

Drug Cases Submitted to the Virginia Department of Forensic Science Calendar Year 2024

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



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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/criminal-justice-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-estimates>

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

Drug Cases Submitted to the Virginia Department of Forensic Science

Introduction

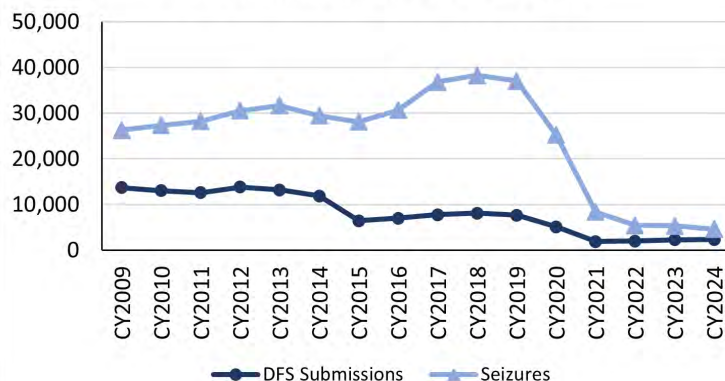
Every year, tens of thousands of drug samples are submitted to the Virginia Department of Forensic Science (DFS). These submissions arrive in many forms, including powders, solid material, liquids, pills, plants, residue, and more. At DFS, they are tested by the Controlled Substances Section, to identify 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
 - ◊ Cocaine
 - ◊ 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
 - ◊ Opioids (such as oxycodone and morphine)
 - ◊ Stimulants (primarily medications to treat ADD/ADHD)
 - ◊ 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 reported seizures by police increased significantly through 2018. Data on marijuana submissions to DFS before and after this change cannot be com-

Marijuana:
DFS Submissions vs Police Seizures



pared. 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 2024; the 2024 frequency of submissions of various subcategories of drugs within these larger categories, where applicable; the regional distribution of 2024 submissions; the 2024 rate of submissions, by VSP Division; and maps presenting the trend in submission rates for the 32 Virginia Court Districts, for 2014, 2019, and 2024.

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.

2024 Drug Submissions to DFS – Highlights

Summary

Overall, drug submissions to DFS decreased in CY 2024, but that varied across the different drug categories.

- Several drug categories included here did show an increase between 2023 and 2024:
 - ◇ Heroin submissions increased 22%
 - ◇ Hallucinogenic Substance submissions increased 13%
 - ◇ Cocaine submissions increased 4%
 - ◇ Cannabimimetic Agent submissions increased 4%
 - ◇ Illicit Benzodiazepine submissions increased 2%
- Other drug categories showed a decrease:
 - ◇ Other Designer Drug submissions dropped 14%
 - ◇ Illicit Synthetic Opioid submissions dropped 13%
 - ◇ Prescription Benzodiazepine submissions dropped 11%
 - ◇ Prescription Opioids submissions dropped 11%
 - ◇ Prescription Stimulant submissions dropped 5%
 - ◇ Methamphetamine submissions dropped 1%

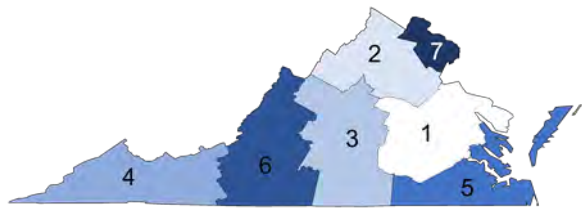
The 2024 rate of drug submissions per 100,000 population varied by drug type and Virginia State Police division (VSP):

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 1, 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 6, and lowest from VSP 5.

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 7.

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

Hallucinogenic Substances: Rate of submissions was highest from VSP 4, and lowest from VSP 5.

Cannabimimetic Agents: Rate of submissions was highest from VSP 4, and lowest from VSP 7.

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

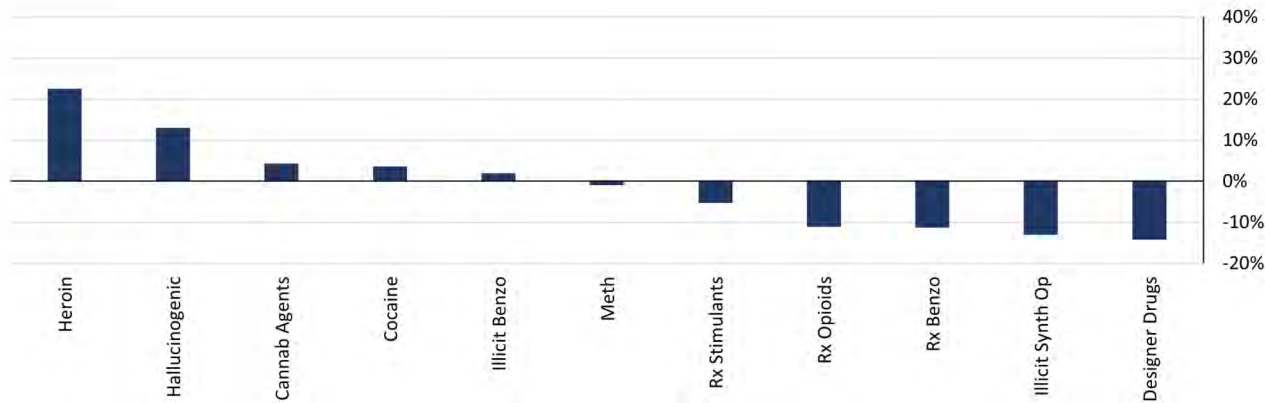
Top Ten

The ten most common substances identified in 2024 were:

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

*Marijuana and naloxone are not included in this report

Change in Submissions—CY 2023 to 2024

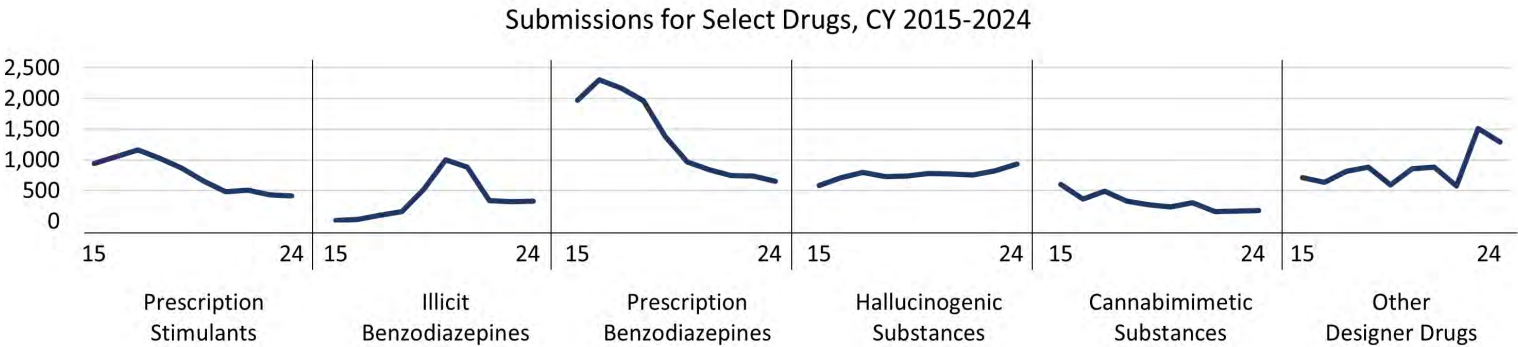
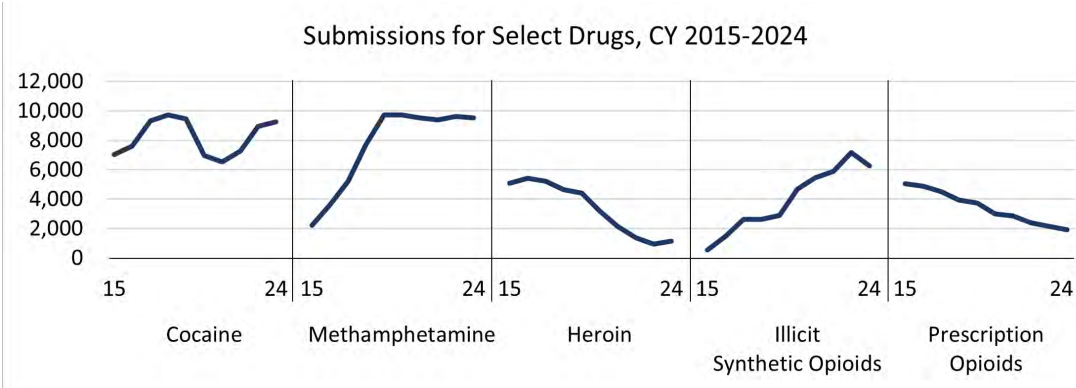


2024 Drug Submissions to DFS – Highlights

Ten-Year Trends

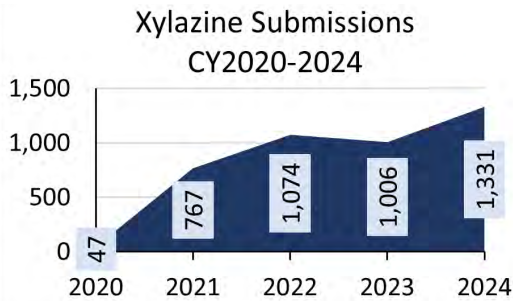
The graphs below present ten-year trendlines for the substances/substance categories included in this report. Note that the two graphs have different scales, so that the trends

can be clearly displayed. Please see the sections for the individual substances/substance categories for more details on these trends.



Emerging Trend—Xylazine

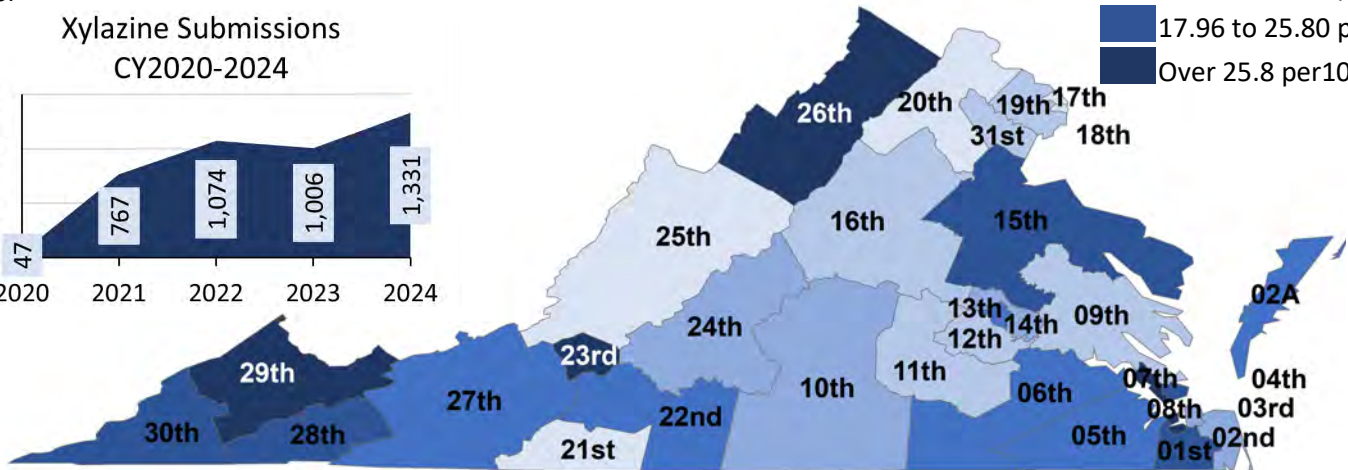
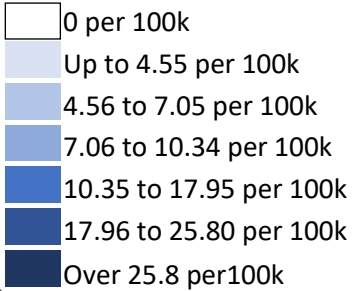
Xylazine is a veterinary tranquilizer that, mixed with fentanyl, has been involved in a rising number of overdose fatalities across the country. DFS has seen an increase in submissions containing xylazine, but only began requiring the reporting of xylazine in August 2021. Data prior to that time would not provide a complete picture. In CY2024, xylazine represented 3% of submissions and increased by 32% since CY2023.



