

#### Drug Cases Submitted to the Virginia Department of Forensic Science Calendar Year 2023

Produced by the Virginia Department of Criminal Justice Services in partnership with the Virginia Department of Forensic Science





# **Drug Cases Submitted to the Virginia Department of Forensic Science**

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#### **Data Sources**

Drug submission data for this report were provided by the Virginia Department of Forensic Science (DFS), using information collected for the National Forensic Laboratory Information System. Annual totals presented here may be slightly lower than previous reports. Some submissions (fewer than 0.1% overall) were double-counted in cases in which testing for two different samples within a submission were completed in different months.

Arrest data were taken from the annual Crime in Virginia reports prepared by the Virginia State Police (VSP), https://vsp.virginia.gov/sections-units-bureaus/bass/criminaljustice-information-services/uniform-crime-reporting/#UCR-IBR

Population data used to calculate rates were retrieved from the Weldon Cooper Center for Public Service, https://demographics.coopercenter.org/virginia-population-<u>estimates</u>

Data analysis was provided by the Virginia Department of Criminal Justice Services (DCJS) Criminal Justice Research Center, https://www.dcjs.virginia.gov/criminal-justiceresearch-center

# Drug Cases Submitted to the Virginia Department of Forensic Science

#### Introduction

Every year, tens of thousands of drug samples are submitted to the Virginia Department of Forensic Science (DFS). These submissions arrive in many forms, including powders, solid material, liquids, pills, plants, residue, and more. At DFS, they are tested by the Controlled Substances Section, to identify the presence of controlled substances. Hundreds of unique substances are identified each year, and they include illegal drugs, prescription drugs, and over the counter medications.

The frequency with which individual drugs are identified in DFS drug testing can help in understanding the level of availability of those drugs within Virginia, and how that level of availability has changed over time. This report looks at selected drug categories of interest, showing how frequently those drugs are submitted to DFS, both statewide and regionally. The drug categories examined here are among the most common submissions and include both illicit substances and prescription drugs with a potential for abuse. In some cases – particularly with regard to designer drugs and cannabimimetic agents – a substance is identified before it is explicitly listed as a controlled substance in the *Code of Virginia*. Those cases are still counted in this report.

- Illicit substances
  - Occaine
  - ◊ Methamphetamine
  - ◊ Heroin
  - Illicit synthetic opioids (primarily illicitly produced fentanyl and fentanyl analogs)
  - Illicit benzodiazepines
  - Hallucinogenic substances (such as LSD, PCP, and psychoactive mushrooms)
  - Cannabimimetic agents (also known as synthetic cannabinoids)
  - Other designer drugs (excluding those included in any of the categories above)
- Prescription drugs
  - $\diamond\,$  Opioids (such as oxycodone and morphine)
  - ◊ Stimulants (primarily medications to treat ADD/ADHD)
  - O Benzodiazepines (such as alprazolam and diazepam)

Marijuana is not included in this report. The *Code of Virginia* was revised in July 2006 to permit law enforcement officers to testify to the results of marijuana field tests at trial in simple possession cases involving plant material. Following this change, the number of marijuana submissions to DFS dropped significantly, while the number of arrests increased significantly through 2018. Data on marijuana submissions to DFS before and after this change cannot be compared. Possession of less



than one ounce of marijuana was decriminalized in 2020, and legalized in 2021.

Each of the drug categories listed is presented separately in the pages that follow. These pages report changing trends in both time and geography, as the availability of individual drugs (as measured by the number of submissions to DFS) changed differently for different regions in Virginia. This report examines regional trends using the Virginia State Police (VSP) Divisions, as well as the smaller Virginia Court Districts. A listing of the counties and cities within the seven VSP divisions, and within the 32 Court Districts, is included in Appendix C.

The pages that follow report the following for each drug category: trends in submissions between 2014 and 2023; the 2023 frequency of submissions of various subcategories of drugs within these larger categories, where applicable; the regional distribution of 2023 submissions; the 2023 rate of submissions, by VSP Division; and maps presenting the trend in submission rates for the 32 Virginia Court Districts, for 2013, 2018, and 2023.

Note that drug submissions in this report may be counted differently than in some other reports of DFS data. For this report, if a submission included at least one substance within a drug category it is counted as a single submission, even if multiple substances within that category were identified. When data are presented for subcategories (e.g., specific prescription opioids), a subcategory is counted once regardless of how many samples of that substance were included in the submission. The sum of the subcategories (where relevant) will usually not equal the total for the drug category, as there are submissions that meet the criteria for multiple subcategories but are still only counted once for the broader category.

# 2023 Drug Submissions to DFS – Highlights

#### Summary

Overall, drug submissions to DFS increased in CY 2023, but that varied across the different drug categories.

