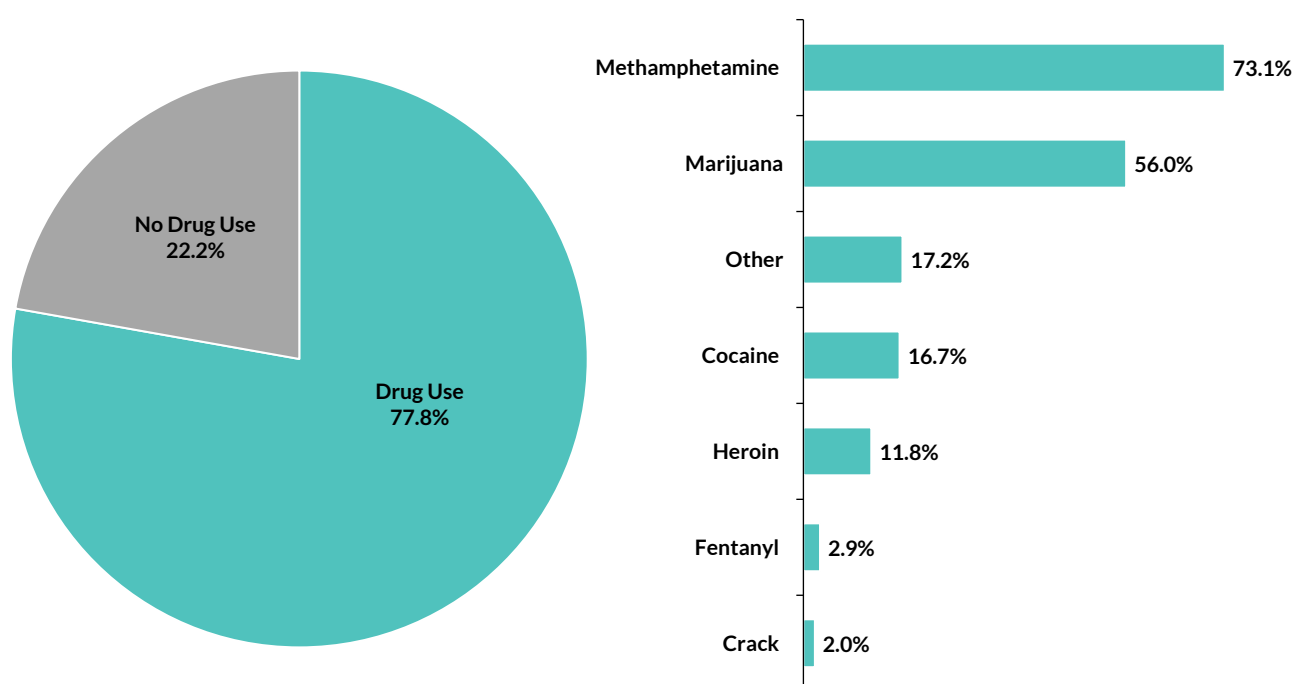


### Function and Drug Use

Drug use also varied by function. More than three-quarters (77.8%) of all individuals sentenced for trafficking methamphetamine used some drug in the past year.<sup>119</sup> The most commonly used drugs were

methamphetamine (73.1%) and marijuana (56.0%) (Figure 24). A smaller percentage of couriers (67.1%) used drugs within the past year compared to either street-level dealers (84.0%) or wholesalers (86.0%).<sup>120</sup>

Figure 24. Drug Use Among Individuals Sentenced for Methamphetamine Trafficking, Fiscal Year 2022





Criminal Organizations, Facilities, and Harm to Persons and the Environment

Criminal Organizations

This study also looked at whether individuals sentenced for trafficking methamphetamine were leaders or members of criminal organizations such as foreign drug cartels, domestic drug trafficking organizations, or gangs.<sup>121</sup> Most (88.8%) individuals in this study were not leaders or members of a criminal organization. However, the information in court documents stated that 1.4 percent of individuals sentenced for trafficking methamphetamine were alleged leaders of a criminal organization and 9.9 percent were members of a drug trafficking organization, foreign drug cartel, or gang.

Methamphetamine Facilities

This study also examined whether individuals sentenced for trafficking methamphetamine operated out of facilities where methamphetamine was sold, stored, or produced.<sup>122</sup> Sentencing documents stated that roughly fifteen percent (15.9%) of individuals in this study operated out of a methamphetamine facility (Table 6). Under ten percent (8.9%) operated out of a trap house, where retail or user amounts of methamphetamine were sold.<sup>123</sup> Approximately seven percent (6.7%) operated out of a stash house, where large quantities of drugs were stored or cut for sale and distribution.<sup>124</sup>

Only about one percent (1.4%) of the individuals sentenced in fiscal year 2022 for trafficking methamphetamine worked in a methamphetamine laboratory. Those illicit facilities are used to produce methamphetamine or convert liquid methamphetamine into a crystal or powder.<sup>125</sup> None of the labs identified in this study produced methamphetamine; rather, they operated as reconversion or recrystallization labs, where liquid methamphetamine was converted into crystal.

Table 6. Prevalence of Methamphetamine Facilities, Fiscal Year 2022

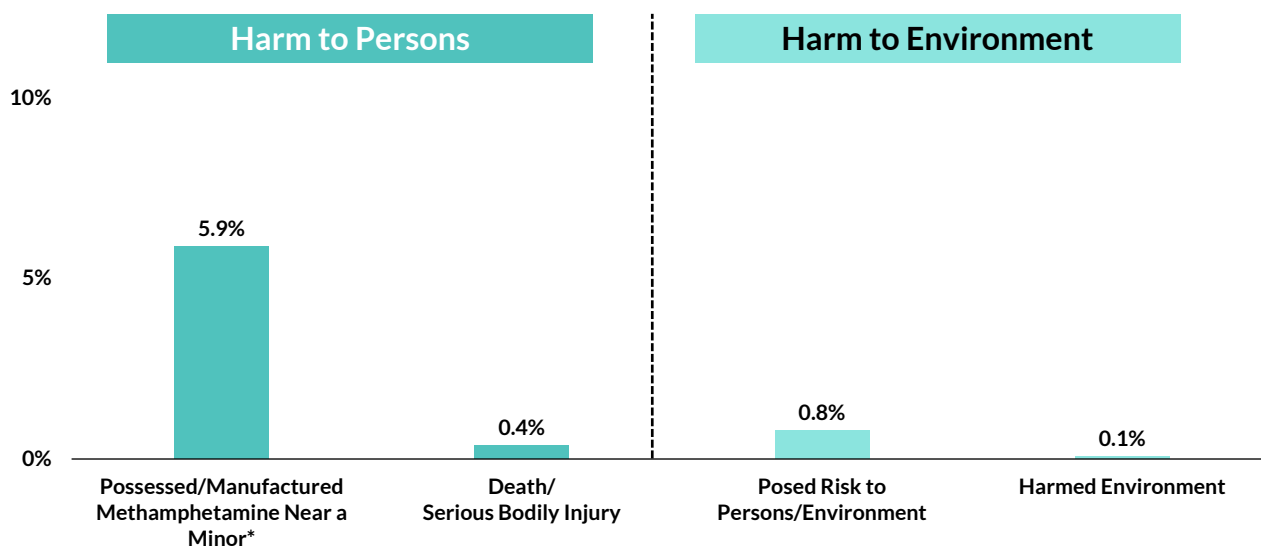
Type of Meth Facility	N	%
No Methamphetamine Facility	1,157	84.1%
Any Methamphetamine Facility	219	15.9%
Trap House	123	8.9%
Stash House	92	6.7%
Methamphetamine Lab	19	1.4%

### Harm to Persons or Environment

As part of the special coding project for this study, the Commission reviewed sentencing documents for conduct that was harmful to persons or the environment. Likely due to the very small number of laboratories identified in this study, very few individuals sentenced for trafficking methamphetamine engaged in offense

conduct that posed a harm to either persons or the environment (0.8%) or actually harmed the environment (0.1%) during their offense conduct (Figure 25). Additionally, very few (0.4%) individuals were involved in offenses that resulted in death or serious bodily injury from ingesting methamphetamine. Roughly six percent (5.8%) of individuals in this study possessed methamphetamine near a minor.<sup>126</sup>

Figure 25. Harm to Persons or Environment in Methamphetamine Offenses, Fiscal Year 2022



\*Only one case involved methamphetamine manufactured near a minor.