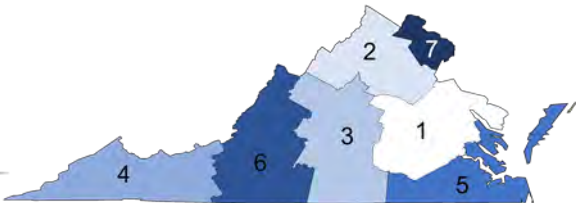
Xylazine Submissions by Court District

Rate per 100,000
CY 2024

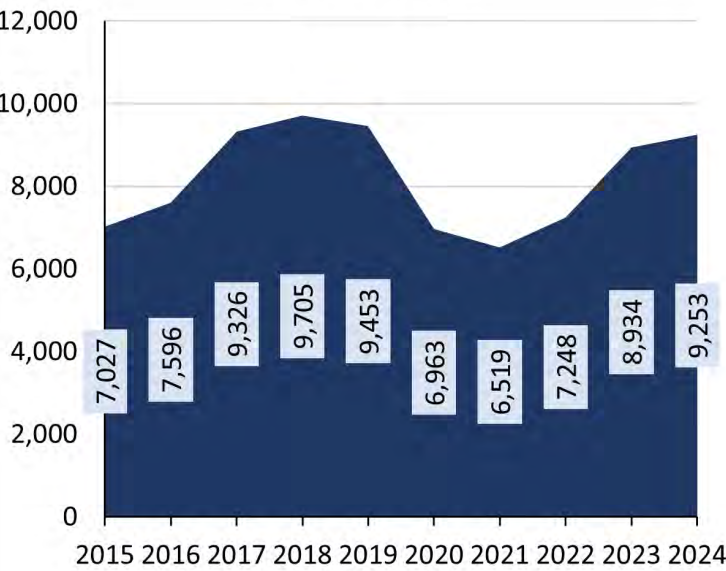
Statewide Rate: 11.4



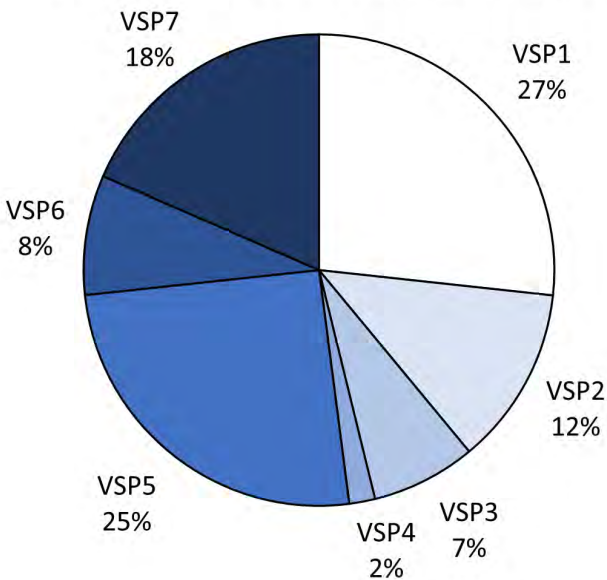
Cocaine



Cocaine Submissions
CY2015-2024



2024 Cocaine Submissions
Across Virginia State Police (VSP) Divisions



Cocaine submissions to DFS are higher than almost any other individual drug, representing 23% of the total number of submissions to DFS in 2024.

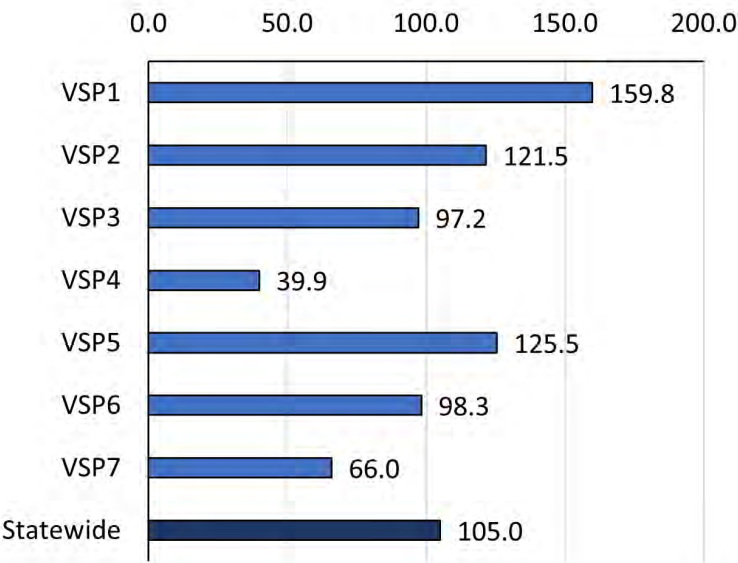
After increasing 41% between 2014 and 2018, cocaine submissions dropped 3% in 2019, 26% in 2020, and another 6% in 2021. This trend reversed in 2022, cocaine submissions increased 11% in 2022, 23% in 2023 and 4% in 2024.

VSP Divisions 1 and 5 were responsible for the highest number of cocaine submissions in 2024. The rate of submissions per 100,000 population was highest from VSP 1.

Statewide, the rate of cocaine submissions in 2024 was 105.0 per 100,000 population. Despite the increase in cases in 2024, this statewide rate was down 5% from 2019.

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

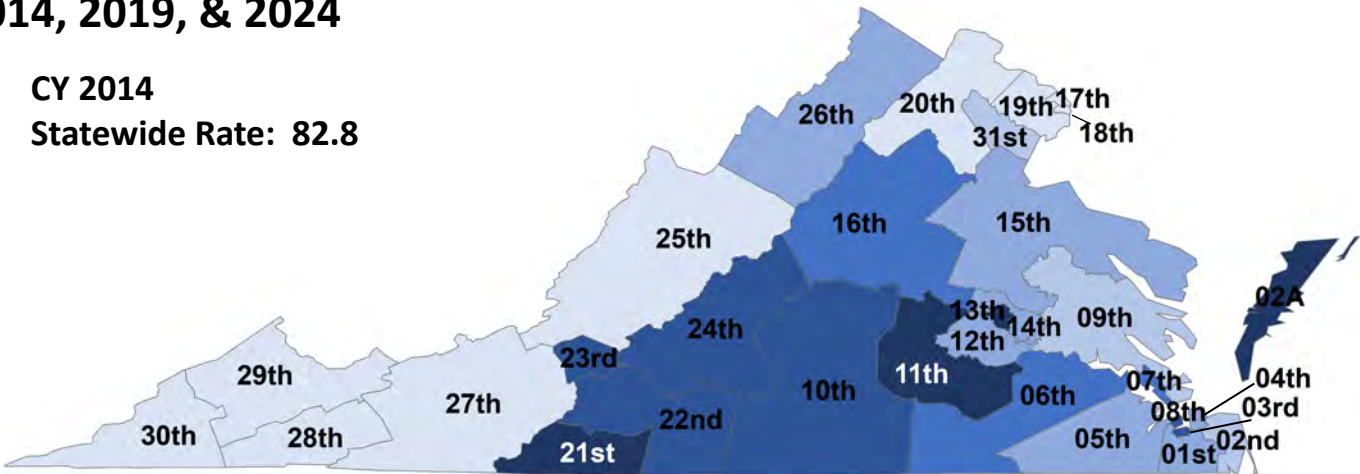
2024 Cocaine Submissions
Rate per 100,000



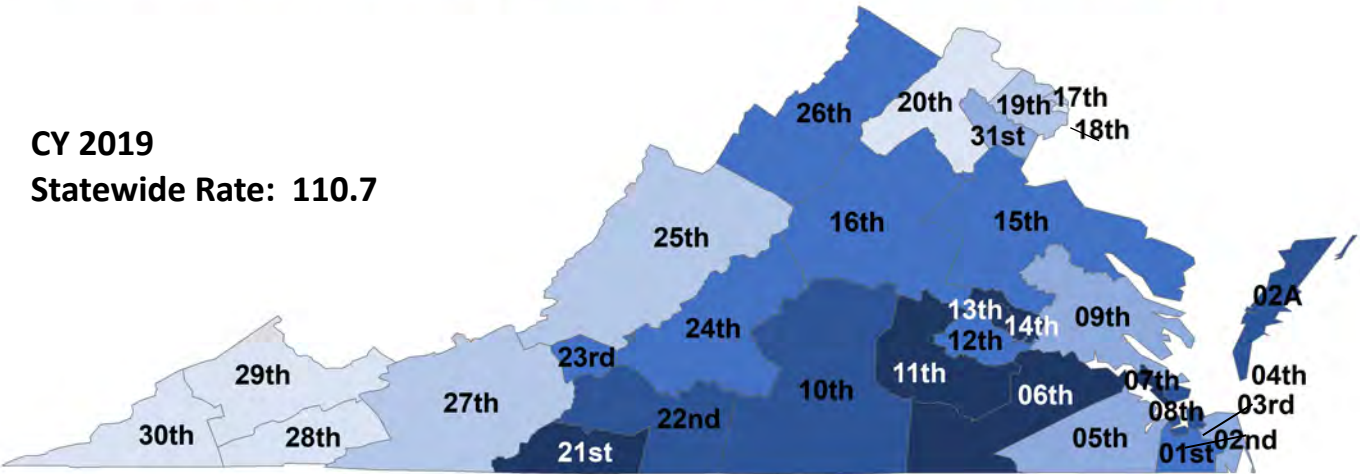
Cocaine

Cocaine Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

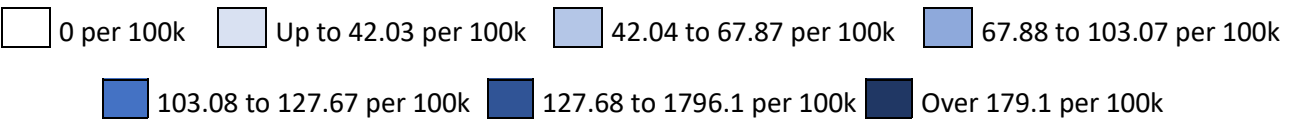
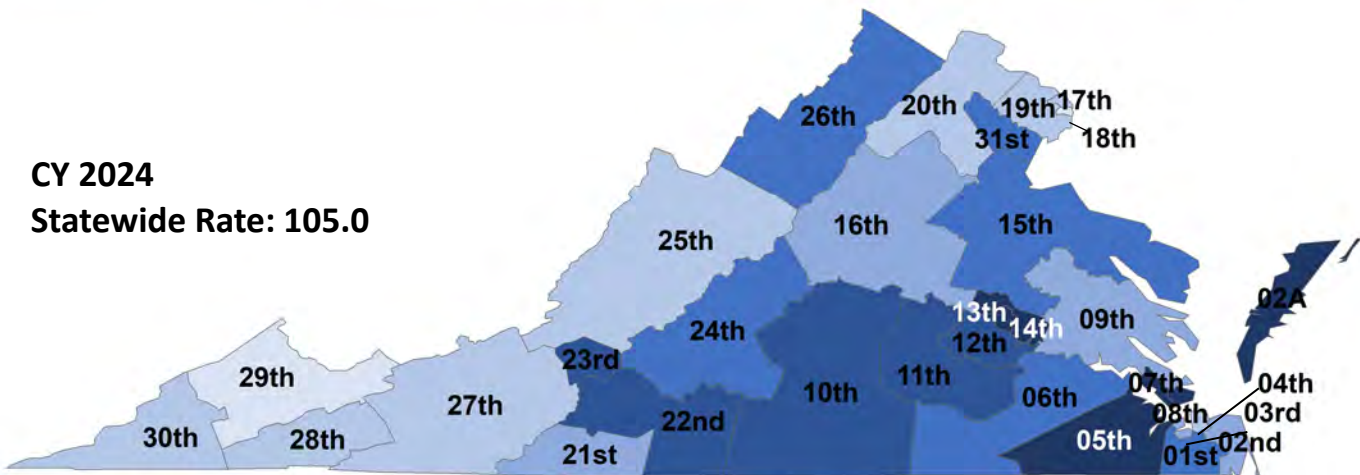
CY 2014
Statewide Rate: 82.8



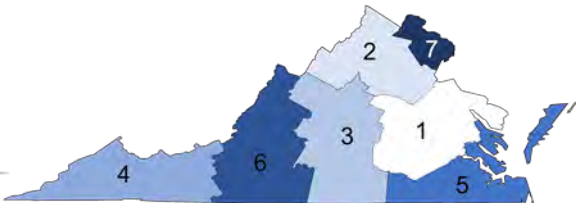
CY 2019
Statewide Rate: 110.7



CY 2024
Statewide Rate: 105.0

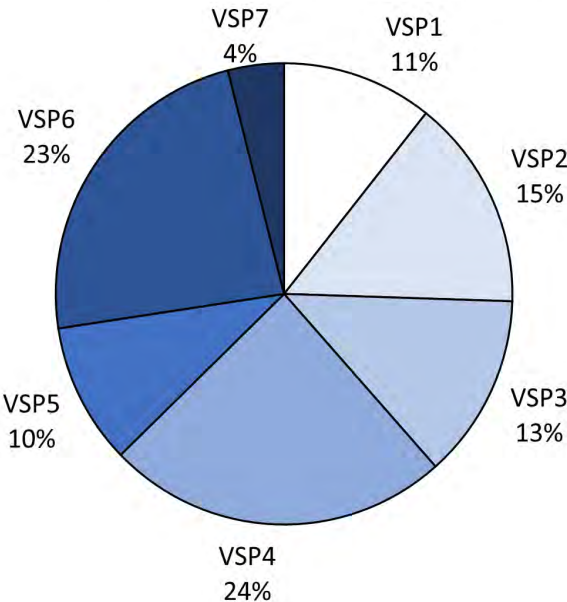
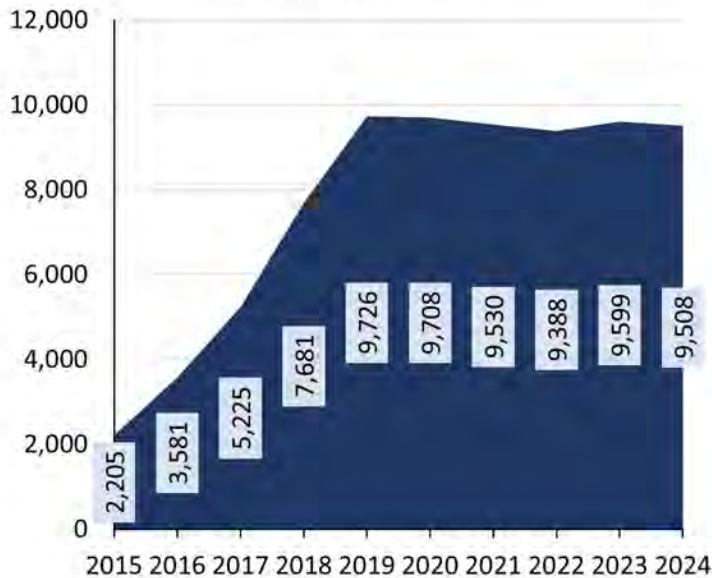


Methamphetamine



2024 Methamphetamine Submissions
Across Virginia State Police (VSP) Divisions

Methamphetamine Submissions
CY2015-2024



Methamphetamine submissions to DFS are the highest for an individual drug, representing 24% of the total number of submissions to DFS in 2024.