- Several drug categories included here did show an increase between 2022 and 2023:
  - Other Designer Drug submissions increased 163%
  - ♦ Cocaine submissions increased 23%
  - ◊ Illicit Synthetic Opioid submissions increased 22%
  - ♦ Hallucinogenic Substance submissions increased 10%
  - Ocannabimimetic Agent submissions increased 8%
  - ◊ Methamphetamine submissions increased 2%
- Other drug categories showed a decrease:
  - ◊ Prescription Benzodiazepine submissions dropped 2%
  - ◊ Illicit Benzodiazepine submissions dropped 6%
  - $\diamond\,$  Prescription Opioids submissions dropped 10%
  - ◊ Prescription Stimulant submissions dropped 15%
  - Heroin submissions dropped 33%

The 2023 rate of drug submissions per 100,000 population varied by drug type and Virginia State Police division (VSP):

**Cocaine:** The rate of submissions was highest from VSP 1, and lowest from VSP 4.

**Methamphetamine:** Rate of submissions was highest from VSP 4, and lowest from VSP 7.

**Prescription Stimulants:** Rate of submissions was highest from VSP 2, and lowest from VSP 7.

**Heroin:** Rate of submissions was highest from VSP 6, and lowest from VSP 7.



Virginia State Police Divisions (VSP)

**Illicit Synthetic Opioids:** Rate of submissions was highest from VSP 2, and lowest from VSP 3.

**Prescription Opioids:** Rate of submissions was highest from VSP 4, and lowest from VSP 7.

**Illicit Benzodiazepines:** Rate of submissions was highest from VSP 4, and lowest from VSP 3.

**Prescription Benzodiazepines:** Rate of submissions was highest from VSP 4, and lowest from VSP 7.

Hallucinogenic Substances: Rate of submissions was highest from VSP 2, and lowest from VSP 1.

**Cannabimimetic Agents:** Rate of submissions was highest from VSP 4, and lowest from VSP 1.

**Other Designer Drugs:** Rate of submissions was highest from VSP 7, and lowest from VSP 3.

#### Top Ten

The ten most common substances identified in 2023 were:

1. Methamphetamine	6. Buprenorphine
2. Cocaine	7. Xylazine
3. Fentanyl	8. Naloxone*
4. Marijuana*	9. Heroin
5. N,N-dimethylpentylone	10. Oxycodone

\*Marijuana and naloxone are not included in this report



#### Change in Submissions—CY 2022 to 2023

# **2023** Drug Submissions to DFS – Highlights

#### **Ten-Year Trends**

The graphs below present ten-year trendlines for the substances/substance categories included in this report. Note that the two graphs have different scales, so that the trends can be clearly displayed. Please see the sections for the individual substances/substance categories for more details on these trends.

**Xylazine Submissions by Court District** 

0 per 100k

Up to 4.55 per 100k

4.56 to 7.05 per 100k

Rate per 100,000

Statewide Rate: 12.4

CY 2023



Submissions for Select Drugs, CY 2014-2023



#### Emerging Trend—Xylazine

Xylazine is a veterinary tranquilizer that, mixed with fentanyl, has been involved in a rising number of overdose fatalities across the country. DFS has seen an increase in submissions containing xylazine, but only began requiring the reporting of xylazine in August 2021. Therefore, data prior to that time would not provide a complete picture. In CY2023, xylazine represented 2% of submissions.



## Cocaine



Cocaine submissions to DFS are higher than almost any other individual drug, representing 22% of the total number of submissions to DFS in 2023.

After increasing 41% between 2014 and 2018, cocaine submissions dropped 3% in 2019, 26% in 2020, and another 6% in 2021. This trend reversed in 2022, when cocaine submissions increased 11%. Cocaine submissions increased 23% in 2023.

VSP Divisions 1 and 5 were responsible for the highest number of cocaine submissions in 2023. The rate of submissions per 100,000 population was highest from VSP 1.

Statewide, the rate of cocaine submissions in 2023 was 102.3 per 100,000 population. Despite the increase in cases in 2023, this statewide rate was down 10% from 2018.

The maps on the following page present the changing pattern of cocaine submission rates, by Virginia Court District.

2023 Cocaine Submissions Across Virginia State Police (VSP) Divisions

4



#### 2023 Cocaine Submissions Rate per 100,000



# Cocaine

Cocaine Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



### Methamphetamine



Methamphetamine Submissions CY2014-2023

Methamphetamine submissions to DFS are the highest for an individual drug, representing 23% of the total number of submissions to DFS in 2023.

After increasing every year between 2014 and 2019 – more than a fivefold overall increase during that time – methamphetamine submissions remained flat between 2019 and 2020, dropped 2% in 2021, and dropped 1% in 2022. In 2023 that trend reversed, with methamphetamine submissions increasing 2%. The large percentage increase between 2014 and 2019 is due in part to the relatively low number of submissions in 2014. In 2014, methamphetamine represented only 4% of total submissions statewide, vs. 23% in 2022.

Both the highest number and the highest rate of methamphetamine submissions in 2023 were from VSP 4.

Statewide, the rate of methamphetamine submissions in 2023 was 110.0 per 100,000 population. This was up 22% from 2018.

The maps on the following page present the changing pattern of methamphetamine submission rates, by Virginia Court District.

2023 Methamphetamine Submissions Across Virginia State Police (VSP) Divisions

4



#### 2023 Methamphetamine Submissions Rate per 100,000



3

### Methamphetamine

Methamphetamine Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



## **Prescription Stimulants**



Prescription Stimulants Identified*								
Substance Identified CY2015-17 CY2018-20 CY2021-								
Amphetamine	2,424	2,066	1,182					
Methylphenidate	447	300	137					
Lisdexamfetamine	359	210	108					

Other

\*Sum of individual substances will not match the total, as some cases involved more than one prescription stimulant.