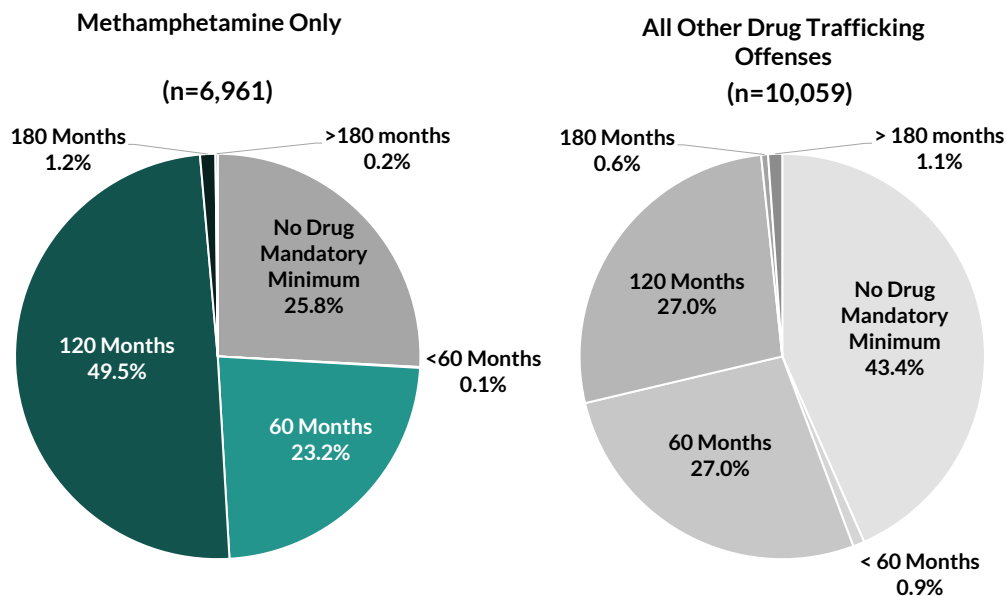
# Sentencing Methamphetamine Offenses

## Mandatory Minimum Penalties: All Methamphetamine

In fiscal year 2022, individuals sentenced in methamphetamine drug trafficking offenses were more likely to be charged with an offense carrying a mandatory minimum penalty, compared to all other individuals sentenced in drug trafficking offenses (Figure 26). Nearly three-quarters (74.2%)

of individuals sentenced for trafficking methamphetamine were convicted of an offense carrying a mandatory minimum penalty, compared to just over half (56.6%) of all other persons sentenced for trafficking other drugs. Approximately one-quarter (23.2%) were convicted of an offense carrying a five-year mandatory minimum penalty and nearly one-half (49.5%) were convicted of an offense carrying a ten-year mandatory minimum penalty.

Figure 26. Mandatory Minimum Penalties in Drug Trafficking Cases, Fiscal Year 2022



Although a larger proportion of individuals sentenced for trafficking methamphetamine were convicted of an offense carrying a mandatory minimum penalty compared to all other drug traffickers, they received relief from those mandatory minimum penalties at sentencing at nearly the same rate (Figure 27). Nearly the same proportion of persons trafficking methamphetamine (54.7%) versus all other drugs (58.4%) received relief from a mandatory minimum penalty at sentencing through the application of safety valve or substantial assistance to the government.<sup>127</sup>

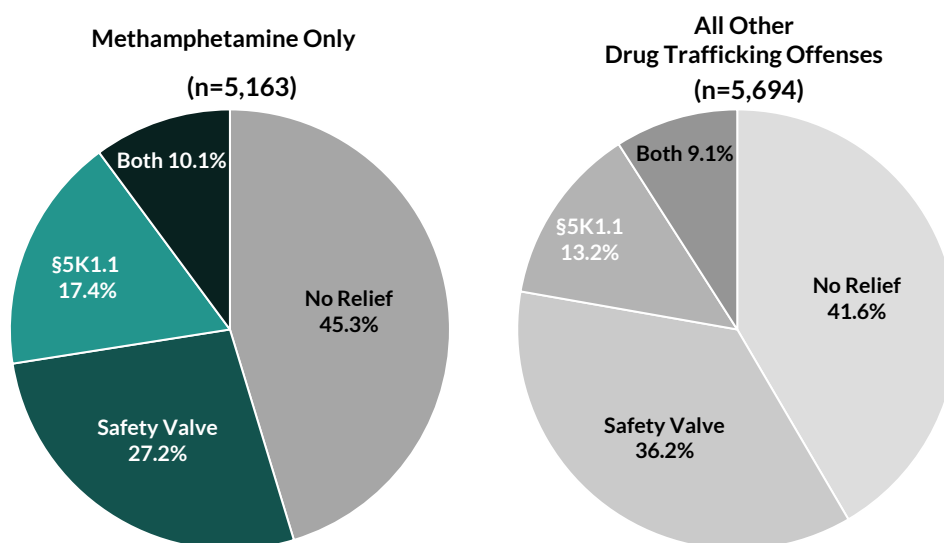
### *Relief from the Mandatory Minimum: All Methamphetamine*

There were some differences in the type of the relief received. More than one-quarter (27.2%) of individuals convicted of a methamphetamine trafficking offense carrying a mandatory minimum penalty received relief through the safety valve, compared to more than one-third (36.2%) of all other individuals convicted of a drug

trafficking offense carrying a mandatory minimum penalty.<sup>128</sup> Methamphetamine traffickers were more likely to receive relief via a substantial assistance departure (17.4%), however, compared to all other drug traffickers (13.2%). The rate at which individuals received both forms of relief—safety valve and substantial assistance—were nearly the same for individuals sentenced for trafficking methamphetamine compared to those sentenced for all other drugs (10.1% compared to 9.1%, respectively).

Consequently, a greater proportion of individuals sentenced for trafficking methamphetamine did not receive relief at sentencing and, therefore, remained subject to the mandatory minimum penalty, compared to all other individuals sentenced for drug trafficking. Roughly one-third (33.6%) of all methamphetamine traffickers were subject to a mandatory minimum penalty, compared to less than a quarter (23.5%) of all other drug traffickers.

**Figure 27. Relief from Drug Mandatory Minimum Penalties in Drug Trafficking Cases, Fiscal Year 2022**

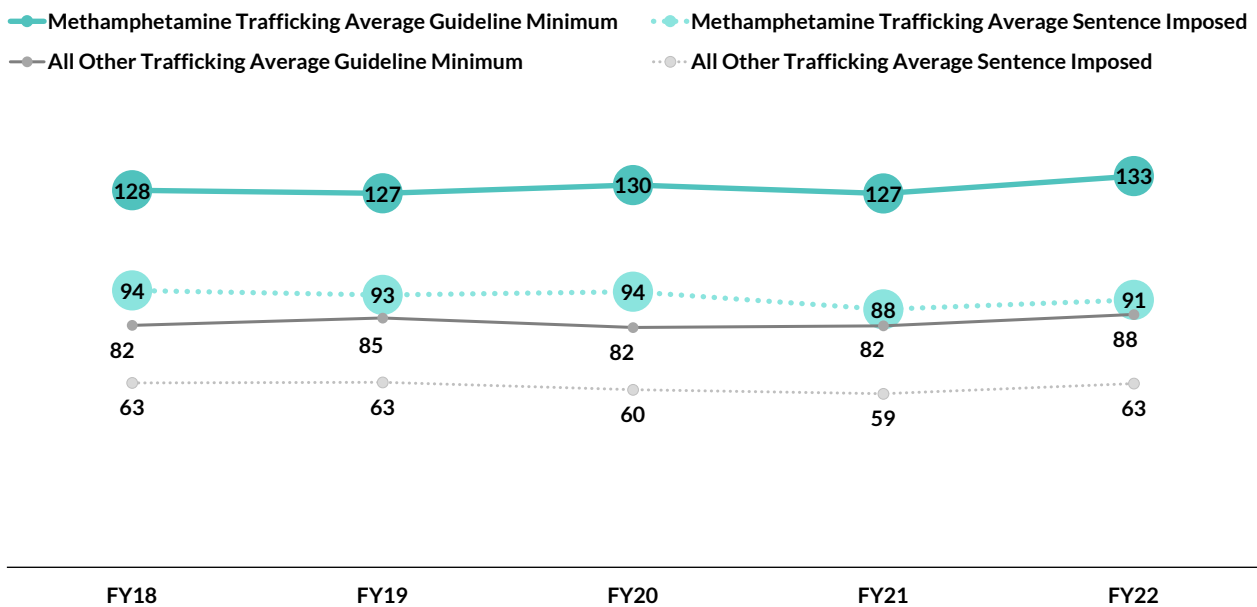


## Sentence Length

Over the past five fiscal years, the average guideline minimum and average sentence imposed in methamphetamine offenses remained fairly stable but were longer than those for trafficking offenses involving other drugs (Figure 28). The average guideline minimum ranged from 127 months in fiscal

year 2019 and 2021 to 133 months in fiscal year 2022. By comparison, the average sentence imposed ranged from 94 months in both fiscal years 2018 and 2020 to 88 months in fiscal year 2021. In fiscal year 2022, the average sentence imposed in methamphetamine offenses was around 30 months longer than the average sentence in other drug trafficking cases, 91 months compared to 63 months.