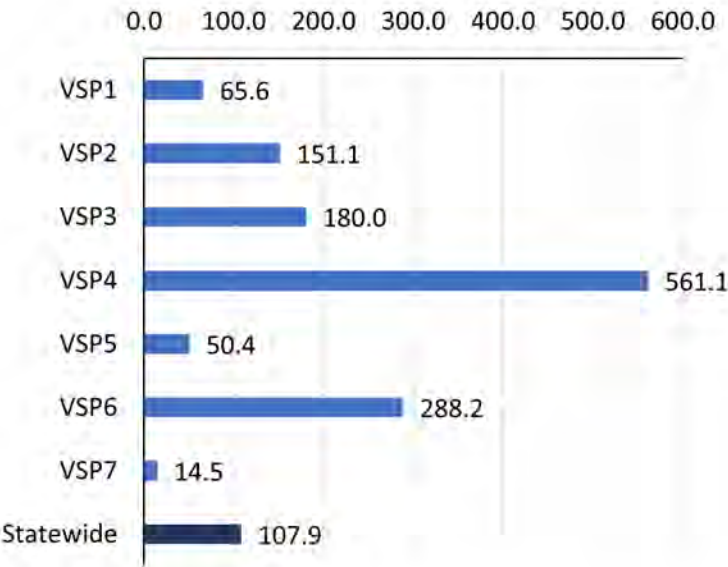
After increasing every year between 2014 and 2019 – more than a fivefold overall increase during that time – methamphetamine submissions remained flat between 2019 and 2020. Since 2020, methamphetamine submissions have remained relatively stable: decreasing 2% in 2021 and 1% in 2022, increasing 2% in 2023, and decreasing 1% in 2024. 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 2024 were from VSP 4 and VSP 6.

Statewide, the rate of methamphetamine submissions in 2024 was 107.9 per 100,000 population. This was down 5% from 2019.

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

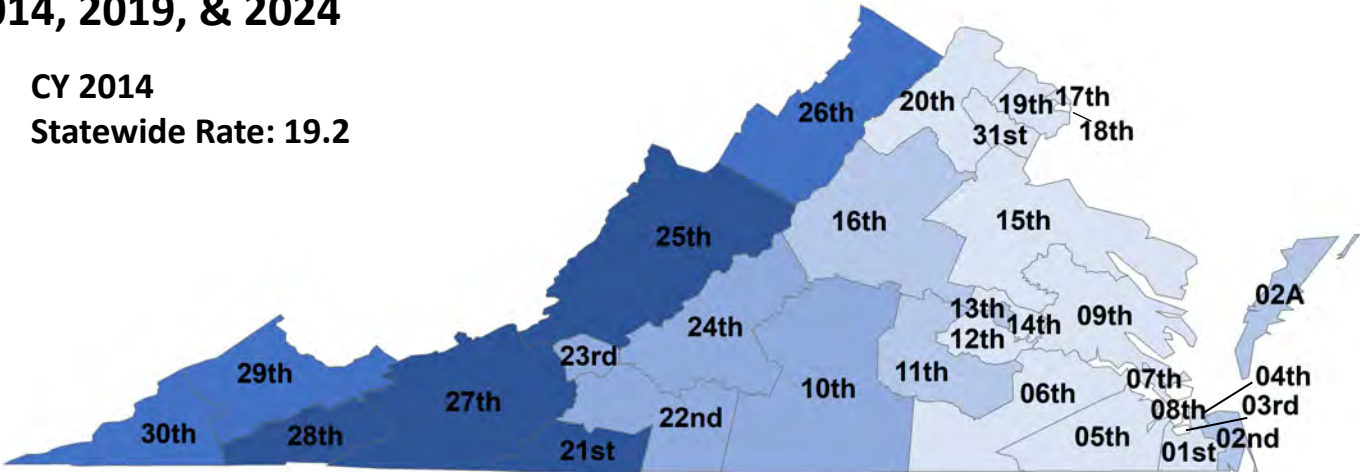
2024 Methamphetamine Submissions
Rate per 100,000



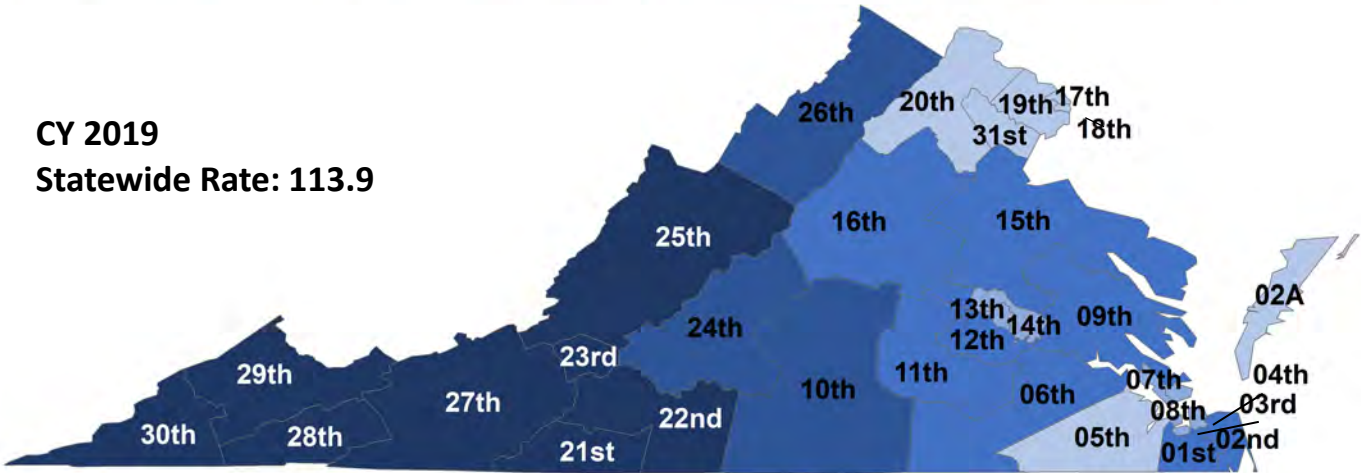
Methamphetamine

Methamphetamine Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

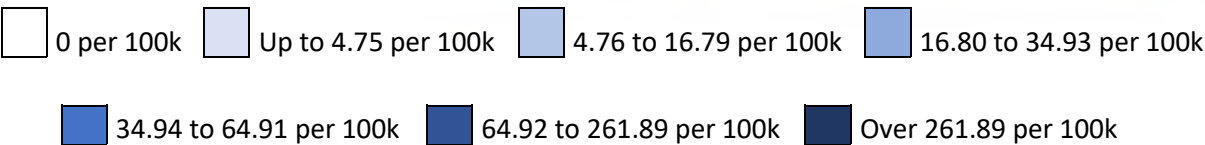
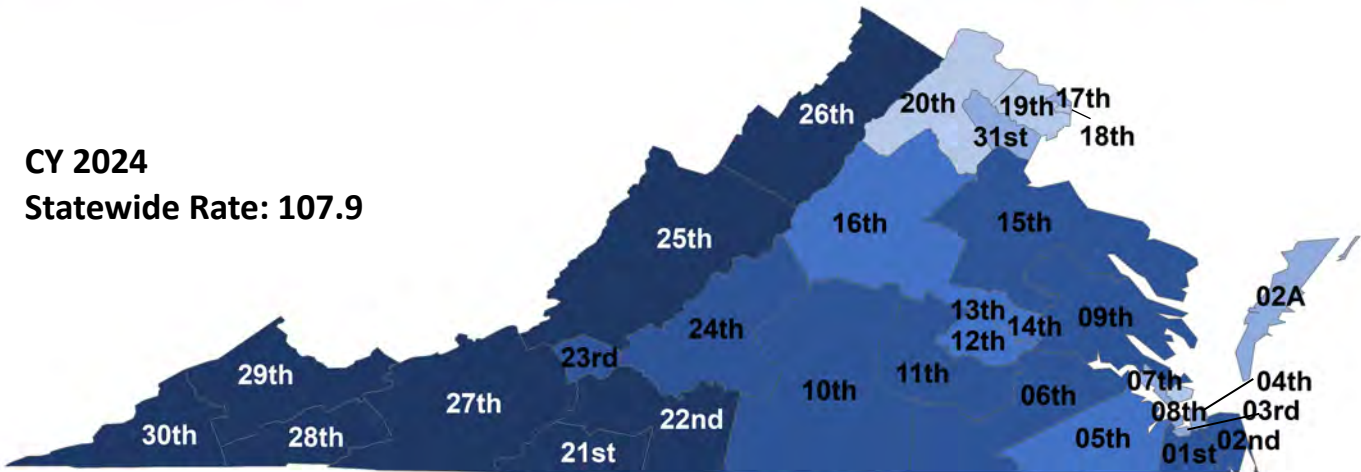
CY 2014
Statewide Rate: 19.2



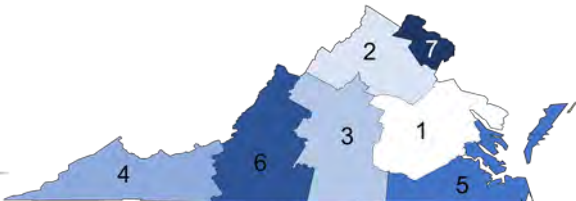
CY 2019
Statewide Rate: 113.9



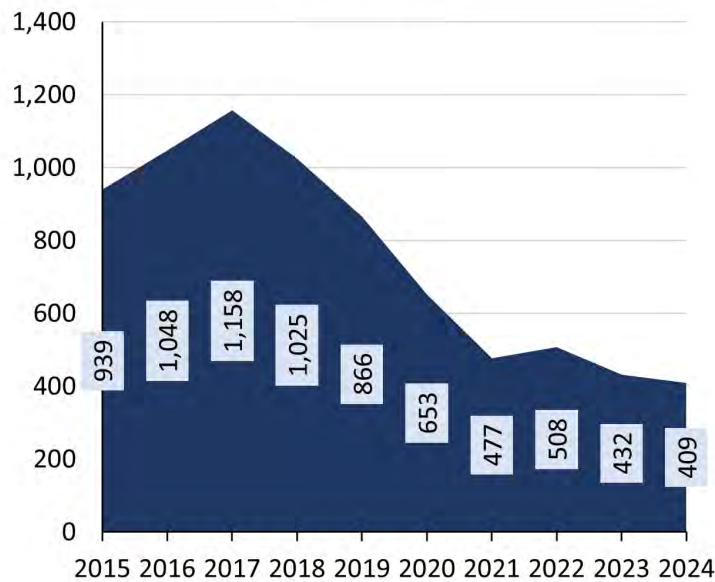
CY 2024
Statewide Rate: 107.9



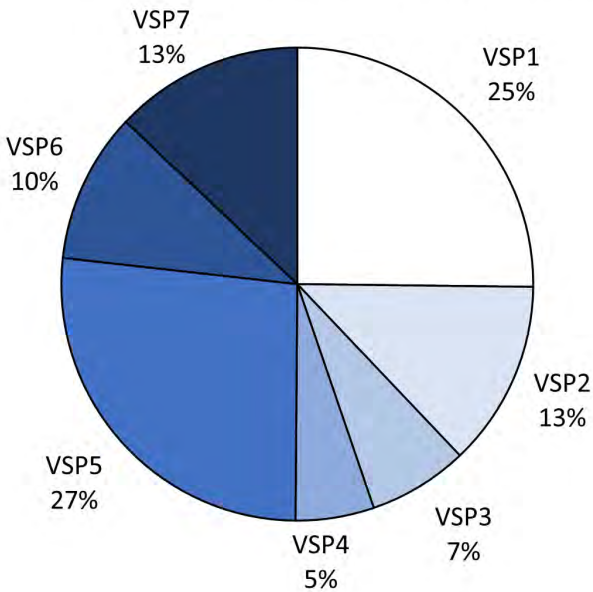
Prescription Stimulants



Prescription Stimulant Submissions
CY2015-2024



2024 Prescription Stimulant Submissions
Across Virginia State Police (VSP) Divisions



Prescription Stimulants Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Amphetamine	2,558	1,642	1,121
Methylphenidate	408	221	135
Lisdexamfetamine	336	153	96
Other	69	52	39

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

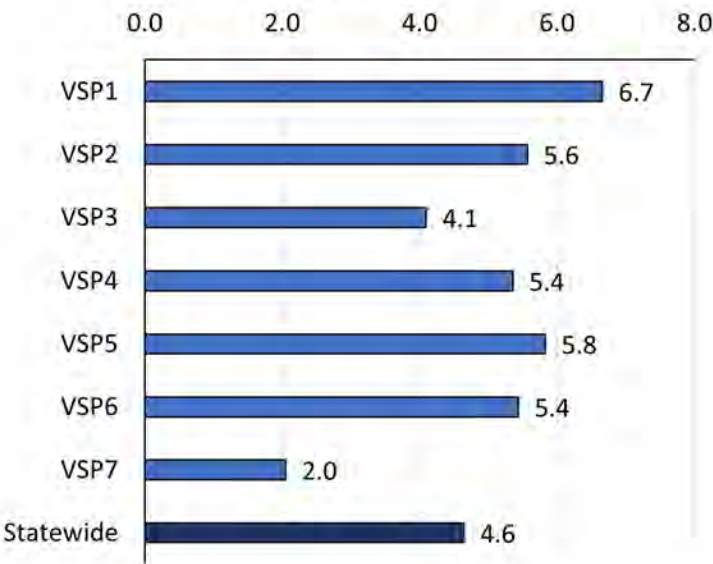
Prescription stimulants are submitted to DFS less frequently than the illicit stimulants cocaine and methamphetamine, representing only 1% of total drug submissions in 2024.