70

54

45

Prescription stimulants are submitted to DFS less frequently than the illicit stimulants cocaine and methamphetamine, representing only 1% of total drug submissions in 2023.

After increasing 29% between CY 2014 and 2017, prescription stimulant submissions dropped every year until 2021, 59% overall. Prescription stimulant submissions increased 6% in 2022, then dropped 15% in 2023.

The most common prescription stimulant identified in substances submitted to DFS is amphetamine, frequently prescribed for attention deficit/hyperactivity disorder. Detailed ten-year trends on individual prescription stimulants are provided in Appendix B.

VSP Division 5 was responsible for the highest number of prescription stimulant submissions in 2023. The rate of submissions per 100,000 population was highest from VSP 2.

2023 Prescription Stimulant Submissions Across Virginia State Police (VSP) Divisions

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#### 2023 Prescription Stimulant Submissions Rate per 100,000



Statewide, the rate of prescription stimulant submissions in 2023 was 4.9 per 100,000. This was down 59% from 2018.

The maps on the following page present the changing pattern of prescription stimulant submission rates, by Virginia Court District.

## **Prescription Stimulants**

Prescription Stimulant Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



# Heroin



Heroin submissions to DFS represented 2% of total drug submissions in 2023.

After increasing 21% between 2014 and 2016, heroin submissions dropped steadily each year from 2016 to 2023. Heroin submissions dropped 33% between 2022 and 2023, to the lowest level in a decade.

VSP Division 5 was responsible for the highest number of heroin submissions in 2023. The rate of submissions per 100,000 population was highest from VSP 6.

Statewide, the rate of heroin submissions in 2023 was 10.6 per 100,000 population. This was down 81% from 2018.

The maps on the following page present the changing pattern of heroin submission rates, by Virginia Court District.

2023 Heroin Submissions Across Virginia State Police (VSP) Divisions

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# Heroin



# **Illicit Synthetic Opioids**

Illicit Synthetic Opioid Submissions CY2014-2023



Illicit Synthetic Opioids Identified\*

Substance Identified	CY2015-17	CY2018-20	CY2021-23
Fentanyl	3,309	9,783	18,110
Fentanyl Analogs			
Para-Fluorofentanyl	1	24	1,613
Acetyl Fentanyl	82	514	156
Fluoro-isobutyryl fentanyl	400	223	3
Furanyl Fentanyl	766	25	1
Fentanyl Analog - Other	135	158	32
Other Illicit Synthetic Opioids	370	212	145

\*Sum of individual substances will not match the total, as some cases involved more than one illicit synthetic opioid.

Illicit synthetic opioids have become the most frequently submitted category of opioid drugs submitted to DFS, surpassing both heroin and prescription opioids, combined. In 2023, illicit synthetic opioids represented 18% of total drug submissions.

Illicit synthetic opioid submissions have increased steadily every year since 2011 (not shown), excepting 2018, which was essentially unchanged from 2017. Submissions increased 22% between 2022 and 2023, to the highest level on record.

The most common illicit synthetic opioid identified in substances submitted to DFS is illicitly produced fentanyl. (Fentanyl is also available as a prescription medication; prescription fentanyl submissions are counted with other prescription opioids in this 2023 Illicit Synthetic Opioid Submissions Across Virginia State Police (VSP) Divisions



#### 2023 Illicit Synthetic Opioid Submissions Rate per 100,000



report.) Detailed ten-year trends on individual illicit synthetic opioids are provided in Appendix B.

VSP Division 7 was responsible for the highest number of illicit synthetic opioid submissions in 2023. The rate of submissions per 100,000 population was highest from VSP 2.

Statewide, the rate of illicit synthetic opioid submissions in 2023 was 82.2 per 100,000. This was up 169% from 2018. The maps on the following page present the changing pattern of illicit synthetic opioid submission rates, by Virginia Court District.

## **Illicit Synthetic Opioids**

Illicit Synthetic Opioid Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



# **Prescription Opioids**

**Prescription Opioid Submissions** CY2014-2023 6,000 5,000 4,000 3,000 5,573 5,037 4,858 4,494 3,916 3,745 2,000 2,995 2,859 2,391 1,000 0

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

. . . .

.....

Prescription Opioids Identified*						
Substance Identified	CY2015-17 C	CY2018-20	CY2021-23			
Buprenorphine	3,922	4,414	3,604			
Oxycodone	5,205	3,203	1,901			
Tramadol	730	992	1,046			
Hydrocodone	2,927	1,418	691			
Methadone	637	400	245			
Hydromorphone	775	309	170			
Morphine	886	409	167			
Codeine	265	180	101			
Other	598	241	72			

\*Sum of individual substances will not match the total, as some cases involved more than one prescription opioid.

Prescription opioid submissions to DFS represented 5% of total drug submissions in 2023. Prescription opioid submissions have decreased steadily since 2014. Submissions decreased 10% between 2022 and 2023, to the lowest level in over a decade.