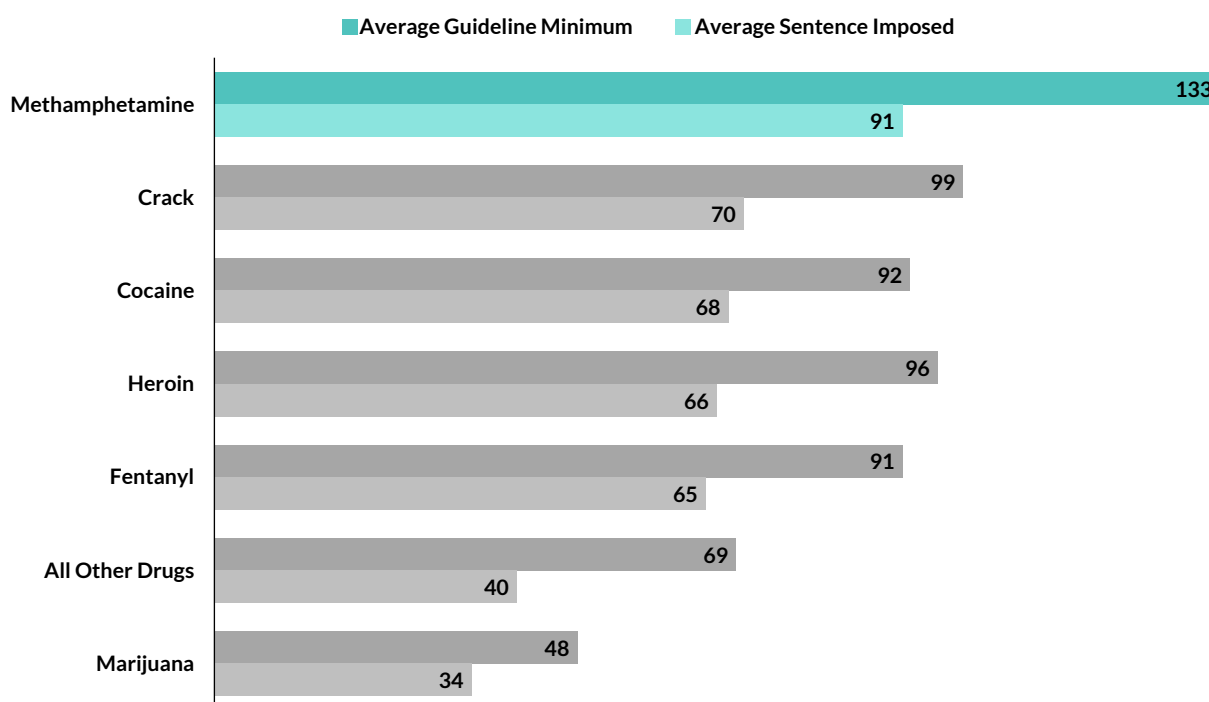
Figure 28. Average Guideline Minimum and Average Sentence Imposed in Drug Trafficking Cases, Fiscal Years 2018–2022



Methamphetamine trafficking offenses also had higher guideline minimums, on average, and received longer average sentences compared to offenses involving heroin, fentanyl, or crack cocaine (Figure 29). The average sentence imposed in

methamphetamine offenses (91 months) was 21 months longer than sentences imposed in crack offenses (70 months) and 26 months longer than the sentences imposed in fentanyl offenses (65 months) sentenced in fiscal year 2022.

**Figure 29. Average Guideline Minimum and Average Sentence Imposed in Drug Trafficking Cases, Fiscal Year 2022**



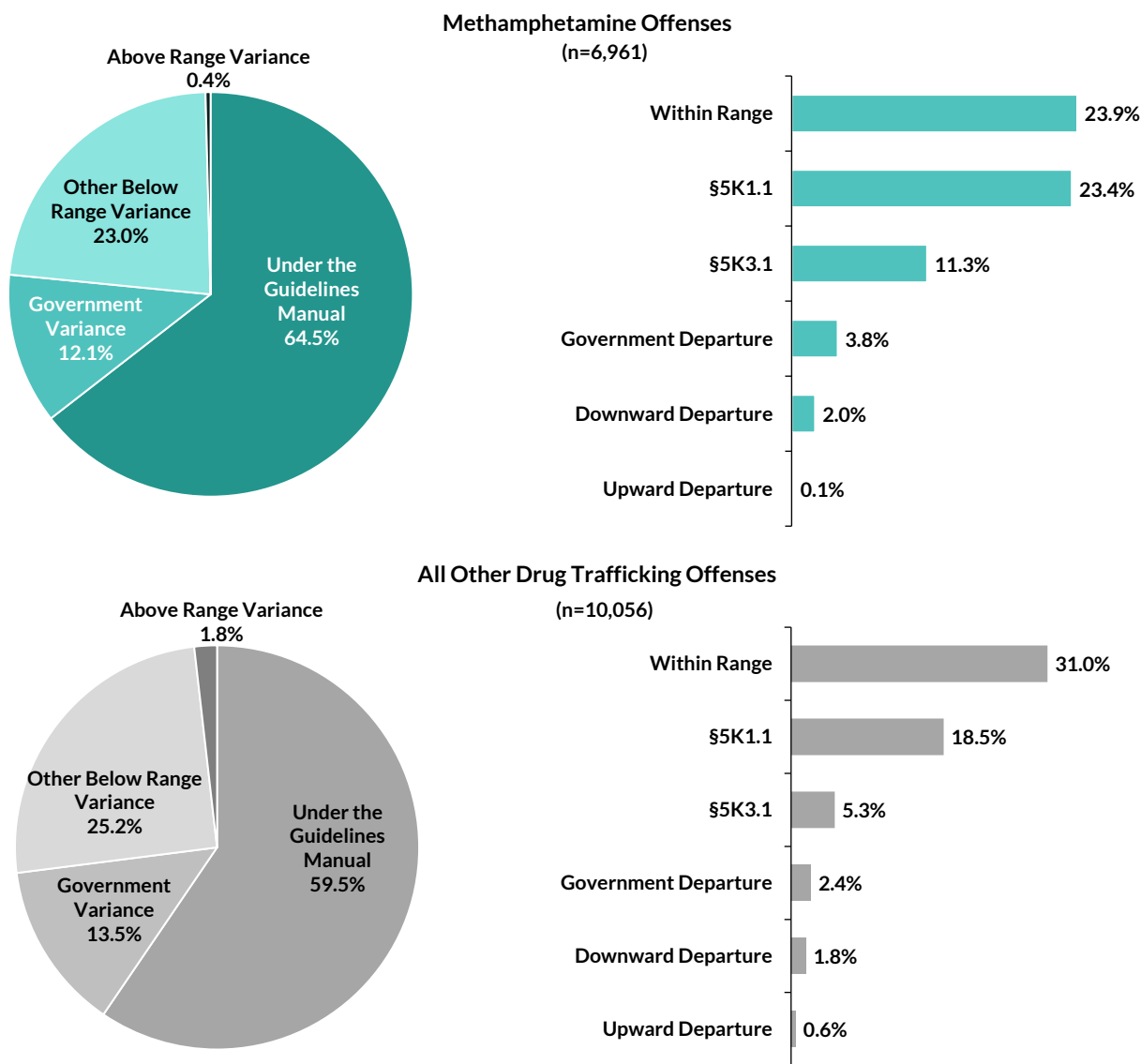
## Sentences Relative to the Guideline Range

Methamphetamine drug trafficking offenses were sentenced under the *Guidelines Manual* more frequently than drug trafficking offenses involving other substances (Figure 30). Nearly two-thirds (64.5%) of methamphetamine offenses were sentenced under the *Guidelines Manual*, compared to 59.5 percent of all other drug trafficking offenses. Nearly one-half of individuals sentenced for methamphetamine offenses received a within range sentence (23.9%) or a downward departure for substantial assistance under §5K1.1 (23.4%). Just over one-tenth (11.3%) of individuals

sentenced for trafficking methamphetamine received a downward departure under §5K3.1 as part of a “fast track” early disposition program. Two percent (2.0%) of sentenced individuals received another downward departure.

Methamphetamine traffickers received variances slightly less frequently than all other drug traffickers. Approximately one-third (35.5%) received a sentence outside of the *Guidelines Manual*, compared to 40.5 percent of all other drug traffickers. Approximately twelve percent (12.1%) of individuals sentenced for methamphetamine received a government sponsored variance, and 23 percent (23.0%) received another below range variance. Less than one percent (0.4%) received an upward variance.