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, dropped 15% in 2023, and decreased by 5% in 2024.

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 2024. The rate of submissions per 100,000 population was highest from VSP 1.

2024 Prescription Stimulant Submissions
Rate per 100,000



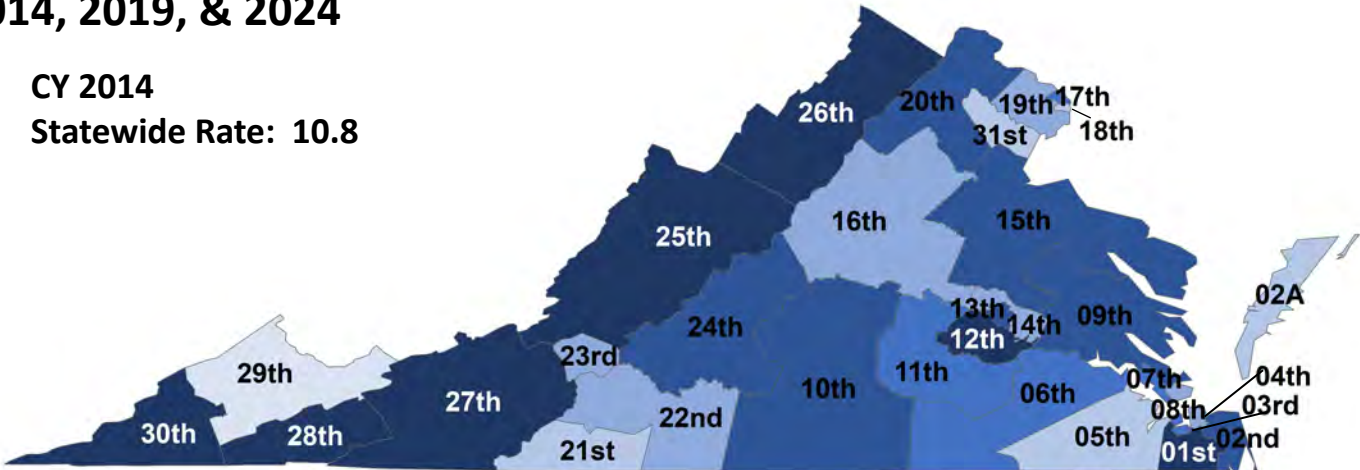
Statewide, the rate of prescription stimulant submissions in 2024 was 4.6 per 100,000. This was down 54% from 2019.

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

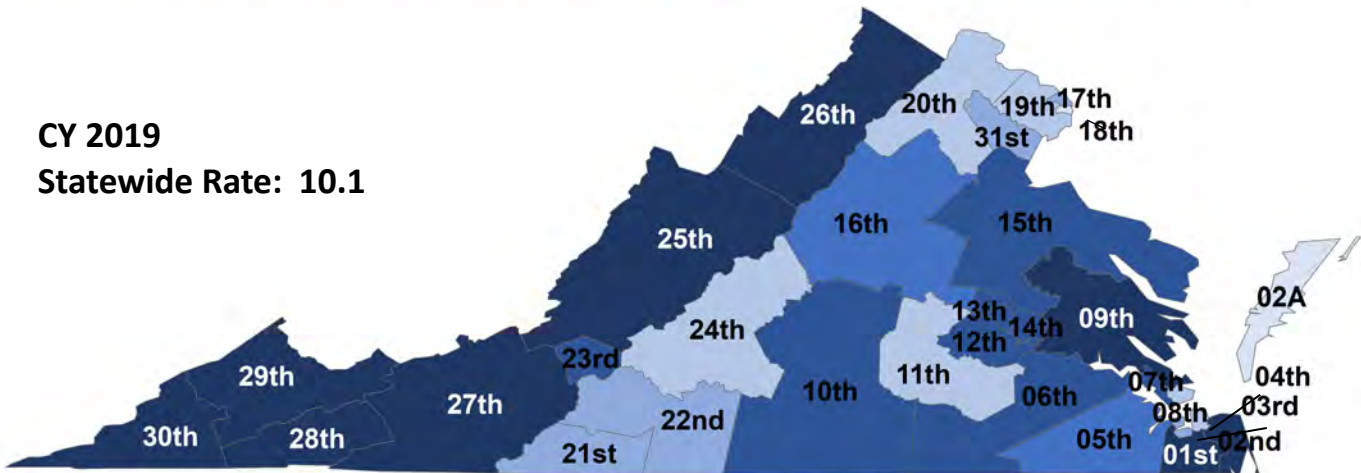
Prescription Stimulants

Prescription Stimulant Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

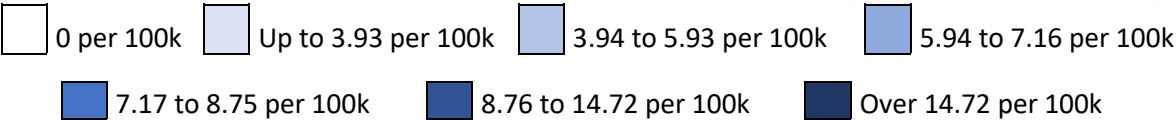
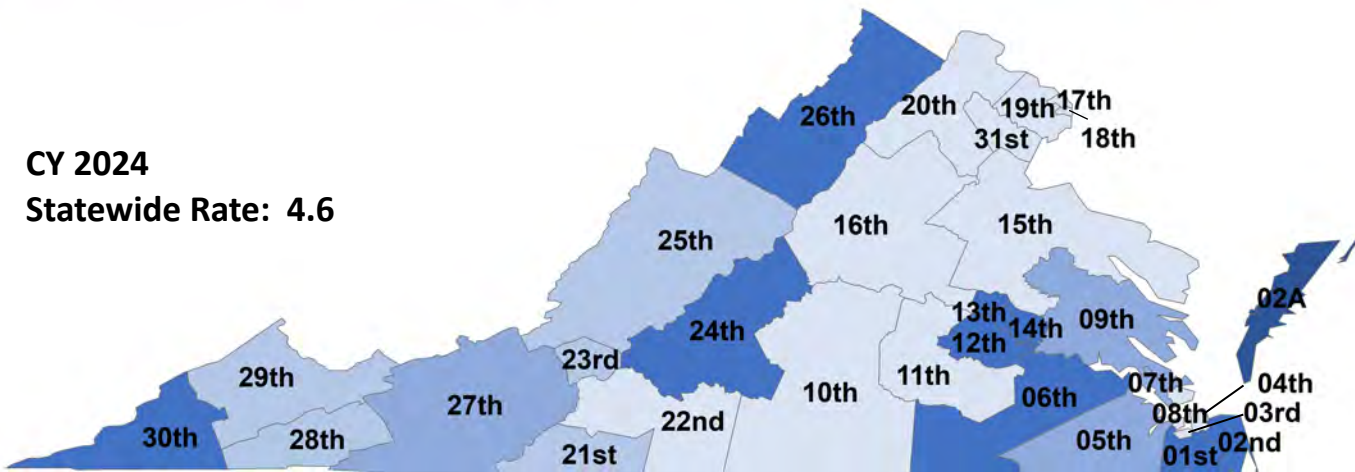
CY 2014
Statewide Rate: 10.8



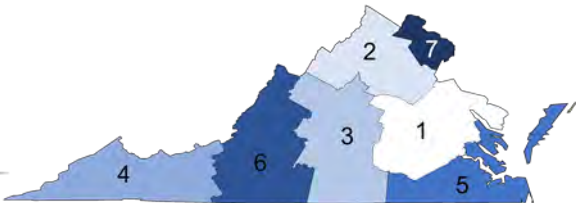
CY 2019
Statewide Rate: 10.1



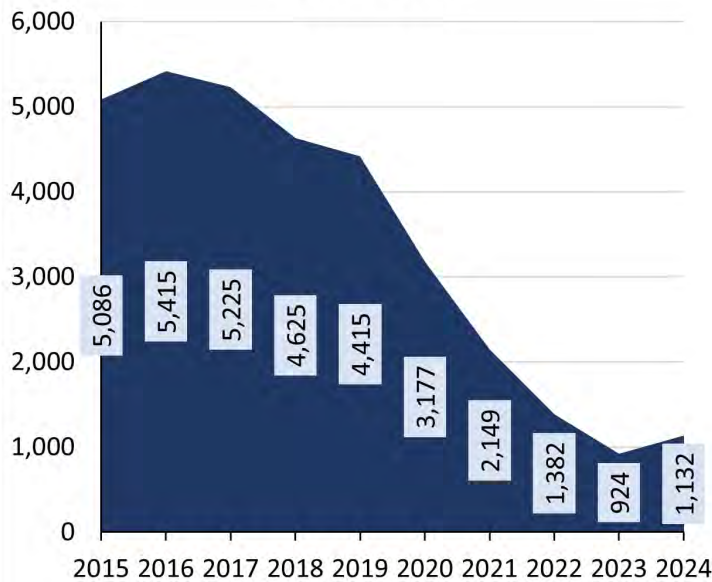
CY 2024
Statewide Rate: 4.6



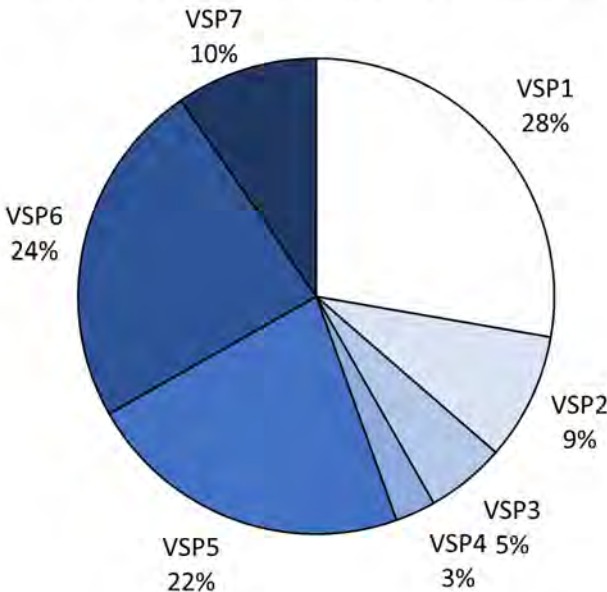
Heroin



Heroin Submissions
CY2015-2024



2024 Heroin Submissions
Across Virginia State Police (VSP) Divisions



Heroin submissions to DFS represented 3% of total drug submissions in 2024.

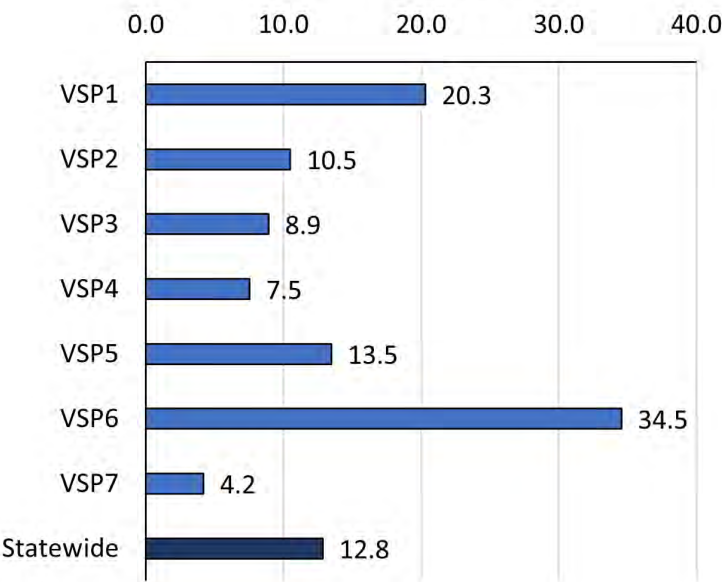
After peaking in 2016, heroin submissions dropped steadily each year from 2016 to 2023. Heroin submissions dropped 33% between 2022 and 2023, to the lowest level in a decade. This trend reversed in 2024, raising by 23%.

VSP Division 1 was responsible for the highest number of heroin submissions in 2024. The rate of submissions per 100,000 population was highest from VSP 4.

Statewide, the rate of heroin submissions in 2024 was 12.8 per 100,000 population. This was down 75% from 2019.