The most common prescription opioid identified in substances submitted to DFS in recent years is buprenorphine, which is frequently used in medically-assisted treatment for individuals addicted to opioids. This represents a change in trends among prescription opioid submissions, which were previously dominated by oxycodone and hydrocodone. Detailed ten-year trends on individual prescription opioids are provided in Appendix B.

Tramadol has recently become the third most frequently identified prescription opioid in DFS submissions, but this is misleading. In recent years, there has been a substantial increase in illicitly-

2023 Prescription Opioid Submissions Across Virginia State Police (VSP) Divisions



#### 2023 Prescription Opioid Submissions Rate per 100,000



produced tramadol. At the time of this report, there is no simple way to distinguish illicitly-produced tramadol from the prescription version in the data, and so they are all counted as prescription opioids. This may change in future reports.

Both the highest number and the highest rate of prescription opioid submissions in 2023 were from VSP 4.

Statewide, the rate of prescription opioid submissions in 2023 was 24.5 per 100,000. This was down 47% from 2018.

The maps on the following page present the changing pattern of prescription opioid submission rates, by Virginia Court District.

# **Prescription Opioids**

Prescription Opioid Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



# **Illicit Benzodiazepines**

Illicit Benzodiazepine Submissions CY2014-2023

Illicit Benzodiazepines Identified*						
Substance Identified	CY2015-17	CY2018-20	CY2021-23			
Clonazolam	13	326	560			
Etizolam	95	976	434			
Bromazolam	0	0	430			
Flualprazolam	0	383	126			
Other	34	71	122			

\*Sum of individual substances will not match the total, as some cases involved more than one illicit benzodiazepine.

In 2020, for the first time, illicit benzodiazepines were submitted to DFS more frequently than prescription benzodiazepines. This continued in 2021, but reversed in 2022. Illicit benzodiazepines represented 1% of total drug submissions in 2023.

Between 2017 and 2020, illicit benzodiazepine submissions increased tenfold. In 2021, that trend reversed, dropping 12%; submissions dropped another 61% in 2022, and another 6% in 2023.

The most common illicit benzodiazepine identified in substances submitted to DFS between 2021 and 2023 was clonazolam. Detailed ten-year trends on individual illicit benzodiazepines are provided in Appendix B.

VSP Division 7 was responsible for the highest number of illicit benzodiazepine submissions in 2023, followed closely by VSP 1. The rate of submissions per 100,000 population was highest from VSP 4. 2023 Illicit Benzodiazepine Submissions Across Virginia State Police (VSP) Divisions



2023 Illicit Benzodiazepine Submissions Rate per 100,000



Statewide, the rate of illicit benzodiazepine submissions in 2023 was 3.7 per 100,000. Despite the recent drop in cases, this statewide rate was 98% higher than the rate in 2018.

The maps on the following page present the changing pattern of illicit benzodiazepine submission rates, by Virginia Court District.

## **Illicit Benzodiazepines**

Illicit Benzodiazepine Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



## **Prescription Benzodiazepines**

Prescription Benzodiazepine Submissions CY2014-2023

Prescription Benzodiazepines Identified\*

Substance Identified	CY2015-17 C	CY2018-20	CY2021-23
Alprazolam (Xanax)	4,605	2,978	1,461
Clonazepam (Klonopin)	1,442	1,067	727
Diazepam (Valium)	611	413	214
Lorazepam (Ativan)	320	219	127
Other	60	35	16

\*Sum of individual substances will not match the total, as some cases involved more than one prescription benzodiazepine.

In 2023, prescription benzodiazepine submissions represented 2% of total submissions.

Prescription benzodiazepine submissions have decreased sharply in recent years. Submissions decreased 64% between 2016 and 2021, another 11% in 2022, and decreased another 2% in 2023.

The most common prescription benzodiazepine identified in substances submitted to DFS is alprazolam. Detailed ten-year trends on individual prescription benzodiazepines are provided in Appendix B.

Both the highest number and the highest rate of prescription benzodiazepine submissions in 2023 were from VSP 4.

Statewide, the rate of prescription benzodiazepine submissions in 2023 was 8.4 per 100,000. This was down 64% from 2018.

2023 Prescription Benzodiazepine Submissions Across Virginia State Police (VSP) Divisions



#### 2023 Prescription Benzodiazepine Submissions Rate per 100,000



The maps on the following page present the changing pattern of prescription benzodiazepine submission rates, by Virginia Court District.

## **Prescription Benzodiazepines**

Prescription Benzodiazepine Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



### **Hallucinogenic Substances**

Hallucinogenic Substance Submissions CY2014-2023



Hallucinogenic Substances Identified*						
Substance Identified	CY2015-17 (	CY2018-20	CY2021-23			
Psilocyn-Psilocybin	438	560	1,228			
PCP & analogs	514	593	484			
LSD & analogs	763	768	461			
Ketamine & analogs	175	197	190			
Tryptamines	123	142	71			
Benzylpiperazine (BZP)	32	1	1			
Other	264	259	140			

\*Sum of individual substances will not match the total, as some cases involved more than one hallucinogenic substance.

Hallucinogenic substance submissions to DFS represented 2% of total drug submissions in 2023.