Figure 30. Sentences Relative to the Guideline Range in Drug Trafficking Cases, Fiscal Year 2022

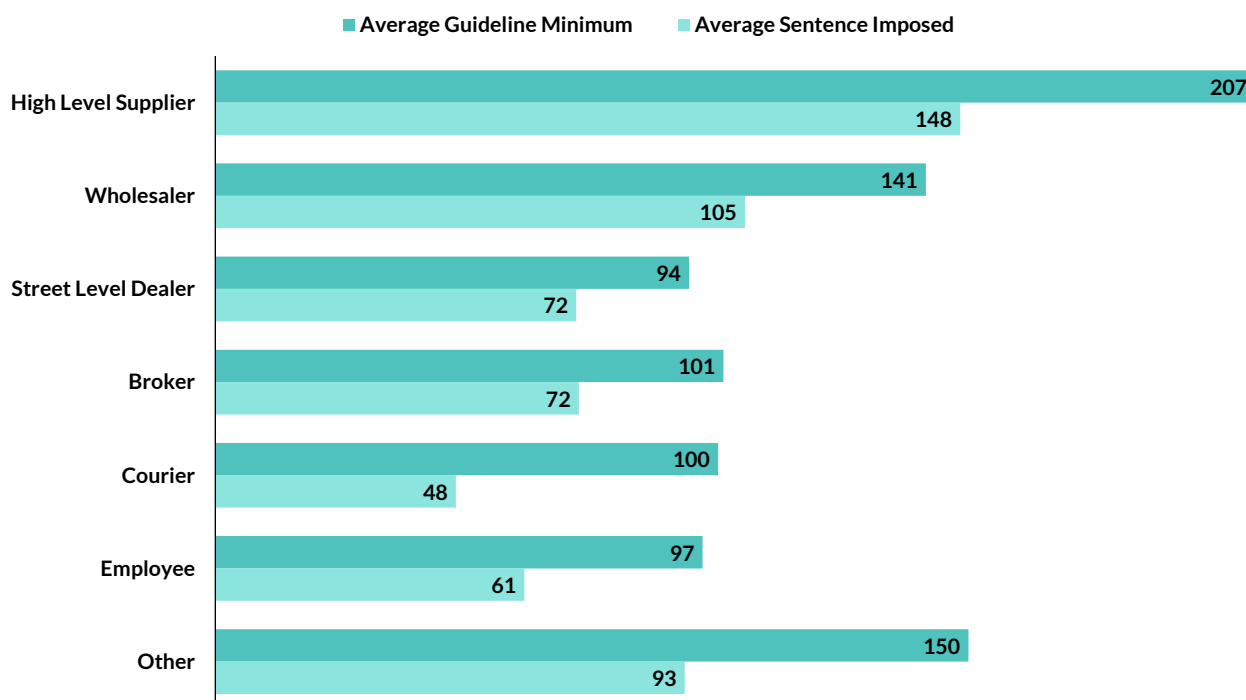


## Factors Affecting Sentencing of Methamphetamine Offenses

Individuals who performed leadership or managerial functions received higher average guideline minimums and longer sentences imposed compared to individuals who performed lower-level functions (Figure 31). Among individuals sentenced for methamphetamine trafficking offenses, average guideline minimums and average sentences imposed were highest for high level suppliers (207 months and 148 months, respectively) and wholesalers (141 months and 105 months, respectively). By comparison, couriers received shorter average guideline minimums and sentences imposed of 100 months and 48 months, respectively.

The higher average guideline minimums and longer sentences for high level suppliers and wholesalers appears largely driven by their role in the offense rather than the quantity of drugs involved in the offense. Couriers were held accountable for twice as much methamphetamine at sentencing compared to high level suppliers (21.3 kilograms vs. 10.1 kilograms) yet received notably shorter average sentences (48 months vs. 148 months). This is because 75.9 percent of couriers received a mitigating role adjustment at sentencing (compared to 23.5% of all methamphetamine drug traffickers). By comparison, 14.1 percent of high-level suppliers and 2.0 percent of wholesalers received aggravating roles adjustments at sentencing (compared to 3.9% of all methamphetamine drug traffickers).

Figure 31. Average Guideline Minimum and Average Sentence Imposed by Function Performed, Fiscal Year 2022



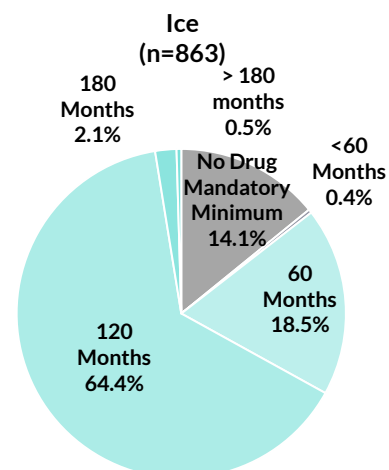
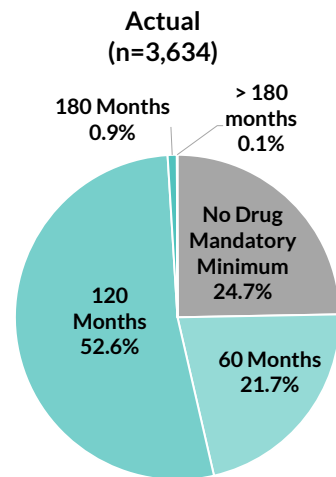
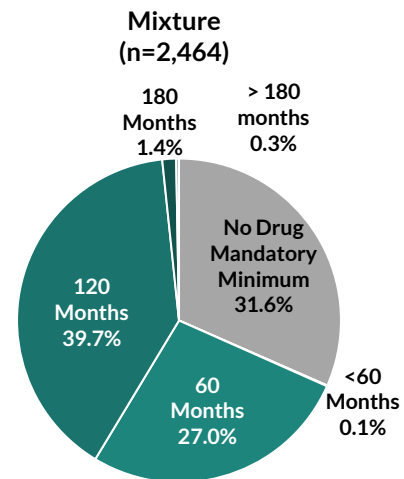


## Sentence Imposed by Methamphetamine Type

### *Mandatory Minimum Penalties: Mixture, Actual, and Ice*

Individuals sentenced for trafficking Ice were more likely to be convicted of an offense carrying a mandatory minimum penalty (85.9%), compared to individuals sentenced for trafficking either mixture (68.4%) or actual (75.3%). Nearly two-thirds (64.4%) of individuals sentenced for trafficking Ice were convicted of an offense carrying a ten-year mandatory minimum penalty, compared to about half (52.6%) of individuals sentenced for trafficking actual and nearly 40 percent (39.7%) of individuals sentenced for trafficking mixture (Figure 32).

Figure 32. Mandatory Minimum Penalties by Methamphetamine Type, Fiscal Year 2022

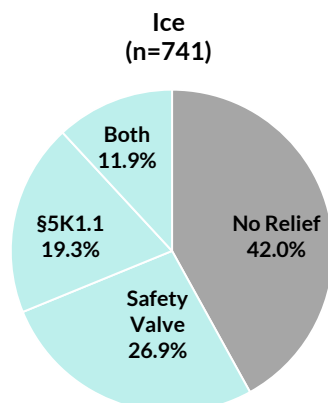
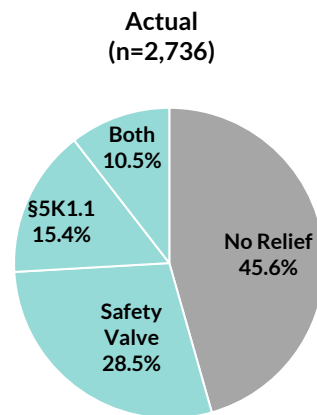
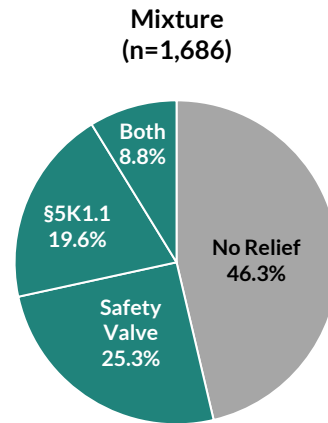


### Relief from Mandatory Minimum Penalties: Mixture, Actual, and Ice

A larger proportion of individuals sentenced for trafficking Ice (58.0%) received relief from a mandatory minimum penalty at sentencing compared to those who trafficked either actual (54.4%) or mixture (53.7%) (Figure 33). Approximately a quarter of individuals sentenced for trafficking either Ice (26.9%), actual (28.5%), or mixture (25.3%) received safety valve relief. Roughly 15 percent (15.4%) of actual traffickers received relief via a substantial assistance departure at sentencing, compared to about 19 percent of either mixture (19.6%) or Ice traffickers (19.3%). Slightly more than ten percent (11.9%) of individuals who trafficked Ice and actual (10.5%) and less than ten percent (8.8%) of individuals who trafficked mixture received both safety valve and substantial assistance relief.

Among individuals sentenced for trafficking methamphetamine, average sentences for individuals trafficking Ice (103 months) were ten months longer than average sentences for individuals who trafficked actual (93 months) and 20 months longer than sentences for individuals who trafficked mixture (83 months).