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

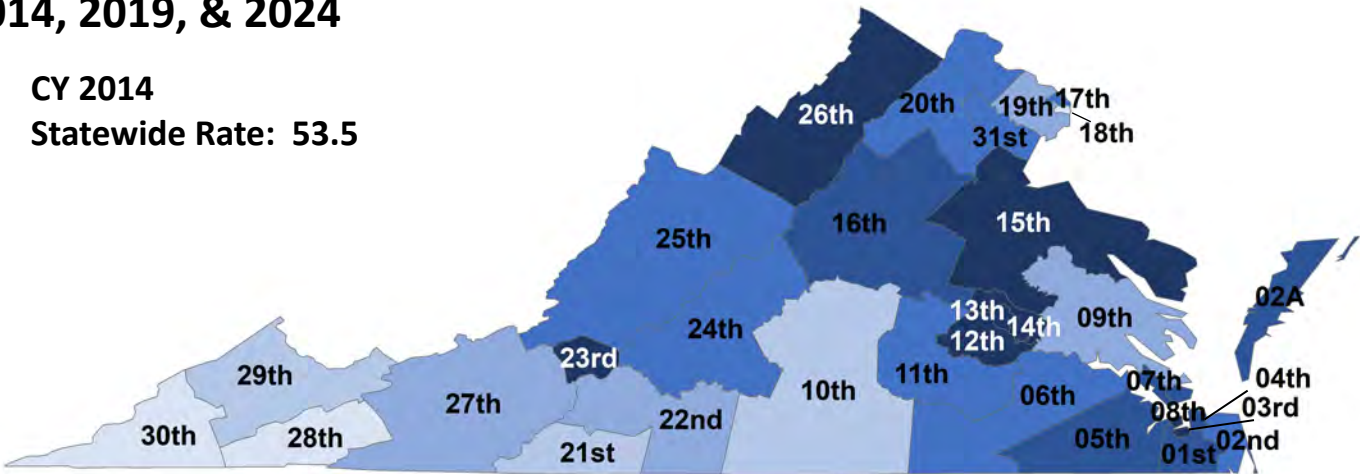
2024 Heroin Submissions
Rate per 100,000



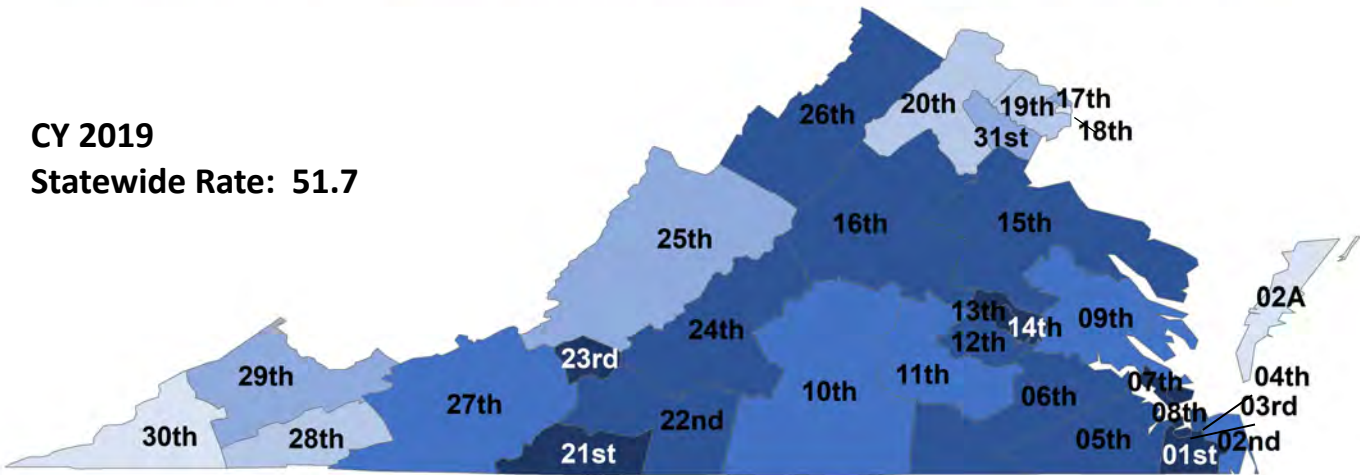
Heroin

Heroin Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

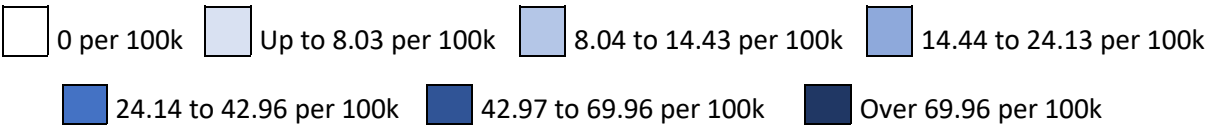
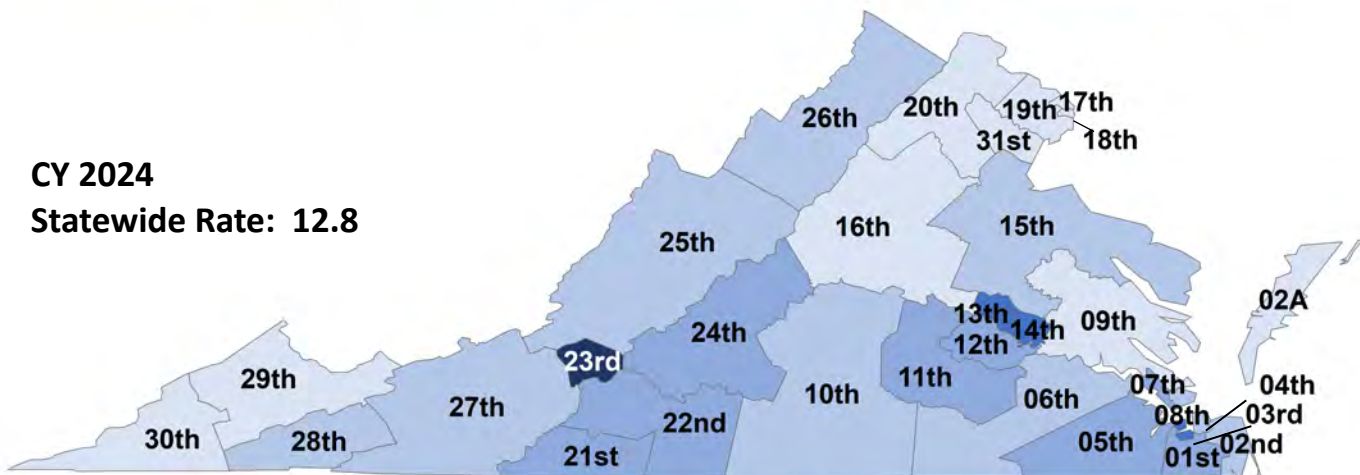
CY 2014
Statewide Rate: 53.5



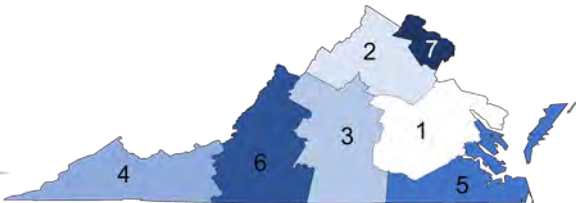
CY 2019
Statewide Rate: 51.7



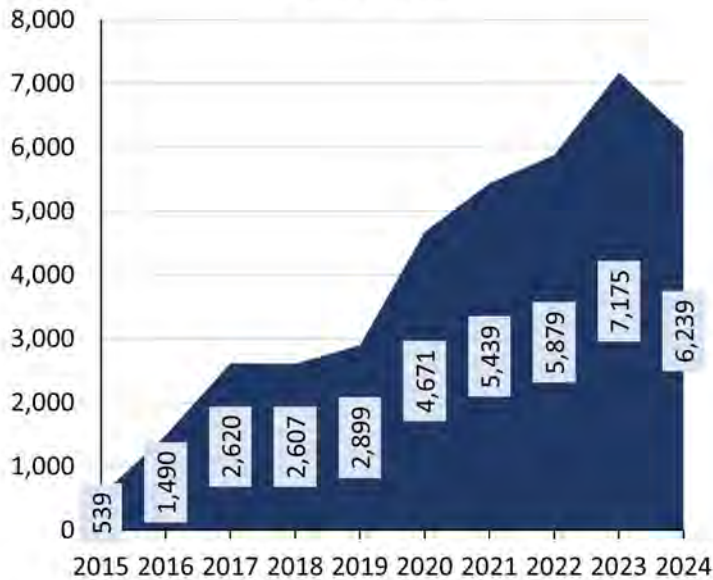
CY 2024
Statewide Rate: 12.8



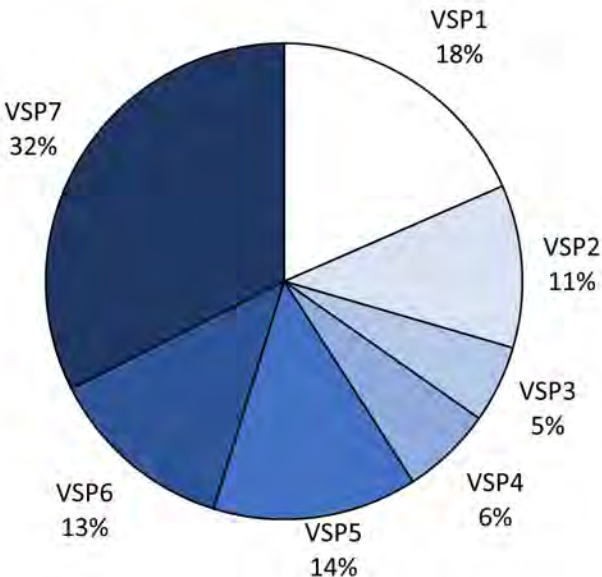
Illicit Synthetic Opioids



Illicit Synthetic Opioid Submissions
CY2015-2024



2024 Illicit Synthetic Opioid Submissions
Across Virginia State Police (VSP) Divisions



Illicit Synthetic Opioids Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Fentanyl	5,229	12,732	18,940
Fentanyl Analogs			
Para-Fluorofentanyl	1	487	1,657
Acetyl Fentanyl	181	438	122
Fluoro-isobutyryl fentanyl	587	38	0
Furanyl Fentanyl	790	2	0
Fentanyl Analog - Other	219	77	45
Nitazenes	0	47	56
Other Illicit Synthetic Opioids	359	173	46

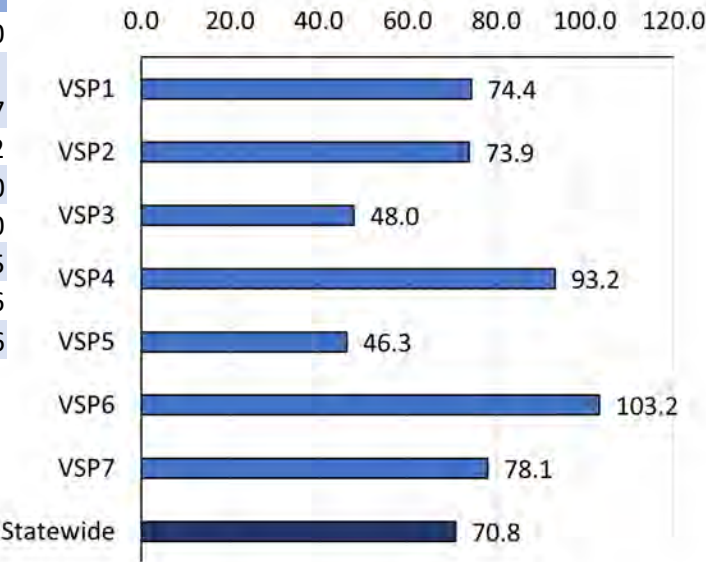
*Sum of individual substances will not match the total, as some cases involved more than one illicit synthetic opioid.

Illicit synthetic opioids have become the most frequently submitted category of opioid drugs submitted to DFS, surpassing both heroin and prescription opioids, combined. In 2024, illicit synthetic opioids represented 16% of total drug submissions.

Illicit synthetic opioid submissions increased steadily every year between 2011 (not shown) and 2023, excepting 2018. This upwards trend reversed in 2024, as submissions decreased by 13%.

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

2024 Illicit Synthetic Opioid Submissions
Rate per 100,000



VSP Division 7 was responsible for the highest number of illicit synthetic opioid submissions in 2024. The rate of submissions per 100,000 population was highest from VSP 6.

Statewide, the rate of illicit synthetic opioid submissions in 2024 was 70.8 per 100,000. This was up 108% from 2019. The maps on the following page present the changing pattern of illicit synthetic opioid submission rates, by Virginia Court District.

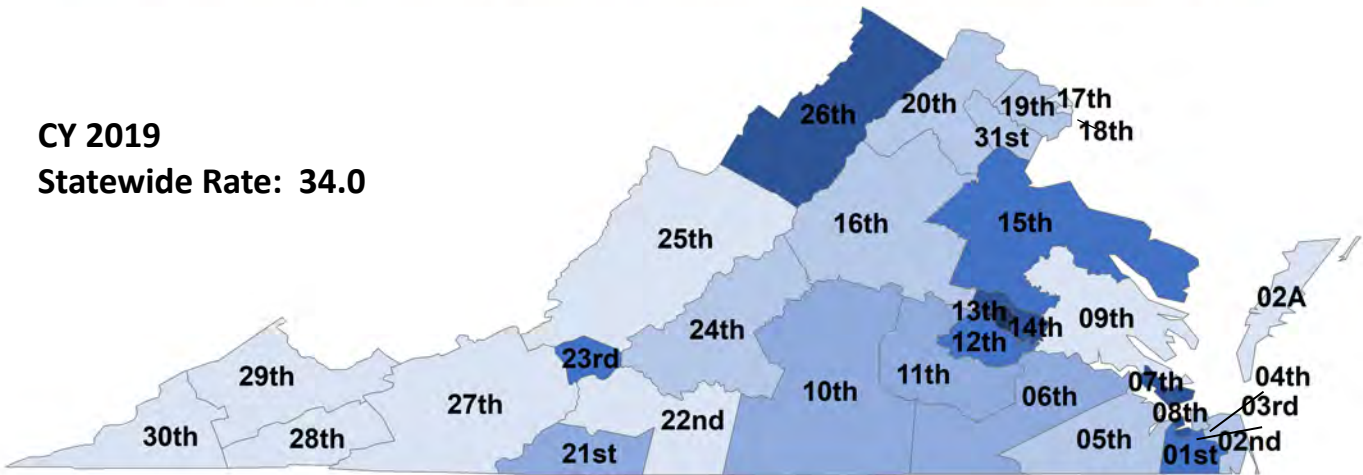
Illicit Synthetic Opioids

Illicit Synthetic Opioid Submissions by Court District, Rate per 100,000
CY 2014, 2019, & 2024