Hallucinogenic substance submissions have not demonstrated a consistent year-to-year trend over time. Submissions increased 10% between 2022 and 2023

The most common hallucinogenic substance category identified in submissions to DFS in the past several years is Psilocyn-Psilocybin (mushrooms), and the second most common is PCP & PCP analogs. Detailed ten-year trends on individual hallucinogenic substances are provided in Appendix B.

The largest number of hallucinogenic substance submissions in 2023 were from VSP 7, but the Division with the highest rate of submissions per 100,000 population was VSP 2.

2023 Hallucinogenic Substances Submissions Across Virginia State Police (VSP) Divisions



2023 Hallucinogenic Substances Submissions Rate per 100,000



Statewide, the rate of hallucinogenic substance submissions in 2023 was 9.4 per 100,000, up 11% from 2018.

The maps on the following page present the changing pattern of hallucinogenic substance submission rates, by Virginia Court District.

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### **Hallucinogenic Substances**

Hallucinogenic Substance Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



### **Cannabimimetic Agents**



Cannabimimetic Agents Identified\*

Substance Identified	CY2015-17 CY2	2018-20 CY20	)21-23
Indazole carboxamides	1,116	594	608
Indole carboxamides	1	274	6
Alkoylindoles	239	23	2
Benzoylindoles	2	0	2
Naphthoylindoles	15	0	1
Indole carboxylates	89	1	0
Phenylacetylindoles	3	0	0
Other or unclear	122	21	8

\*Sum of individual substances will not match the total, as some cases involved more than one cannabimimetic agent.

Cannabimimetic agent submissions to DFS represented less than 0.5% of total drug submissions in 2023.

Cannabimimetic agent submissions peaked in 2013 (not shown), and dropped consistently in later years (with the exception of 2017), dropping 79% overall between 2013 and 2020. Submissions increased 28% between 2020 and 2021, then dropped 50% in 2022. Submissions increased 8% in 2023.

The types of cannabimimetic agents that are most prevalent among submissions has varied substantially over time. Alkoylindoles (e.g., UR-144) were the most common during the peak years of cannabimimetic agent submissions, but indazole carboxamides (e.g., AMB-FUBINACA) have been the most common in recent years. In some cases, cannabimimetic agents were identified prior to being expressly proscribed in the *Code of Virginia*. In those cases, the specific type of cannabimimetic agent may be unclear in the record. Detailed ten-



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2023 Cannabimimetic Agent Submissions Rate per 100,000



year trends on individual cannabimimetic agents are provided in Appendix B.

Virginia State Police division 6 was responsible for the highest number of submissions in 2023. VSP4 had the highest rate of cannabimimetic agent submissions in 2023.

Statewide, the rate of cannabimimetic agent submissions in 2023 was 1.9 per 100,000, down 51% from 2018.

The maps on the following page present the changing pattern of cannabimimetic agent submission rates, by Virginia Court District.

### **Cannabimimetic Agents**

Cannabimimetic Agent Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



# **Other Designer Drugs**

Other Designer Drug Submissions CY2014-2023



2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

0	0		
Substance Identified	CY2015-17	CY2018-20	CY2021-23
Synthetic Cathinone			
N,N-dimethylpentylone	0	0	1,746
Eutylone	0	946	875
Alpha-PVP	97	1	7
N-ethylpentylone	436	699	4
Dibutylone	393	46	0
Ethylone	535	10	0
MDPV	8	2	0
Methylone	32	3	0
Other	124	126	113
Substituted Amphetamine			
MDMA (Ecstasy)	507	475	250
Other	149	115	64

Designer Drugs Identified\*

\*Sum of individual substances will not match the total, as some cases involved more than one designer drug.

The frequency of designer drug submissions, and the type submitted, has not displayed a consistent trend. After dropping 35% between 2021 and 2022, submissions increased 163% in 2023. In 2023, designer drugs represented 4% of total submissions.

The types of designer drugs that are most prevalent among submissions changes over time, as newly developed drugs replace older ones. There were no Eutylone submissions until 2018, then it soon was the most prominent designer drug. Similarly, N,Ndimethylpentylone was first submitted in 2021, and has recently 2023 Designer Drug Submissions Across Virginia State Police (VSP) Divisions

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2023 Designer Drug Submissions Rate per 100,000



become the most frequently submitted. Detailed ten-year trends on individual designer drugs are provided in Appendix B.

Both the highest number and the highest rate of designer drug submissions in 2023 were from VSP 7.

Statewide, the rate of designer drug submissions in 2023 was 17.3 per 100,000, up 68% from 2018.

The maps on the following page present the changing pattern of designer drug submission rates, by Virginia Court District.