Figure 33. Relief from Mandatory Minimum Penalties in Methamphetamine Drug Trafficking Offenses, Fiscal Year 2022



### Sentences Imposed under the Guidelines Manual: Mixture, Actual, and Ice

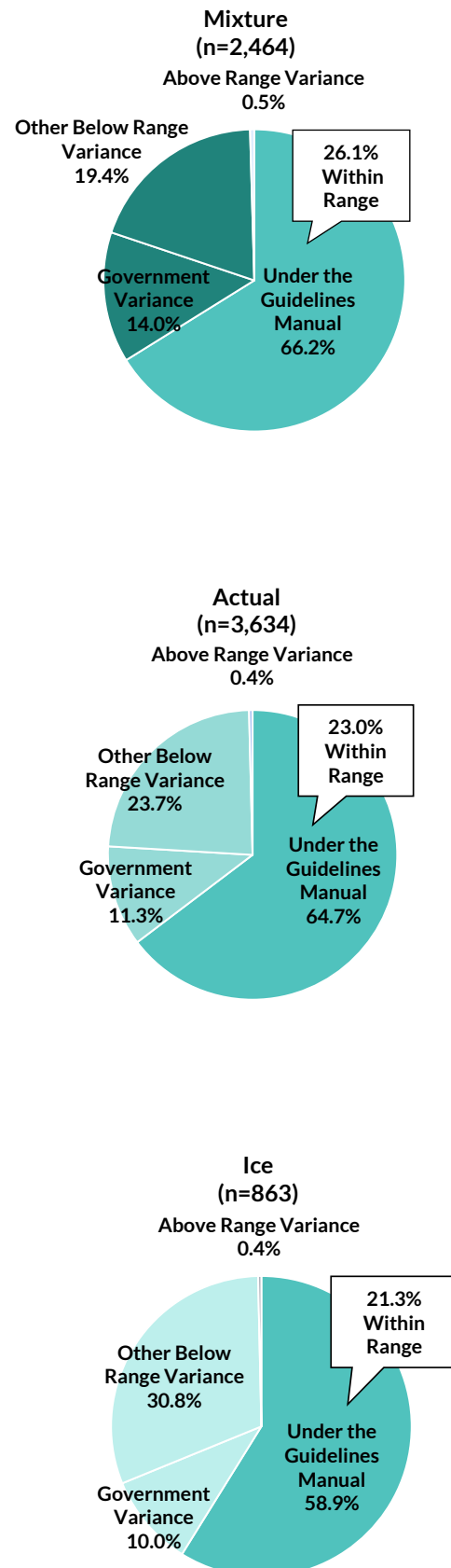
Among all individuals sentenced for trafficking methamphetamine, individuals sentenced for trafficking mixture (66.2%) were sentenced under the guidelines more frequently than those sentenced for trafficking either actual (64.7%) or Ice (58.9%) (Figure 34). Conversely, a smaller proportion of individuals sentenced for trafficking mixture received a below range variance at sentencing, compared to individuals sentenced for trafficking either actual or Ice.

Roughly a third (33.4%) of mixture traffickers received either a government sponsored (14.0%) or other below range variance (19.4%) at sentencing. A slightly greater proportion of actual traffickers (35.0%) received either a government sponsored (11.3%) or other below range variance (23.7%) at sentencing. Ice traffickers were the most likely to receive a below range sentence outside of the Guidelines Manual. Just over forty percent (40.8%) of Ice traffickers received either a government sponsored (10.0%) or other below range variance (30.8%) at sentencing.

### Sentences Relative to the Guideline Range: Mixture, Actual, and Ice

Individuals sentenced for trafficking methamphetamine mixture were sentenced within the guideline range (26.1%) more frequently than either actual (23.0%) or Ice (21.3%) traffickers. The proportion of individuals receiving a substantial assistance departure under §5K1.1 was slightly higher in Ice offenses (29.2%), compared to either mixture (23.9%) or actual (21.7%) offenses. Conversely, individuals sentenced for trafficking Ice were less likely to receive a downward departure under §5K3.1 as part of a “fast track” early disposition program (2.9%), compared to individuals sentenced for trafficking either actual (14.0%) or mixture (10.3%).

Figure 34. Sentence Relative to the Guideline Range in Methamphetamine Drug Trafficking Offenses, Fiscal Year 2022



## Conclusion

In the last 20 years, the number of individuals sentenced for methamphetamine trafficking has increased 168 percent with methamphetamine now comprising the largest proportion of individuals sentenced for federal drug trafficking offenses (48.7%). Persons sentenced for methamphetamine trafficking also received longer average sentences (91 months) compared to individuals sentenced for trafficking other major drug types, including fentanyl (65 months) and heroin (66 months).

At the same time, courts have expressed growing policy disagreements with the methamphetamine guideline penalties. Methamphetamine is one of only five controlled substances where purity drives the federal statutory and guideline penalties, leading to higher penalties when purity levels are tested and confirmed. By statute, ten times as much methamphetamine mixture (50 grams and 500 grams) is required to trigger the five- and ten-year statutory mandatory minimum penalties—with corresponding base offense levels of 24 and 30—compared to actual methamphetamine (5 grams and 50 grams). Consequently, a greater proportion of individuals in this study who were sentenced for trafficking actual (52.6%) and Ice (64.4%) were convicted of

an offense carrying a ten-year mandatory minimum penalty, compared to individuals sentenced for trafficking mixture (39.7%). Additionally, average sentences were lower among individuals sentenced for trafficking mixture (83 months) and higher among individuals sentenced for trafficking Ice and actual (103 and 93 months, respectively).

This study also revealed that while laboratory testing practices varied across the nation, there was little variation in the purity of methamphetamine seized. Laboratory testing was conducted in a majority of methamphetamine offenses, but the rate of testing varied across judicial circuits. Notably, methamphetamine seized in southwest border districts was significantly more likely to undergo laboratory testing than in non-border districts. When tested, however, nearly all the methamphetamine seized in federal drug trafficking offenses was highly pure (93% pure on average). Moreover, two-thirds of the methamphetamine tested in these offenses was more than 96 percent pure. This has led some judges to express concern that methamphetamine purity is no longer an indication of culpability in the offense and that the varied testing practices create disparity.

# Endnotes

1 Lou REEDT, JOHN STEER, SHARON HENEGAN, CHRISTINE KITCHENS & GRACE CHUNG BECKER, U.S. SENT’G COMM’N, METHAMPHETAMINE—FINAL REPORT 2 (1999) [hereinafter 1999 METHAMPHETAMINE REPORT]. Commission materials cited herein are available on the Commission’s website at [www.ussc.gov](http://www.ussc.gov).

2 *Id.* at 4.

3 See *United States v. Robinson*, No. 21-14, 2022 WL 17904534 (S.D. Miss. Dec. 23, 2022); see, e.g., *United States v. Moreno*, 583 F. Supp. 3d 739 (W.D. Va. 2019).

4 See *supra* note 3.

5 Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, 102 Stat 4181; U.S. SENT’G COMM’N, GUIDELINES MANUAL Ch.2, Pt.D (Nov. 1987).

6 In 2000, the Drug Enforcement Administration reported that methamphetamine purity ranged from 10% to 80% depending on location in the United States. NAT’L DRUG INTEL. CTR., U.S. DEP’T OF JUST., NATIONAL DRUG THREAT ASSESSMENT 2001: THE DOMESTIC PERSPECTIVE 19 (2000). So called “Mexican methamphetamine” tested below 10%, but methamphetamine produced elsewhere was much higher. *Id.*

7 This policy factor is reflected in the primary drug trafficking guideline, §2D1.1, which provides in relevant part, “the fact that a defendant is in possession of unusually pure narcotics may indicate a prominent role in the criminal enterprise and proximity to the source of the drugs.” U.S. SENT’G COMM’N, GUIDELINES MANUAL §2D1.1, comment. (n.27(C)) (Nov. 2023) [hereinafter USSG].

8 See, e.g., *Robinson*, 2022 WL 17904534, at \*3 (Judge Reeves) (“But national experience suggests that [the sentencing guidelines use of drug purity as a proxy for culpability] is no longer true for methamphetamine. The DEA data show that most methamphetamine confiscated today is ‘pure’ regardless of whether the defendant is a kingpin or a low-level addict.”); *United States v. Johnson*, 379 F. Supp. 3d 1213, 1223–24 (M.D. Ala. 2019) (Judge Thompson) (“[J]ust as courts have criticized the link between drug quantity and the offender’s role, they have also debunked the Guidelines’ assumed connection between drug purity and criminal role.”); *United States v. Ibarra-Sandoval*, 265 F. Supp. 3d 1249, 1255 (D.N.M. 2017) (Judge Brack) (finding that the Sentencing Commission’s “assumption regarding the connection between methamphetamine purity and criminal role is divorced from reality”).

9 Methamphetamine is a distinct drug from 3,4-methylenedioxymethamphetamine (MDMA). Although both drugs are amphetamine-type stimulants that produce similar effects, they have different chemical structures which results in different neurochemical responses. For more information, see Matthew G. Kirkpatrick, Erik W. Gunderson, Audrey Y. Perez, Margaret Haney, Richard W. Foltin & Carl L. Hart, *A Direct Comparison of the Behavioral and Physiological Effects of Methamphetamine and 3,4-methylenedioxymethamphetamine (MDMA) in Humans*, 219 PSYCHOPHARMACOLOGY 109–22 (2012).