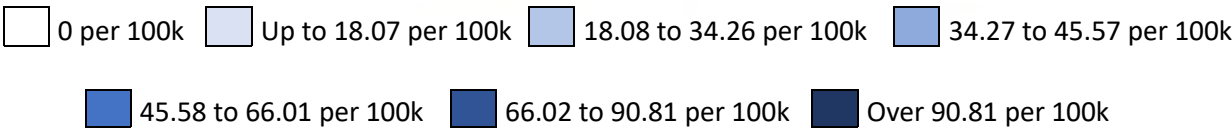
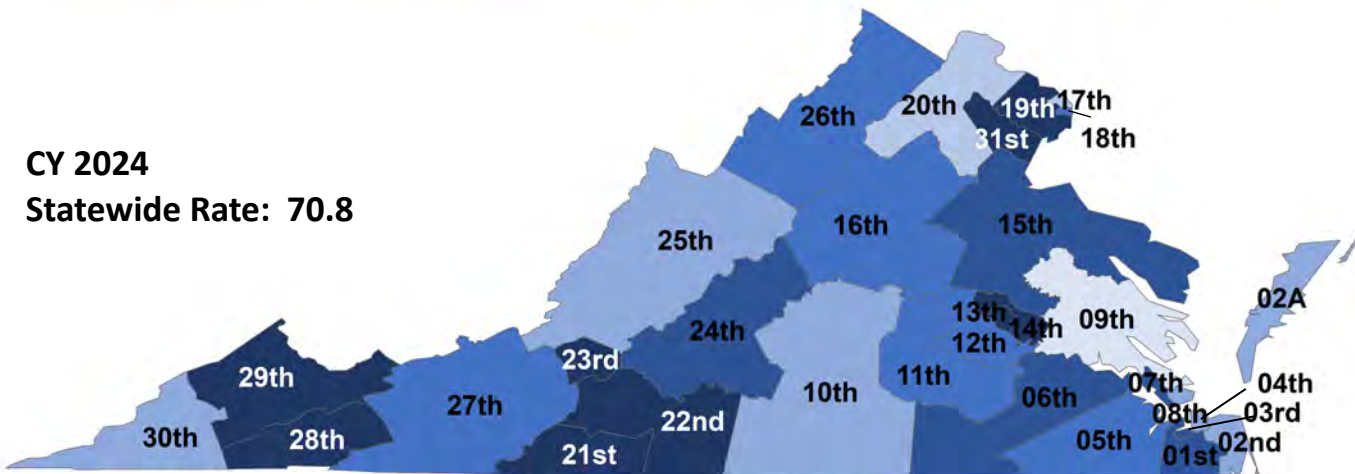
CY 2014
Statewide Rate: 3.0



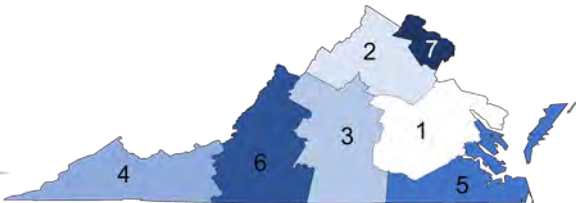
CY 2019
Statewide Rate: 34.0



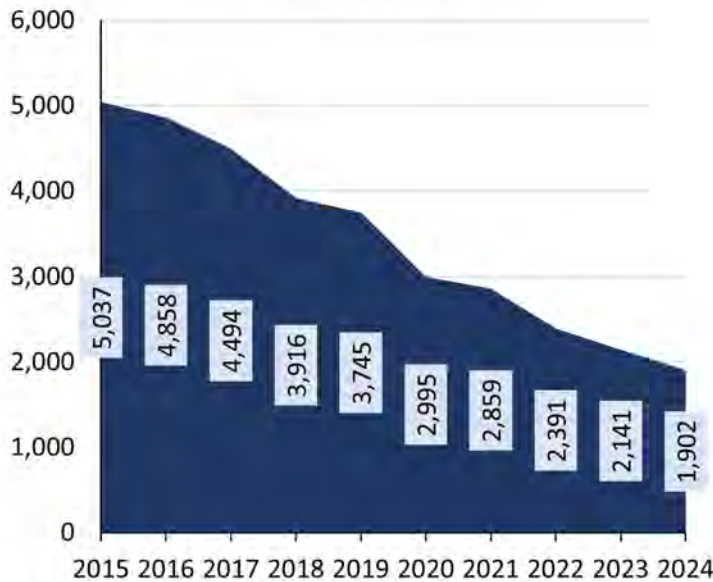
CY 2024
Statewide Rate: 70.8



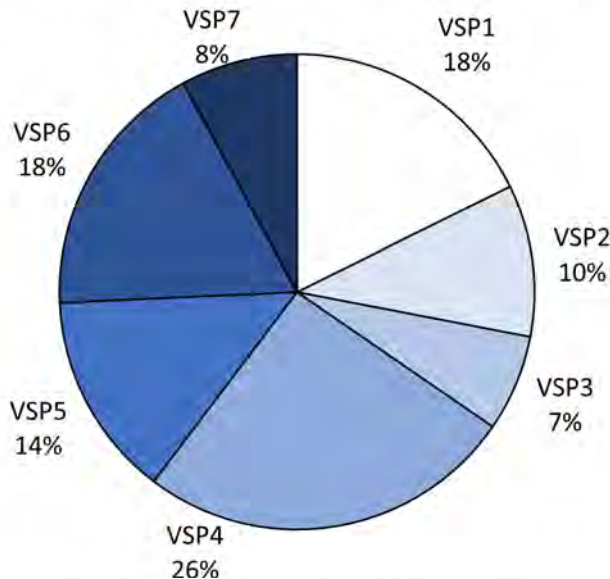
Prescription Opioids



Prescription Opioid Submissions
CY2015-2024



2024 Prescription Opioid Submissions
Across Virginia State Police (VSP) Divisions



Prescription Opioids Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Buprenorphine	4,053	4,313	3,286
Oxycodone	4,621	2,552	1,795
Tramadol	2,427	1,064	672
Hydrocodone	779	1,305	565
Methadone	570	343	217
Hydromorphone	737	306	138
Morphine	657	215	125
Codeine	251	152	84
Other	531	147	53

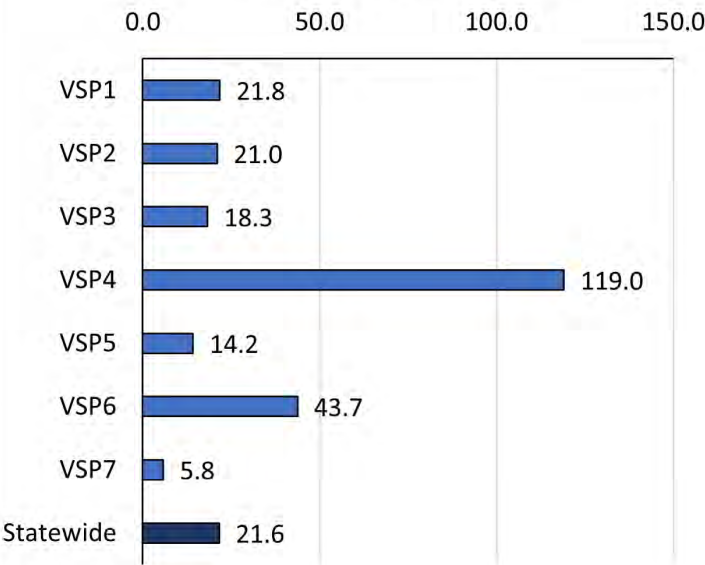
*Sum of individual substances will not match the total, as some cases involved more than one prescription opioid.

Prescription opioid submissions to DFS represented 5% of total drug submissions in 2024. Prescription opioid submissions have decreased steadily since 2015. Submissions decreased 11% between 2023 and 2024, 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-

2024 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 2024 were from VSP 4.

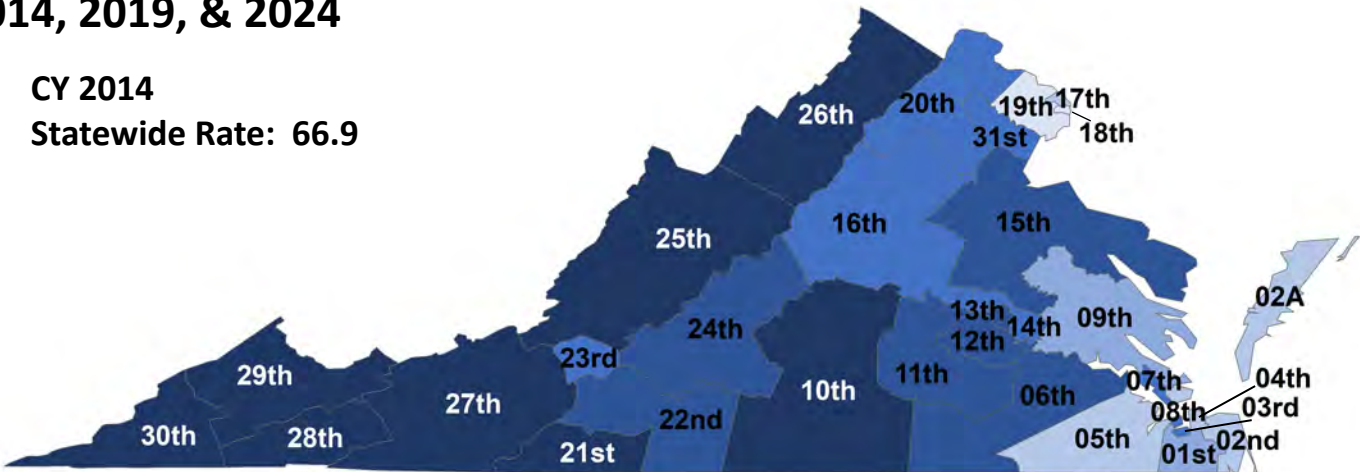
Statewide, the rate of prescription opioid submissions in 2024 was 21.6 per 100,000. This was down 51% from 2019.

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

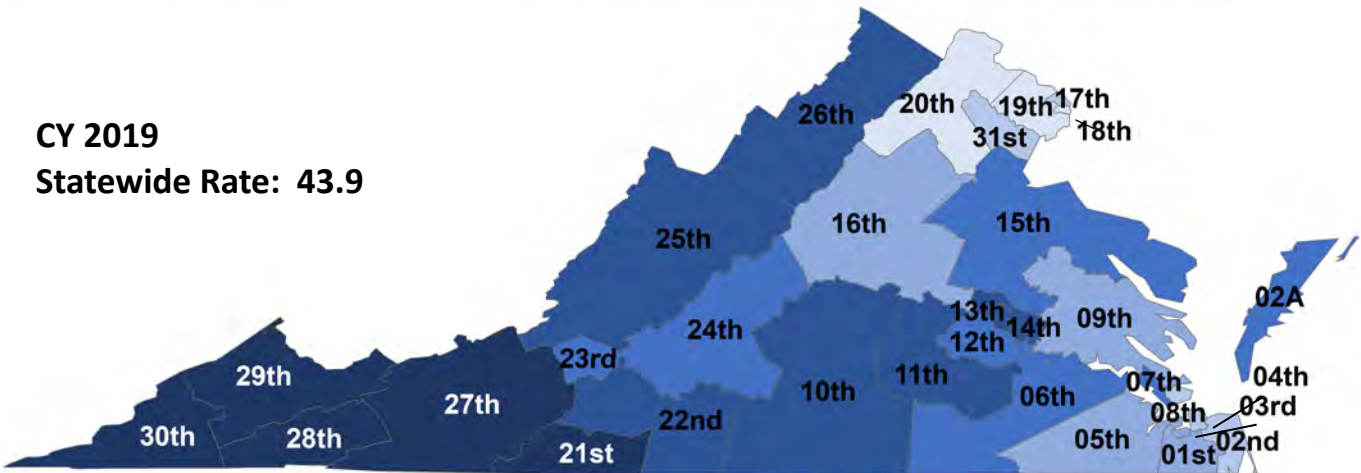
Prescription Opioids

Prescription Opioid Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

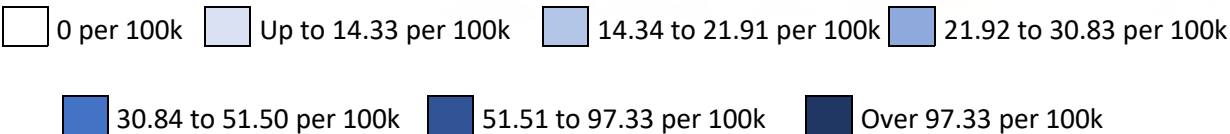
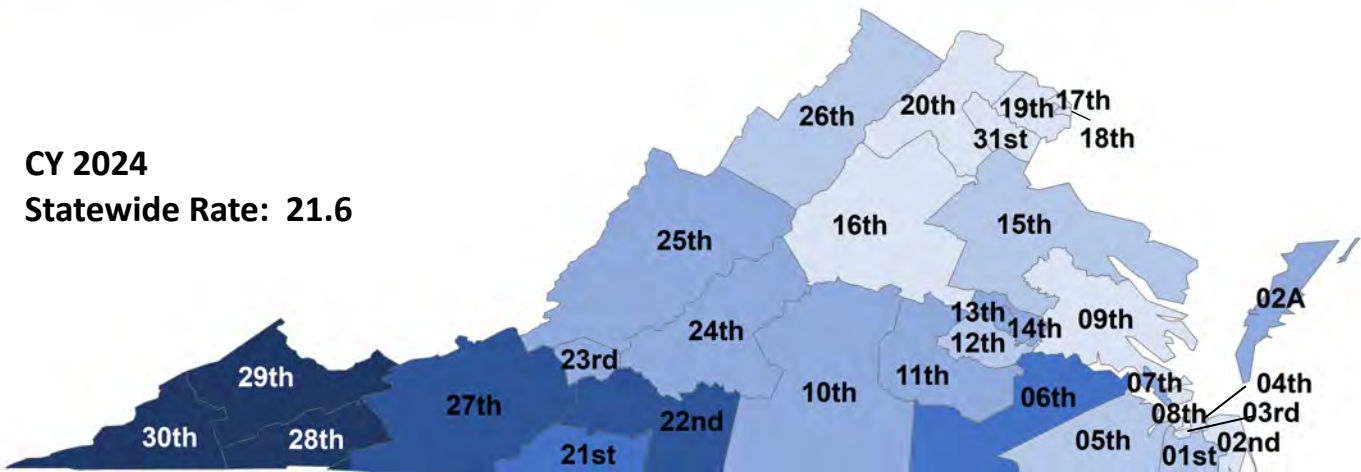
CY 2014
Statewide Rate: 66.9