## **Other Designer Drugs**

Other Designer Drug Submissions by Court District, Rate per 100,000 CY 2013, 2018, & 2023



					Cocaine					
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
VSP1	2,029	1,973	2,082	2,586	2,911	3,035	2,309	2,167	2,166	2,303
VSP2	531	610	748	1,006	1,083	942	801	766	808	1,167
VSP3	927	816	768	871	763	700	468	387	392	566
VSP4	159	123	195	155	144	134	85	79	81	139
VSP5	1,484	1,639	1,891	2,415	2,414	2,372	1,827	1,648	1,989	2,309
VSP6	897	921	812	947	941	844	529	487	586	636
VSP7	864	945	1,101	1,346	1,449	1,426	944	985	1,226	1,812

Methamphetamine										
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
VSP1	61	80	110	171	300	525	743	774	775	873
VSP2	233	314	423	660	845	1,171	1,387	1,492	1,427	1,381
VSP3	227	292	680	1,051	1,295	1,460	1,410	1,236	1,271	1,229
VSP4	529	678	1,172	1,582	2,461	3,107	2,799	2,678	2,324	2,442
VSP5	72	102	191	251	398	702	840	946	1,027	1,112
VSP6	398	644	906	1,352	2,164	2,513	2,314	2,118	2,258	2,195
VSP7	82	95	99	158	218	247	215	286	306	367

	Prescription Stimulants												
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023			
VSP1	175	177	200	230	184	155	161	113	101	96			
VSP2	135	139	164	164	153	133	110	82	84	61			
VSP3	65	69	76	79	68	53	33	16	35	25			
VSP4	76	71	74	93	81	75	51	39	41	21			
VSP5	179	173	193	235	211	202	159	97	132	113			
VSP6	113	116	123	140	112	100	57	53	38	48			
VSP7	157	193	218	217	216	148	82	77	77	68			



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					Heroin					
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
VSP1	1,512	1,608	1,661	1,657	1,378	1,418	940	668	469	197
VSP2	841	953	1,032	840	619	521	351	223	147	94
VSP3	132	213	238	281	251	245	192	140	86	69
VSP4	37	46	58	63	46	81	132	82	50	33
VSP5	1,010	1,165	1,247	1,255	1,059	1,041	776	582	345	247
VSP6	388	365	413	532	787	771	557	319	200	211
VSP7	537	736	766	597	485	338	229	135	85	73

	Illicit Synthetic Opioids													
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023				
VSP1	71	117	363	752	666	767	1,268	1,367	1,296	1,182				
VSP2	50	112	246	442	570	555	883	965	874	1,008				
VSP3	11	14	29	113	101	118	226	259	297	373				
VSP4	7	4	11	23	24	33	126	209	298	374				
VSP5	42	217	532	660	568	723	934	1,034	1,050	1,119				
VSP6	16	25	48	193	225	240	594	660	789	803				
VSP7	51	50	261	437	453	463	640	945	1,275	2,316				

	Prescription Opioids													
VSP	VSP CY2014 CY2015 CY2016 CY2017 CY2018 CY2019 CY2020 CY2021 CY2022 CY20													
VSP1	849	778	792	732	693	752	574	606	412	312				
VSP2	802	769	756	591	517	463	454	401	307	249				
VSP3	402	316	368	277	248	270	196	166	155	152				
VSP4	1,875	1,579	1,374	1,264	1,052	1,005	813	765	609	550				
VSP5	447	507	534	513	390	420	344	322	324	312				
VSP6	715	646	646	730	665	498	418	404	372	366				
VSP7	483	442	388	386	351	338	196	195	212	200				



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Illicit Benzodiazepines												
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023		
VSP1	0	1	2	16	25	64	150	147	58	74		
VSP2	0	1	5	10	33	124	244	201	53	53		
VSP3	0	0	4	7	10	37	67	47	13	15		
VSP4	0	1	0	4	18	36	60	82	30	30		
VSP5	0	3	4	16	16	63	119	140	60	54		
VSP6	0	0	0	5	6	26	54	89	54	18		
VSP7	1	3	18	38	50	167	306	174	72	76		

	Prescription Benzodiazepines													
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023				
VSP1	339	362	404	377	344	239	201	178	132	135				
VSP2	206	238	266	271	253	163	117	110	88	86				
VSP3	87	79	106	116	101	88	37	48	42	45				
VSP4	444	442	440	392	342	301	233	194	179	164				
VSP5	229	273	364	330	245	179	141	112	112	131				
VSP6	251	237	238	289	287	222	129	122	126	106				
VSP7	189	340	484	391	387	190	109	75	65	65				



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	Hallucinogenic Substances												
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023			
VSP1	66	93	80	90	80	73	109	78	98	110			
VSP2	118	88	89	128	107	117	158	166	122	118			
VSP3	40	39	55	44	63	55	65	47	55	54			
VSP4	19	17	26	37	24	32	47	41	30	34			
VSP5	95	70	75	86	84	95	89	89	130	164			
VSP6	59	56	76	122	80	67	45	50	64	77			
VSP7	258	222	309	288	289	296	267	301	251	267			

	Cannabimimetic Agents												
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023			
VSP1	70	79	62	35	8	11	4	11	2	5			
VSP2	133	131	63	104	46	37	56	82	26	33			
VSP3	31	42	10	14	14	14	13	28	14	11			
VSP4	142	124	92	45	9	15	20	62	67	41			
VSP5	179	56	45	36	16	19	15	5	4	19			
VSP6	40	86	33	95	106	76	70	87	36	45			
VSP7	187	79	58	158	128	94	60	29	4	11			