10 Pub. L. No. 91-513, title II, 84 Stat. 1242 (1970). The CSA created the five controlled substances schedules found at 21 U.S.C. § 812. The current schedules list injectable methamphetamine as a Schedule II drug and any non-injectable methamphetamine as a Schedule III drug. See 21 U.S.C. § 812 Schedule II and Schedule III, respectively. However, in 1971, the Director of the Bureau of Narcotics and Dangerous Drugs, the predecessor of the Drug Enforcement Administration, acting on behalf of the Attorney General, reclassified all forms of methamphetamine as Schedule II controlled substances based on its high potential for abuse. See *Amphetamines—Justice Dept. Order Regarding Schedules of Control Substances*, 36 FR 12734, 12735 (July 7, 1971) (codified at 21 C.F.R. § 1308.12(d)); see also 21 U.S.C. § 811(a) (granting the Attorney General power to reclassify controlled substances).

11 OFF. ON DRUGS & CRIME, UNITED NATIONS, RECOMMENDED METHODS FOR THE IDENTIFICATION AND ANALYSIS OF AMPHETAMINE, METHAMPHETAMINE, AND THEIR RING-SUBSTITUTED ANALOGUES IN SEIZED MATERIALS 5 (2006) [hereinafter

## RECOMMENDED METHODS FOR ANALYSIS REPORT].

- 12        DRUG ENF'T ADMIN., U.S. DEP'T OF JUST., DRUG FACT SHEET: METHAMPHETAMINE (2022) [hereinafter DEA DRUG FACT SHEET].
- 13        John R. Richards & Erik G. Laurin, Nat'l Libr. of Med., Nat'l Inst. of Health, *Methamphetamine Toxicity* (June 8, 2023), <https://www.ncbi.nlm.nih.gov/books/NBK430895/>.
- 14        Hugo Juárez Olguín, David Calderón Guzmán, Ernestina Hernández García & Gerardo Barragán Mejía, *The Role of Dopamine and its Dysfunction as a Consequence of Oxidative Stress*, 2016 OXIDATIVE MED. & CELLULAR LONGEVITY 1 (2015).
- 15        Drug Enf't Admin., U.S. Dep't of Just., *Drug Scheduling* (July 10, 2018), <https://www.dea.gov/drug-information/drug-scheduling>; see also 21 U.S.C. § 812(b)(2)(A-C).
- 16        Annette E. Fleckenstein, Trent J. Volz, Evan L. Riddle, James W. Gibb & Glen R. Hanson, *New Insights into the Mechanism of Action of Amphetamines*, 47 ANN. REV. OF PHARMACOLOGY & TOXICOLOGY 681–98 (2007).
- 17        DEA DRUG FACT SHEET, *supra* note 12.
- 18        John R. Richards, Brian N. Harms, Amanda Kelly & Samuel D. Turnipseed, *Methamphetamine Use and Heart Failure: Prevalence, Risk Factors, and Predictors*, 36 AM. J. OF EMERGENCY MED. 1423–28 (2018).
- 19        DEA DRUG FACT SHEET, *supra* note 12.
- 20        Nat'l Inst. on Drug Abuse, Nat'l Inst. of Health, *Drug Overdose Death Rates* (June 30, 2023), <https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates>.
- 21        See Ctrs. for Disease Control & Prevention, CDC WONDER (Nov. 20, 2023), <http://wonder.cdc.gov>. Psychostimulants with abuse potential include methamphetamine, amphetamine, methylphenidate (Ritalin), and 3,4-methylenedioxy-methamphetamine (MDMA, Ecstasy).
- 22        DRUG ENF'T ADMIN., U.S. DEP'T OF JUST., 2020 NATIONAL DRUG THREAT ASSESSMENT 26 (2021) [hereinafter 2020 DRUG THREAT ASSESSMENT].
- 23        DEA DRUG FACT SHEET, *supra* note 12.
- 24        Desoxyn is the brand name drug product approved by the FDA for medical use. See *id.*
- 25        *Id.*
- 26        RECOMMENDED METHODS FOR ANALYSIS REPORT, *supra* note 11, at 7.
- 27        NAT'L DRUG INTEL. CTR., U.S. DEP'T OF JUST., CRYSTAL METHAMPHETAMINE FAST FACTS (2006).
- 28        *Id.*
- 29        *Id.*
- 30        Transcript of Public Hearing before the U.S. Sent'g Comm'n, Washington, D.C. 131 (Mar. 7, 2023) (C. Freedman).
- 31        2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 25.
- 32        *Id.* at 24–25.
- 33        *Id.* at 25.
- 34        DRUG ENF'T ADMIN., U.S. DEP'T OF JUST., 2017 NATIONAL DRUG THREAT ASSESSMENT 71 (2017) [hereinafter 2017 DRUG THREAT ASSESSMENT].



35 *Id.*

36 2020 DRUG THREAT ASSESSMENT, *supra* note 22.

37 Scott A. Waldman, *Does Potency Predict Clinical Efficacy? Illustration Through an Antihistamine Model*, 89 ANNALS OF ALLERGY, ASTHMA & IMMUNOLOGY 7–12 (2002).

38 Methamphetamine has two optical isomers that are federally scheduled; however, there may be other substances that are positional isomers of methamphetamine that are not federally scheduled. Isomers are “molecules of identical atomic compositions, but with different bonding arrangements of atoms or orientations of their atoms in space i.e., isomers are two or more different substances with the same molecular formula.” For more information on isomers, see Naveen Chhabra, Madan L. Aseri & Deepak Padmanabhan, *A Review of Drug Isomerism and its Significance*, 3 INT’L J. OF APPLIED & BASIC MED. RSCH. 16 (2013).

39 See R. West, A. Pesce, C. Mikel, J. Velasco, E. Gonzales, Z. Dizon, P. Almazan & S. Latyshev, *Detection of the d (dextro) and l (levo) Methamphetamine Enantiomers in a Population of Those With Pain*, 13 J. OF PAIN 89 (2012).

40 See M.T. Bardo, E.D. Denehy, L.R. Hammerslag, L.P. Dwoskin, B.E. Blough, A. Landavazo, J. Bergman & S. J. Kohut, *Effects of Methamphetamine Isomers on d-Methamphetamine Self-Administration and Food-Maintained Responding in Male Rats*, 236 PSYCHOPHARMACOLOGY 3557–65 (2019).

41 Nat’l Ctr. for Advancing Translational Sci., U.S. Dep’t of Health & Hum. Servs., *Inxight Drugs*, <https://drugs.ncats.io/drug/13ZT6YG5SD> (last visited May 4, 2023).

42 U.S. Drug Testing Lab’ys, *DL-Methamphetamine Isomer Explained*, <https://www.usdtl.com/d-l-isomers> (last visited May 4, 2023).

43 See Nat’l Libr. of Med., Nat’l Inst. of Health, *PubChem: D-Methamphetamine*, <https://pubchem.ncbi.nlm.nih.gov/compound/DL-Methamphetamine> (last visited May 4, 2023).

44 2017 DRUG THREAT ASSESSMENT, *supra* note 34, at 70 fig.61; 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 20 fig.12.

45 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 20 fig.12. Potency refers to the concentration of the drug needed to achieve the desired outcome.

46 See USSG §2D1.1(c)(Notes B, C).

47 Nat’l Drug Intel. Ctr., *Methamphetamine Drug Threat Assessment* (Mar. 2005), <https://www.justice.gov/archive/ndic/pubs13/13853/avail.htm>.

48 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 20 fig.12.

49 USA PATRIOT Improvement and Reauthorization Act of 2005, Pub. L. No. 109–177, title VII, 120 Stat. 192, 256 (2006).

50 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 20–21.

51 *Id.* at 23.

52 *Id.* at 22 fig.14. Incidents include Dumpsites, Chemical Only, or Equipment Only Seizures, and Laboratory Seizures. *Id.* at 23 n.o.

53 *Id.* at 25–27.

54 *Id.* at 25 fig.18.

55 See JAMES O. FINCKENAUER, JOSEPH R. FUENTES & GEORGE L. WARD, NAT’L INST. OF JUST., *MEXICO AND THE UNITED STATES: NEIGHBORS CONFRONT DRUG TRAFFICKING* (2001).

56 DRUG ENF'T ADMIN., U.S. DEP'T OF JUST., 2019 NATIONAL DRUG THREAT ASSESSMENT 49 (2019).

57 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 24.

58 *Id.* at fig. 16.

59 U.S. Customs & Border Prot., U.S. Dep't of Homeland Sec., *Drug Seizure Statistics* (Feb. 13, 2024), <https://www.cbp.gov/newsroom/stats/drug-seizure-statistics>.

60 2020 Drug Threat Assessment, *supra* note 22, at 24–25.

61 *Id.* at 25.

62 *Id.*

63 *Id.* at 24–25.

64 *Id.* at 24 fig.16.

65 See 21 U.S.C. §§ 841(b), 960(b).

66 See 21 U.S.C. §§ 841(b), 960(b).

67 Four other substances also have statutory penalties based on the purity of the substance, including amphetamine, PCP, hydrocodone, and oxycodone.