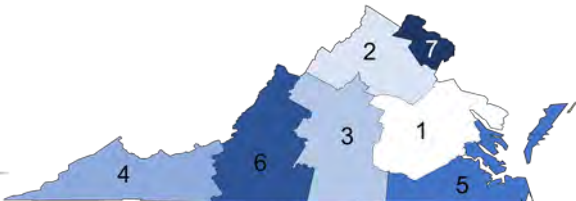
CY 2019
Statewide Rate: 43.9



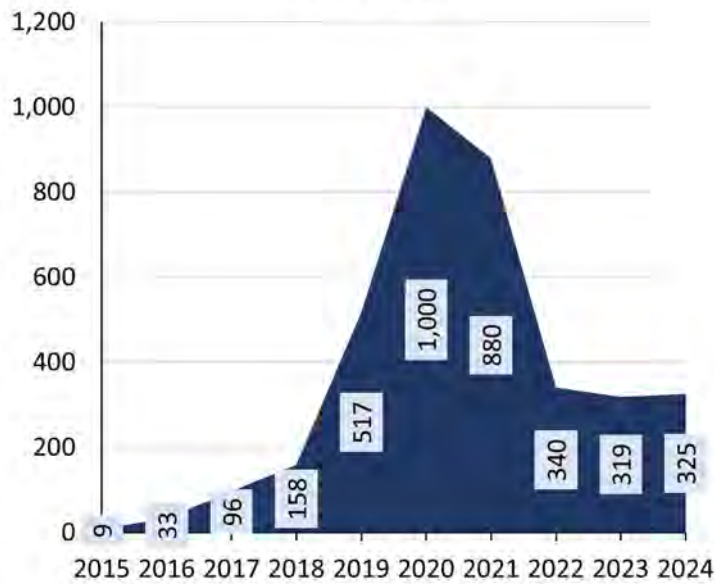
CY 2024
Statewide Rate: 21.6



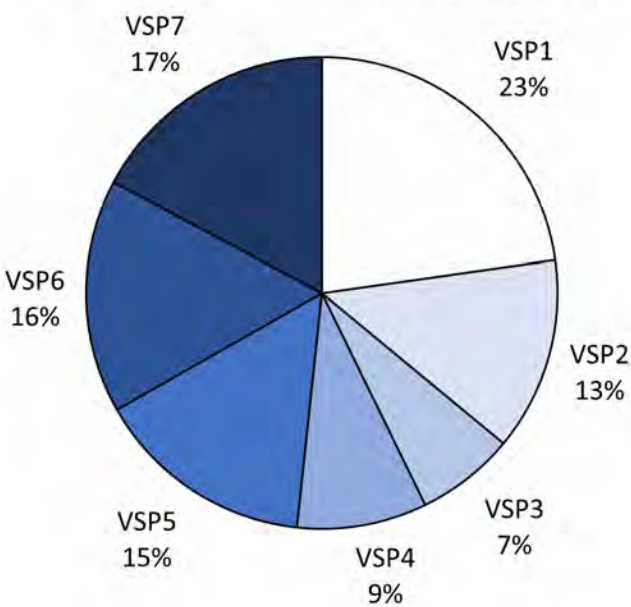
Illicit Benzodiazepines



Illicit Benzodiazepine Submissions
CY2015-2024



2024 Illicit Benzodiazepine Submissions
Across Virginia State Police (VSP) Divisions



Illicit Benzodiazepines Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Bromazolam	0	40	685
Clonazolam	68	671	174
Etizolam	167	1,269	70
Flualprazolam	7	457	50
Other	49	101	96

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

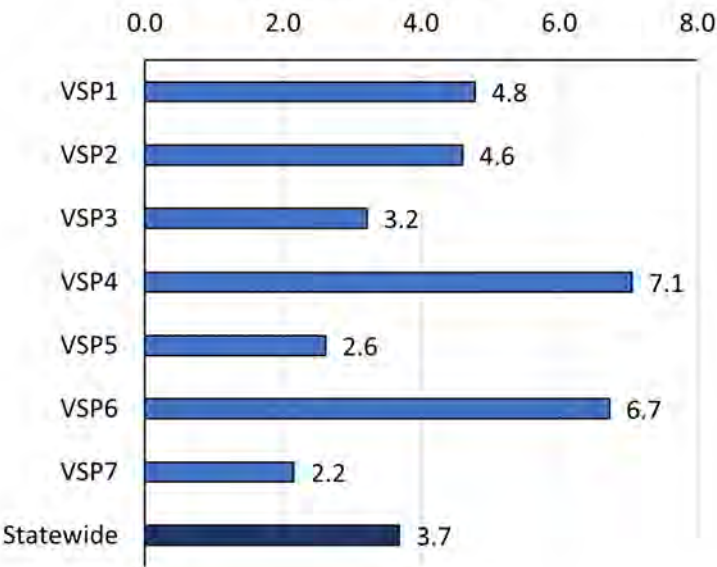
In 2020, for the first time, illicit benzodiazepines were submitted to DFS more frequently than prescription benzodiazepines. This continued in 2021, but reversed in 2022. Illicit benzodiazepines represented 1% of total drug submissions in 2024.

Between 2017 and 2020, illicit benzodiazepine submissions increased tenfold. This trend reversed in 2021, with a large drop in 2022 of 61%. Submissions have stabilized since 2022, decreasing 6% in 2023, and increasing 2% in 2024.

The most common illicit benzodiazepine identified in substances submitted to DFS between 2022 and 2024 was bromazolam. Detailed ten-year trends on individual illicit benzodiazepines are provided in Appendix B.

VSP Division 1 was responsible for the highest number of illicit benzodiazepine submissions in 2024. The rate of submissions per 100,000 population was highest from VSP 4, followed by VSP 6.

2024 Illicit Benzodiazepine Submissions
Rate per 100,000



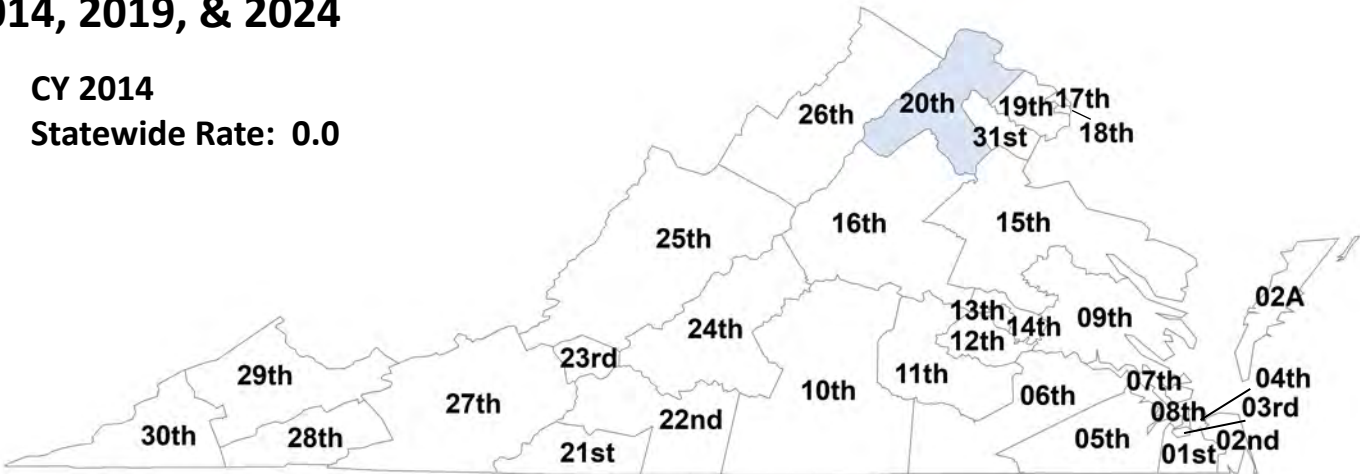
Statewide, the rate of illicit benzodiazepine submissions in 2024 was 3.7 per 100,000. Despite the recent increase in cases, this statewide rate was 39% lower than the rate in 2019.

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

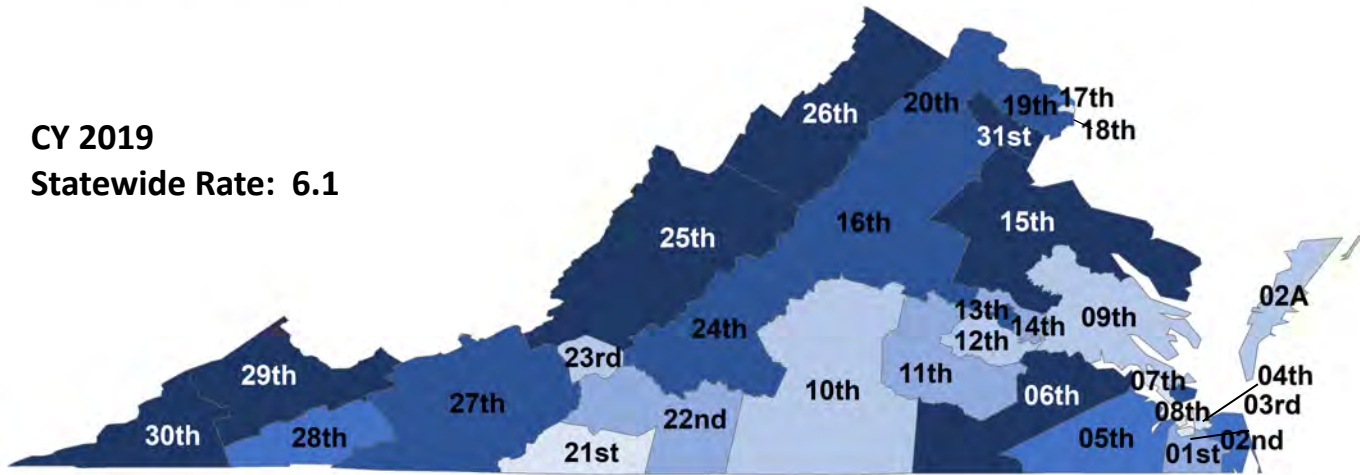
Illicit Benzodiazepines

Illicit Benzodiazepine Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

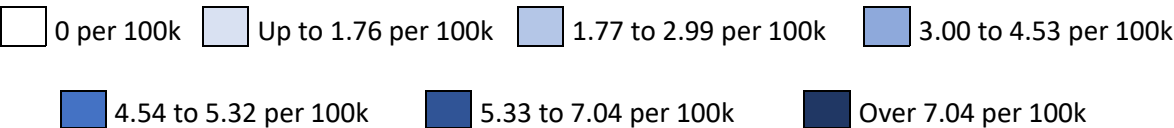
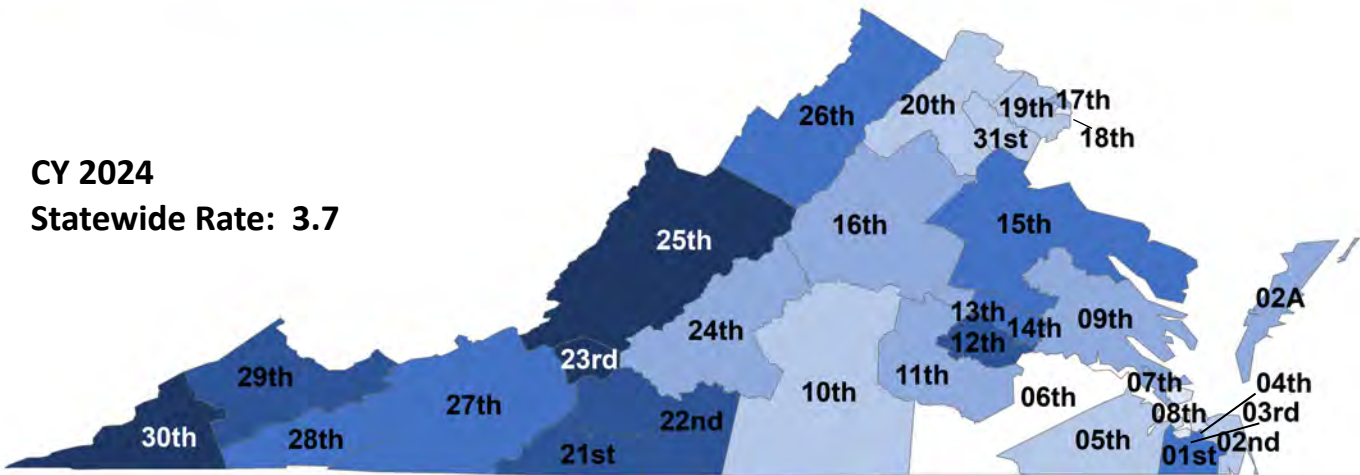
CY 2014
Statewide Rate: 0.0