	Other Designer Drugs												
VSP	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023			
VSP1	134	138	129	204	227	116	218	181	72	97			
VSP2	87	86	78	108	159	99	222	269	135	278			
VSP3	27	28	27	49	39	36	37	35	9	7			
VSP4	103	62	20	26	14	28	22	18	14	16			
VSP5	114	135	116	133	130	105	128	90	52	55			
VSP6	35	37	45	67	46	39	45	31	17	10			
VSP7	189	225	215	223	263	166	183	261	274	1,046			



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### Appendix B – Ten-Year Trends, Statewide

Stimulants	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Cocaine	6,891	7,027	7,596	9,326	9,705	9,453	6,963	6,519	7,248	8,933
Methamphetamine	1,602	2,205	3,581	5,225	7,681	9,726	9,708	9,530	9,388	9,599
Prescription Stimulants										
Amphetamine	680	694	798	932	828	686	552	404	415	363
Lisdexamfetamine	90	112	135	112	89	75	46	32	43	33
Methylphenidate	155	161	149	137	122	112	66	43	52	42
Other	27	23	18	29	22	20	12	20	14	11
Opioids	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Heroin	4,458	5,086	5,415	5,225	4,625	4,415	3,177	2,149	1,382	924
Illicit Synthetic Opioids										
Fentanyl	185	426	1,177	1,706	2,346	2,814	4,623	5,295	5,727	7,088
Para-Fluorofentanyl	0	0	1	0	0	0	24	462	730	421
Acetyl Fentanyl	3	42	28	12	141	276	97	65	42	49
Fluoro-isobutyryl fentanyl	0	0	22	378	187	29	7	3	0	0
Furanyl Fentanyl	0	0	228	538	24	1	0	1	0	0
Fentanyl Analog - Other	0	1	12	122	85	47	26	4	12	16
Other	61	80	103	187	69	82	61	77	40	28
Prescription Opioids										
Buprenorphine	1,048	1,307	1,221	1,394	1,438	1,592	1,384	1,336	1,160	1,108
Codeine	75	80	97	88	66	66	48	38	28	35
Hydrocodone	1,422	1,098	982	847	598	495	325	244	226	221
Hydromorphone	391	282	296	197	164	93	52	70	44	56
Methadone	275	220	226	191	153	137	110	96	82	67
Morphine	410	324	301	261	175	154	80	72	54	41
Oxycodone	2,211	1,861	1,792	1,552	1,277	1,163	763	626	627	648
Tramadol	207	225	256	249	274	305	413	587	325	134
Other	180	190	225	183	123	82	36	30	23	19

### Appendix B – Ten-Year Trends, Statewide

Benzodiazepines	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Illicit Benzodiazepines										
Bromazolam	0	0	0	0	0	0	0	40	120	270
Clonazolam	0	0	5	8	55	50	221	400	121	39
Etizolam	1	7	27	61	79	353	544	372	52	10
Flualprazolam	0	0	0	0	7	111	265	81	38	7
Other	0	2	1	31	17	25	29	82	155	278
Prescription Benzodiazepines										
Alprazolam (Xanax)	1,139	1,338	1,726	1,541	1,423	930	625	531	466	464
Clonazepam (Klonopin)	468	493	471	478	422	362	283	248	254	225
Diazepam (Valium)	204	221	200	190	168	146	99	82	60	72
Lorazepam (Ativan)	112	104	101	115	95	87	37	47	39	41
Other	22	21	18	21	12	12	11	7	6	3
Hallucinogenic Substances	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Benzylpiperazine (BZP)	25	17	13	2	0	1	0	0	0	1
Ketamine & analogs	46	58	54	63	57	66	74	61	58	71
LSD & analogs	104	142	263	358	260	239	269	226	129	106
PCP & analogs	186	147	186	181	185	192	216	192	158	134
Psilocyn-Psilocybin (mushrooms)	130	124	135	179	173	199	188	288	424	516
Tryptamines	62	45	39	39	45	59	38	36	15	20
Other	167	115	98	51	105	94	60	73	32	35
Cannabimimetic Agents	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Alkoylindoles	386	197	33	9	9	6	8	0	1	1
Benzoylindoles	2	2	0	0	0	0	0	1	1	0
Indazole carboxamides	260	390	256	470	319	132	143	296	148	164
Indole carboxamides	0	1	0	0	3	165	106	4	1	1
Indole carboxylates	107	43	45	1	1	0	0	0	0	0
Naphthoylindoles	18	8	2	5	0	0	0	0	0	1
Phenylacetylindoles	172	48	61	13	6	9	6	5	3	0
Other or unclear	3	2	1	0	0	0	0	0	0	0
Other Designer Drugs	CY2014	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023
Substituted Amphetamines										
MDMA (Ecstasy)	139	133	173	201	169	204	102	76	84	90
Other	30	22	45	82	36	56	23	15	31	18
Synthetic Cathinones										
Alpha-PVP	132	77	17	3	1	0	0	1	2	4
Dibutylone	3	2	224	167	44	2	0	0	0	0
Ethylone	219	465	57	13	7	3	0	0	0	0
Eutylone	0	0	0	0	3	239	704	766	60	49
MDPV	15	4	3	1	0	2	0	0	0	0
Methylone	175	14	15	3	2	1	0	0	0	0
N,N-dimethylpentylone	0	0	0	0	0	0	0	16	376	1,354
N-ethylpentylone	0	0	83	353	625	66	8	2	1	1
Other	27	29	59	36	20	55	51	37	49	27