68 See 21 U.S.C. §§ 841(b)(1)(A)(viii), (B)(viii), 960(b)(1)(H), (2)(H).

69 For offenses involving less than five grams of methamphetamine (actual) and 50 grams of methamphetamine (mixture), a statutory maximum penalty of not more than 20 years is applicable. See 21 U.S.C. §§ 841(b)(1)(C), 960(b)(3). If the individual committed the offense after a prior conviction for a felony drug offense, the penalty increases to not more than 30 years. *Id.* If death or serious bodily injury resulted from the use of the substance, a mandatory minimum sentence of not less than 20 years or more than life is applicable. *Id.* If the death or serious bodily injury resulted and the individual commits the offense after a prior conviction for a felony drug offense, a mandatory minimum penalty of life is applicable. *Id.* The methamphetamine quantity thresholds were first established in the Anti-Drug Abuse Act of 1988. Pub. L. No. 100–690, § 6470, 102 Stat. 4181. The 1988 Act set the mandatory minimum threshold quantities for methamphetamine (pure or actual) and methamphetamine mixture to the following:

	5-Year Mandatory Minimum	10-Year Mandatory Minimum
<b>Methamphetamine (Pure)</b>	10 grams	100 grams
<b>Methamphetamine (Mixture)</b>	100 grams	1 kilogram

Congress enacted the current threshold quantities in the Methamphetamine Trafficking Penalty Enhancement Act of 1998 by halving the previous threshold quantities. Pub. L. No. 105–277, div. E, 112 Stat. 2681.

70 See USSG App. A.

71 See USSG §2D1.1(a)(1)–(4).

72 See USSG §2D1.1(a)(5).

73 In 2014, the Commission amended the Drug Quantity Table to reduce by two levels the offense levels assigned to the quantities that trigger mandatory minimum penalties, resulting in corresponding ranges that



include the mandatory minimum penalties. See USSG App. C, amend. 782 (effective Nov. 1, 2014). Prior to the amendment, the base offense levels assigned corresponded to guideline ranges that were slightly above the statutory mandatory minimum penalties. Offenses involving drug quantities that trigger a five-year statutory minimum were assigned a base offense level 26 (63 to 78 months for a defendant in Criminal History Category I) and offenses involving drug quantities that trigger a ten-year statutory minimum were assigned a base offense level of 32 (121 to 151 months for a defendant in Criminal History Category I). *Id.*

74 A detailed discussion regarding the interaction between mandatory minimum penalties and the guidelines is presented in the Commission's 2011 report to Congress on mandatory minimum penalties. See U.S. SENT'G COMM'N, REPORT TO CONGRESS: MANDATORY MINIMUM PENALTIES IN THE FEDERAL CRIMINAL JUSTICE SYSTEM, at Ch.3 (2011) [hereinafter MANDATORY MINIMUM REPORT].

75 See USSG §2D1.1(c)(Note A). Most substances are measured according to the total weight of any mixture or substance in which they are contained.

76 See USSG §2D1.1(c)(Note C).

77 See USSG §2D1.1(c)(Note B).

78 *Id.*

79 The Commission responded to the new statutory penalty scheme for methamphetamine in the Anti-Drug Abuse Act of 1988 by amending the Drug Quantity Table at §2D1.1 by inserting specific references to the quantity of the substance for each offense level set forth in the table. USSG App. C, amend. 125 (effective Nov. 1, 1989). The Commission responded to the Methamphetamine Trafficking Penalty Enhancement Act of 1998, which changed the quantity thresholds by amending the methamphetamine (actual) quantities in the Drug Quantity Table in §2D1.1. USSG App. C, amend. 594 (effective Nov. 1, 2000).

80 In addition to changes in the statutory penalties for methamphetamine, Congress directed the Commission to increase guideline penalties for methamphetamine offenses. In 1996, Congress enacted the Comprehensive Methamphetamine Control Act of 1996. Pub. L. No. 104-237, 110 Stat. 3099. Among its provisions were directives to the Commission to amend the *Guidelines Manual* to increase penalties for methamphetamine-related offenses. § 301, 110 Stat. at 3105. In response, the Commission amended the *Guidelines Manual* by reducing by one-half the quantity of a mixture or substance containing methamphetamine corresponding to each offense level in the Drug Quantity Table in §2D1.1. USSG App. C, amend. 555 (effective Nov. 1, 1997).

81 Crime Control Act of 1990, Pub. L. No. 101-647 (Nov. 29, 1990), 104 Stat 4789. Initially, Congress considered amending the Control Substances Act directly to punish Ice trafficking offenses, but instead directed the Commission to amend the guidelines to ensure that the offense level in cases involving "smokable crystal methamphetamine" were two levels above those for other forms of methamphetamine. § 2701, 104 Stat. at 4912.

82 See 1999 METHAMPHETAMINE REPORT, *supra* note 1, at 9. Ice was defined as methamphetamine in its hydrochloride format and crystalline in structure.

83 USSG App. C, amend. 370 (Effective Date: Nov. 1, 1991). See also USSG §2D1.1(c) and Note (C).

84 See USSG §2D1.1(b)(5).

85 See USSG §2D1.1(b)(6). Section 731 of the USA PATRIOT Improvement and Reauthorization Act of 2005 created the new offense at section 865, which provides for a mandatory consecutive sentence of 15 years' imprisonment for smuggling methamphetamine or its precursor chemicals into the United States by a person enrolled in, or acting on behalf of someone or some entity enrolled in, any dedicated commuter lane, alternative or accelerated inspection system, or other facilitated entry program administered by the federal government for use in entering the United States. Pub. L. No. 109-177, § 731, 120 Stat. 192, 270 (2006). The Commission referenced the new offense at section 865 to both §§2D1.1 and 2D1.11 and provided similar two-level enhancements in both guidelines. See USSG App. C, amend. 705 (effective Nov. 1, 2007).

86 See USSG §2D1.1, comment. (n.27(C)).

87 See USSG §2D1.1(b)(14). In two instances Congress directed the Commission to amend the *Guidelines Manual* to account for the harms to both people and the environment caused by the production of methamphetamine. In the Comprehensive Methamphetamine Control Act, Congress directed the Commission to amend the *Guidelines Manual* to increase penalties for environmental violations occurring in association with an illicit manufacturing or other drug trafficking offense. § 303, 110 Stat. at 3106. The Commission responded by amending §2D1.1 to provide a two-level enhancement, with an invited upward departure in more extreme cases, for environmental violations occurring in association with an illicit manufacturing or other drug trafficking offense. USSG App. C, amend. 555 (effective Nov. 1, 1997); see also USSG §2D1.1(b)(14)(A); USSG §2D1.1, comment. (18(A)).

In 2000, Congress enacted the Methamphetamine Anti-Proliferation Act of 2000 as part of the Children's Health Act of 2000. Pub. L. No. 106-310, § 3601, 114 Stat 1101, 1227. In it, Congress directed the Commission to amend the *Guidelines Manual* to account for the "substantial risk[s]" involved in any offense relating to the manufacture, attempt to manufacture, or conspiracy to manufacture methamphetamine. § 3612, 114 Stat. at 1229. The Act contained a detailed directive to the Commission and granted emergency amendment authority. *Id.* The basic structure of the responding emergency amendments tracked the structure of the substantial risk directive. USSG App. C, amend. 608 (effective Dec. 16, 2000). The temporary emergency amendments were later re-promulgated, with slight modifications, as permanent amendments. USSG App. C, amend. 620 (effective Nov. 1, 2001).

88 See USSG §2D1.1(b)(14). The Combat Methamphetamine Epidemic Act of 2005 created a new offense in 21 U.S.C. § 860a (Consecutive sentence for manufacturing or distributing, or possessing with intent to manufacture or distribute, methamphetamine on premises where children are present or reside). § 734, 120 Stat. at 270. The new offense provided that a term of not more than 20 years' imprisonment was to be imposed, in addition to any other sentence imposed, for manufacturing, distributing, or possessing with the intent to manufacture or distribute, methamphetamine on a premise where a minor was present or resided. *Id.* In response, the Commission amended the existing "substantial risks" enhancement created in response to the Methamphetamine Anti-Proliferation Act of 2000 to provide tiered enhancements with minimum offense levels for specified conduct involved in the offense. USSG App. C, amend. 705 (effective Nov. 1, 2007).

89 See USSG §§2D1.11(b)(3), 2D1.12(b)(2).

90 1999 METHAMPHETAMINE REPORT, *supra* note 1, at 15 n.42.

91 Drug trafficking guidelines information is obtained from the Presentence Report and is based on the guidelines in Chapter Two, Part D of the *Guidelines Manual*. The seven guidelines (§§2D1.1, 2D1.2, 2D1.5, 2D1.6, 2D1.8, 2D1.10, and 2D1.14) represent the guidelines in Chapter Two, Part D, that utilize the Drug Quantity Table in §2D1.1 (Drug Trafficking) to determine the base offense level. See USSG Ch.2, Pt.D; USSG §2D1.1(c).

92 Individuals in this study had only methamphetamine involved in their guideline calculation, were sentenced under one of the seven drug trafficking guidelines (§§2D1.1, 2D1.2, 2D1.5, 2D1.6, 2D1.8, 2D1.10, and 2D1.14), and had complete sentencing information and documentation.