# **Appendix C – Virginia Regions**



Division 1	Division 2	Division 3	Division 4	Division 5	Division 6	Division 7
Amelia County	Clarke County	Albemarle County	Bland County	Accomack County	Alleghany County	Arlington County
Caroline County	Culpeper County	Amherst County	Buchanan County	Brunswick County	Bath County	Fairfax County
Charles City County	Fauquier County	Appomattox County	Carroll County	Gloucester County	Bedford County	Loudoun County
Chesterfield County	Frederick County	Augusta County	Dickenson County	Greensville County	Botetourt County	Prince William County
Dinwiddie County	Madison County	Buckingham County	Giles County	Isle of Wight County	Craig County	Alexandria City
Essex County	Orange County	Campbell County	Grayson County	James City County	Floyd County	Fairfax City
Goochland County	Page County	Charlotte County	Lee County	Mathews County	Franklin County	Falls Church City
Hanover County	Rappahannock County	Cumberland County	Pulaski County	Middlesex County	Henry County	Manassas City
Henrico County	Rockingham County	Fluvanna County	Russell County	Northampton County	Highland County	Manassas Park City
King and Queen County	Shenandoah County	Greene County	Scott County	Southampton County	Montgomery County	
King George County	Spotsylvania County	Halifax County	Smyth County	Surry County	Patrick County	
King William County	Stafford County	Lunenburg County	Tazewell County	Sussex County	Pittsylvania County	
Lancaster County	Warren County	Mecklenburg County	Washington County	York County	Roanoke County	
Louisa County	Fredericksburg City	Nelson County	Wise County	Chesapeake City	Rockbridge County	
New Kent County	Harrisonburg City	Prince Edward County	Wythe County	Emporia City	Bedford City	
Northumberland County	Winchester City	Charlottesville City	Bristol City	Franklin City	Buena Vista City	
Nottoway County		Lynchburg City	Galax City	Hampton City	Danville City	
Powhatan County		Staunton City	Norton City	Newport News City	Lexington City	
Prince George County		Waynesboro City		Norfolk City	Martinsville City	
Richmond County				Poquoson City	Radford City	
Westmoreland County				Portsmouth City	Roanoke City	
Colonial Heights City				Suffolk City	Salem City	
Hopewell City				Virginia Beach City		
Petersburg City				Williamsburg City		
Richmond City						

### **Appendix C – Virginia Regions**



District	Locality	District	Locality	District	Locality	District	Locality	District	Locality
1st	Chesapeake City	10th	Appomattox County	16th	Albemarle County	24th	Amherst County	27th	Bland County
2A	Accomack County		Buckingham County		Charlottesville City		Bedford City		Carroll County
	Northampton County		Charlotte County		Culpeper County		Bedford County		Floyd County
2nd	Virginia Beach City		Cumberland County		Fluvanna County		Campbell County		Galax City
3rd	Portsmouth City		Halifax County		Goochland County		Lynchburg City		Giles County
4th	Norfolk City		Lunenburg County		Greene County		Nelson County	_	Grayson County
5th	Franklin City		Mecklenburg County		Louisa County	25th	Alleghany County		Montgomery County
	Isle of Wight County		Prince Edward County	_	Madison County		Augusta County		Pulaski County
	Southampton County	11th	Amelia County		Orange County	_	Bath County		Radford City
	Suffolk City		Dinwiddie County	17th	Arlington County	-	Botetourt County		Wythe County
6th	Brunswick County		Nottoway County		Falls Church City	_	Buena Vista City	28th	Bristol City
	Emporia City		Petersburg City	18th	Alexandria City	_	Clifton Forge		Smyth County
	Greensville County		Powhatan County	19th	Fairfax City	-	Covington City		Washington County
	Hopewell City	12th	Chesterfield County		Fairfax County	_	Craig County	29th	Buchanan County
	Prince George County		Colonial Heights City	20th	Fauquier County	-	Highland County		Dickenson County
	Surry County	13th	Richmond City	_	Loudoun County		Lexington City		Russell County
	Sussex County	14th	Henrico County		Rappahannock County	_	Rockbridge County		Tazewell County
7th	Newport News City	15th	Caroline County	21st	Henry County	-	Staunton City	30th	Lee County
8th	Hampton City	_	Essex County		Martinsville City		Waynesboro City	_	Norton City
9th	Charles City County		Fredericksburg City		Patrick County	26th	Clarke County	-	Scott County
	Gloucester County		Hanover County	22nd	Danville City	-	Frederick County		Wise County
	James City County		King George County		Franklin County		Harrisonburg City	31st	Manassas City
	King and Queen County		Lancaster County		Pittsylvania County	_	Page County		Manassas Park City
	King William County		Northumberland County	23rd	Roanoke City	-	Rockingham County		Prince William County
	Mathews County		Richmond County		Roanoke County		Shenandoah County		
	Middlesex County		Spotsylvania County		Salem City		Warren County		
	New Kent County		Stafford County				Winchester City		
	Poquoson City		Westmoreland County						
	Williamsburg City								

Williamsburg City York County