93 Weapon enhancement is defined as either a guideline specific offense characteristic relating to a weapon (§2D1.1(b)(1)) or a conviction under 18 U.S.C. § 924(c) for using or carrying a firearm during and in relation to, or possessing a firearm in furtherance of, a "crime of violence" or "drug trafficking crime." 18 U.S.C. § 924(c). The specific offense characteristic results in 2-level increase in the offense level. USSG §2D1.1(b)(1). In the case of a section 924(c) conviction, the court must impose a consecutive statutory minimum penalty of 5, 7, 10, 25 or 30 years, depending on the conduct involved. 18 U.S.C. § 924(c)(1).

94 The proportion of individuals who received a weapon enhancement did not vary significantly by the type of methamphetamine involved in the offense.

95 See USSG §2D1.1(b)(5). Among the 6,961 individuals sentenced for trafficking methamphetamine 23.5% received a mitigating role adjustment under Chapter 3 and therefore were not eligible for an enhancement for importation.

96 See USSG §2D1.1(b)(14)(A)(ii).

97 See USSG §2D1.1(b)(14)(C)(ii)(II).

98 See USSG §2D1.1(b)(14)(B).

99 See USSG §2D1.1(b)(14)(C)(i), (D).

100 Among methamphetamine traffickers, individuals sentenced for trafficking Ice (5.6%) received an aggravating role adjustment more frequently than individuals who were sentenced for trafficking either mixture (4.6%) or actual (3.1%).

101 The criminal history guidelines and the determination of the individual's CHC measure the seriousness of the individual's prior conduct and likelihood to recidivate. Courts determine an individual's CHC based on a point system that takes into account the length of a sentence imposed for a prior conviction and whether the individual was still serving a sentence in another case while committing the instant offense (e.g., the individual was on probation or parole). See USSG Ch.4, Pt.A.

102 The Armed Career Criminal Act (ACCA), codified at 18 U.S.C. § 924(e), requires imposition of a minimum 15-year term of imprisonment for recidivists convicted of unlawful possession of a firearm under 18 U.S.C. § 922(g), who have three prior state or federal convictions for violent felonies or serious drug offenses. 18 U.S.C. § 924(e).

103 A career offender is someone who commits a crime of violence or a controlled substance offense after two prior felony convictions for those crimes. The sentencing guidelines assign all career offenders to CHC VI and to offense levels at or near the statutory maximum penalty of the offense of conviction. USSG §§4B1.1, 4B1.2; see generally U.S. SENT'G COMM'N, REPORT TO THE CONGRESS: CAREER OFFENDER SENTENCING ENHANCEMENTS (2016).

104 The Commission collects information for every federal felony and Class A misdemeanor offense sentenced each year. Sentencing courts are statutorily required to submit five sentencing documents to the Commission within 30 days of entry of judgment in a criminal case, including: (1) the charging document; (2) the plea agreement; (3) the Presentence Report; (4) the Judgment and Commitment Order; and (5) the Statement of Reasons form. See 28 U.S.C. § 994(w)(1). For each case in its Individual Datafile, the Commission routinely collects case identifiers, sentencing data, demographic variables, statutory information, the complete range of court guideline application decisions, and departure and variance information from these documents.

105 The Commission identified 9,681 individuals with methamphetamine involved in their offense; 9,555 were sentenced under one of the seven drug trafficking guidelines and had complete sentencing information and documentation. Of those, 6,961 had only methamphetamine involved in their guideline calculation. The Commission took a 20 percent random sample of the 6,961 individuals sentenced for methamphetamine-only in fiscal year 2022, which resulted in a sample of 1,378 individuals.

106 USSG §2D1.1(a)(5). Subsection (a)(5), which uses the type and quantity of the controlled substances for which the individual is accountable to determine the offense level, is the most frequently applied §2D1.1 alternative base offense level provision.

107 USSG §2D1.1, comment. (n.5).

108 This information was determined from a review of the sentencing documents used in this study.

109 The difference in laboratory testing practices was statistically significant by federal circuit, as determined by an ANOVA analysis ( $p < .001$ ).

110 Difference in drug testing between border and non-border districts is statistically significant, as determined by a  $X^2$  analysis ( $p < .0001$ ).

111 Using a least squared means adjustment for multiple comparisons, there was no statistically significant difference in the purity of the methamphetamine tested in offenses sentenced as methamphetamine actual or sentenced as methamphetamine mixture; however, the purity was statistically significantly higher in Ice offenses, likely as a result of the 80% purity threshold required by the guidelines ( $p \geq .001$ ).

112 Using least squared means adjustment for multiple comparisons, the difference in drug purity across circuits was not statistically significant.

113 There was an insufficient number of cases to determine the average drug purity of methamphetamine tested in the Second Circuit.

114 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 21.

115 The difference in drug purity from border districts and non-border districts was not statistically significant.

116 The Commission assessed the most serious function a sentenced individual performed during an offense, independent of any application of sentencing enhancements and reductions. In those cases where an individual performed different functions at different times, the Commission determined the most serious function performed in the drug offense, even if the individual more frequently performed a less serious function.

117 See, e.g., KRISTIN M. TENNYSON, CHARLES S. RAY & KEVIN T. MAAS, U.S. SENT'G COMM'N, FENTANYL AND FENTANYL ANALOGUES: FEDERAL TRENDS AND TRAFFICKING PATTERNS 27-29 (2021); MANDATORY MINIMUM REPORT, *supra* note 74, at 43-50.

118 Difference in drug weight by function performed is statistically significant, as determined by a  $X^2$  analysis ( $p < .0001$ ).

119 Individuals admitted to using illicit drugs or abusing prescription medication in the 12 months prior to arrest.

120 Difference in drug use by function performed is statistically significant, as determined by a  $X^2$  analysis ( $p < .0001$ ).

121 This information was recorded from the indictment, plea, statement of reasons, or presentence investigation report and is not necessarily reflective of an aggravating role adjustment under §3B1.1. Drug cartels were defined as drug trafficking organizations based outside the United States; however, they produce, transport, and distribute illicit drugs domestically. Drug trafficking organizations (DTOs) were defined as complex organizations with highly defined command-and-control structures that produce, transport, and/or distribute large quantities of one or more illicit drugs based within the United States. Gangs included street gangs, prison gangs, and outlaw motorcycle gangs. Street gangs were defined as groups or associations of three or more persons with a common identifying sign, symbol, or name, the members of which engage in criminal activity. Prison gangs were defined as highly structured criminal networks that operate within the federal and state prison system and in local communities through members who have been released from prison. Outlaw motorcycle gangs (OMGs) were defined as highly structured criminal organizations whose members share affinity and membership through riding motorcycles, shared symbolism, and engagement in criminal activities such as violent crimes, weapons trafficking, and drug trafficking.

122 If an individual in this study ran one of these facilities or bought or sold drugs from one of these facilities, they were considered to have participated in the activities of that facility.

123 A trap house was defined as a residence, or any part of a residence, where low level dealers sell drugs to users, with all the attendant traffic coming and going. The location is not used to store large quantities of drugs, but rather serves as a "storefront" for dealing or a location for buyers to also use drugs. This included motel or hotel rooms or abandoned buildings.

124 A stash house was defined as a location or residence where large quantities of drugs are stored and/or cut. Often the location includes large amounts of cash or stashes of weapons. Stash houses included storage facilities, barns, or buildings adjacent to a residence.

125 See NAT'L DRUG INTEL. CTR., U.S. DEP'T OF JUST., METHAMPHETAMINE LABORATORIES: IDENTIFICATION AND HAZARDS

FAST FACTS (2004); *see also* 2020 DRUG THREAT ASSESSMENT, *supra* note 22, at 25.

126 One individual in this study manufactured methamphetamine near a minor, or in this instance, was converting liquid methamphetamine into a crystal form where a minor was present.

127 Defendants may receive relief from a drug mandatory minimum penalty, including a recidivist enhancement, in two ways. First, if the prosecution files a motion based on the defendant's "substantial assistance" to authorities in the investigation or prosecution of another person, a sentencing court may impose a sentence below the statutory minimum pursuant to 18 U.S.C. § 3553(e). 18 U.S.C. § 3553(e). Second, if the defendant meets the "safety valve" criteria provided in 18 U.S.C. § 3553(f), the statute provides that the court shall impose a sentence pursuant to the sentencing guidelines without regard to the otherwise applicable statutory minimum. 18 U.S.C. § 3553(f).

128 Unlike a substantial assistance departure—which applies to all federal offenses carrying a mandatory minimum penalty—the safety valve statute applies only in cases in which a defendant faces a mandatory minimum penalty after being convicted of a drug trafficking offense listed in the statute. 18 U.S.C. § 3553(f).



## United States Sentencing Commission

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THURGOOD MARSHALL FEDERAL JUDICIARY BUILDING  
ONE COLUMBUS CIRCLE N.E.  
SUITE 2-500, SOUTH LOBBY  
WASHINGTON, DC 20002-8002

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