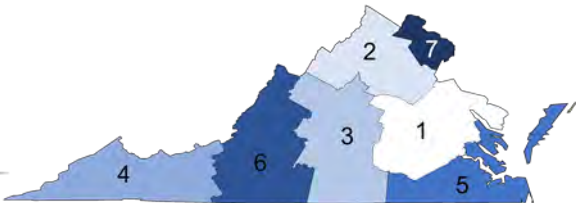
CY 2019
Statewide Rate: 6.1



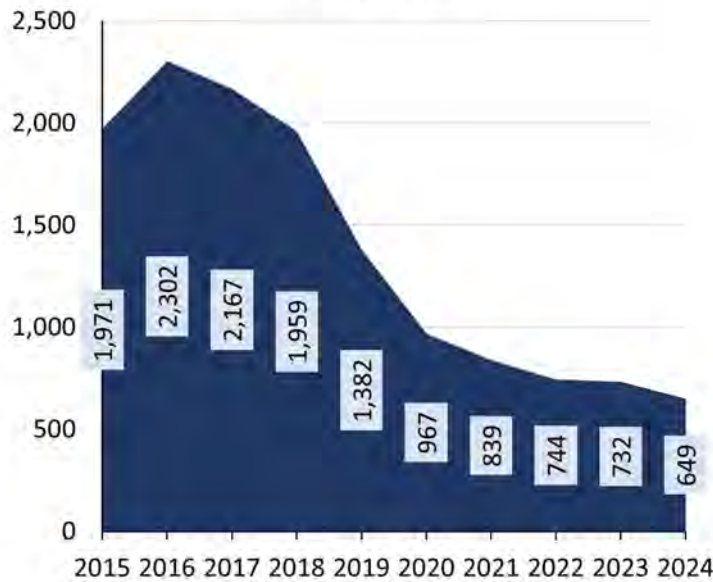
CY 2024
Statewide Rate: 3.7



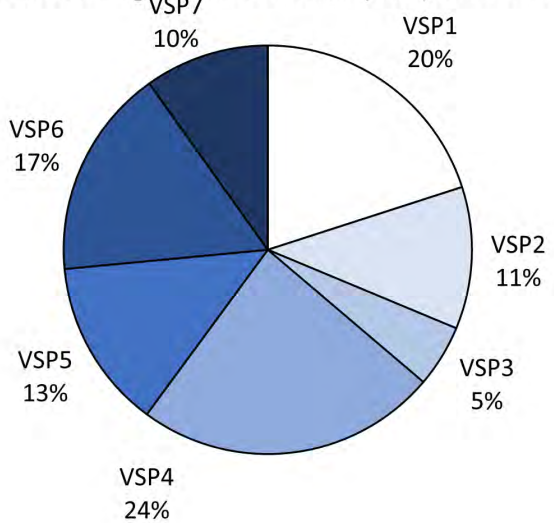
Prescription Benzodiazepines



Prescription Benzodiazepine Submissions
CY2015-2024



2024 Prescription Benzodiazepine
Submissions
Across Virginia State Police (VSP) Divisions



Prescription Benzodiazepines Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Alprazolam (Xanax)	4,690	2,086	1,340
Clonazepam (Klonopin)	1,371	893	680
Diazepam (Valium)	558	327	197
Lorazepam (Ativan)	311	171	106
Other	51	30	13

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

In 2024, prescription benzodiazepine submissions represented 2% of total submissions.

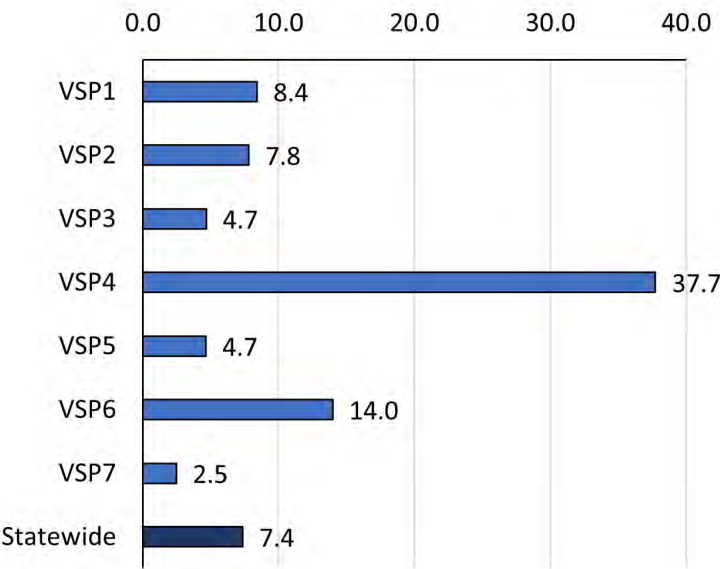
Prescription benzodiazepine submissions have decreased sharply in recent years. Submissions decreased 64% between 2016 and 2021, another 11% in 2022, and decreased another 2% in 2023. In 2024 submissions dropped sharply by 11%.

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 2024 were from VSP 4.

Statewide, the rate of prescription benzodiazepine submissions in 2024 was 7.4 per 100,000. This was down 55% from 2019.

2024 Prescription Benzodiazepine
Submissions Rate per 100,000

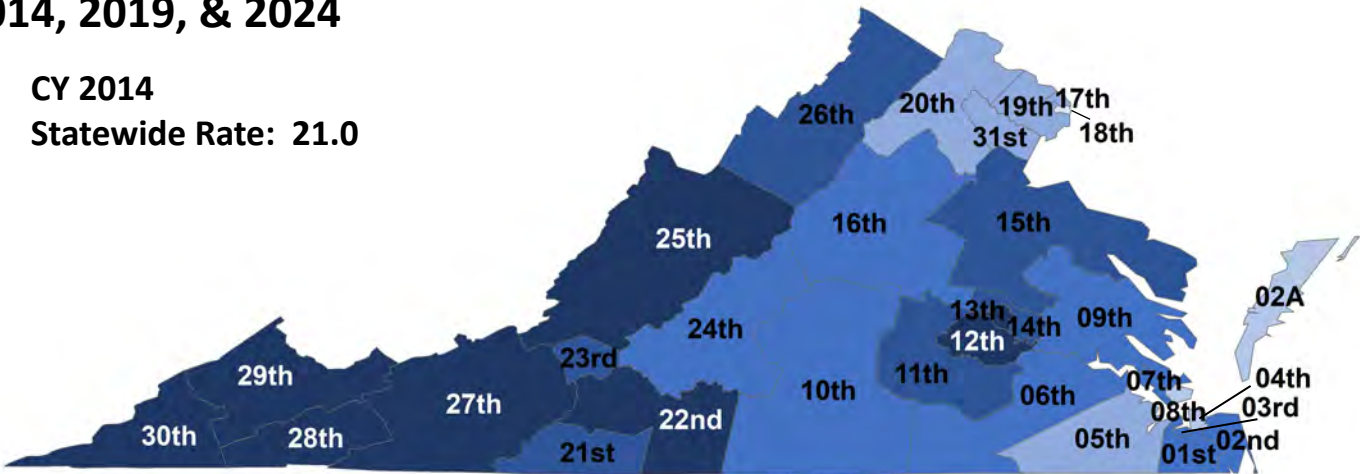


The maps on the following page present the changing pattern of prescription benzodiazepine submission rates, by Virginia Court District.

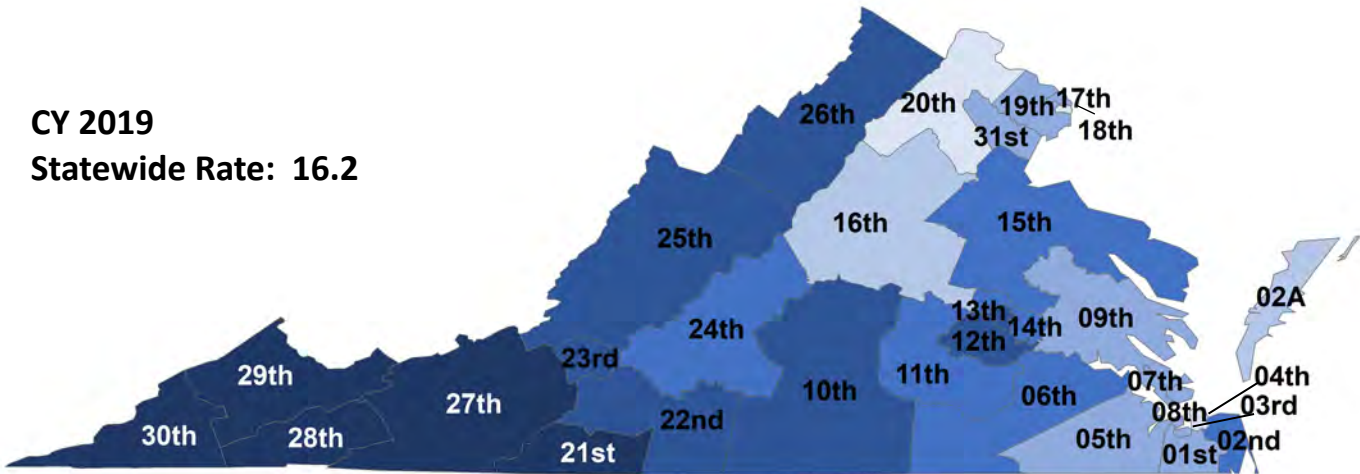
Prescription Benzodiazepines

Prescription Benzodiazepine Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

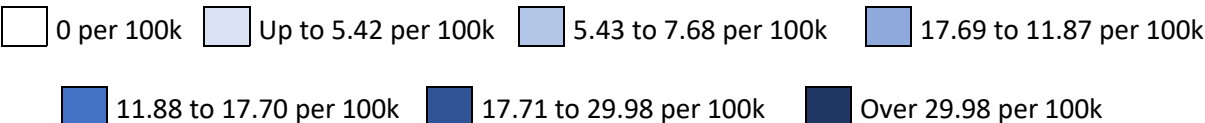
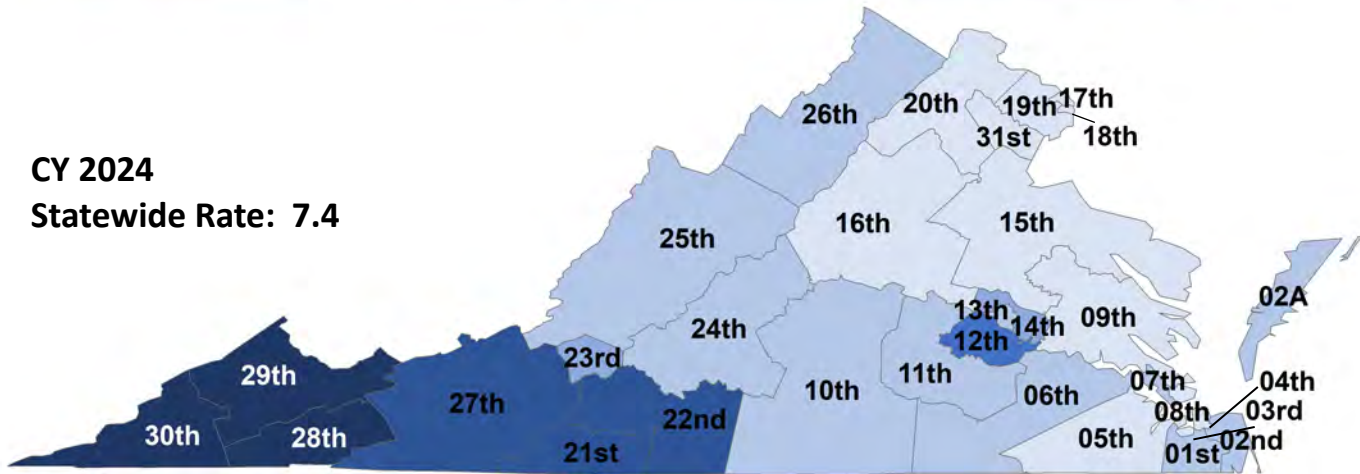
CY 2014
Statewide Rate: 21.0



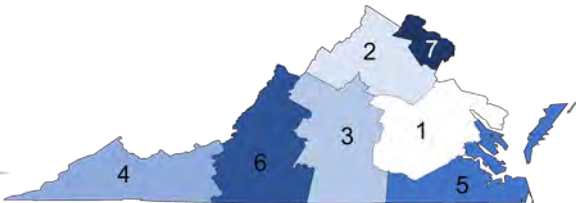
CY 2019
Statewide Rate: 16.2



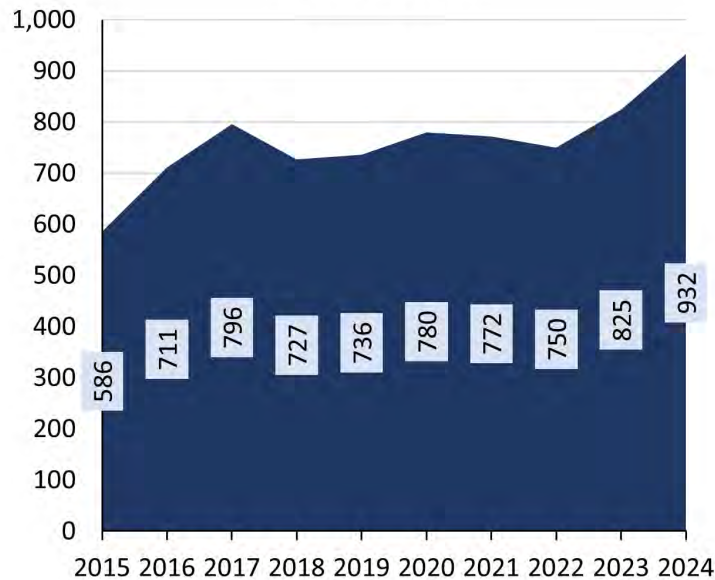
CY 2024
Statewide Rate: 7.4



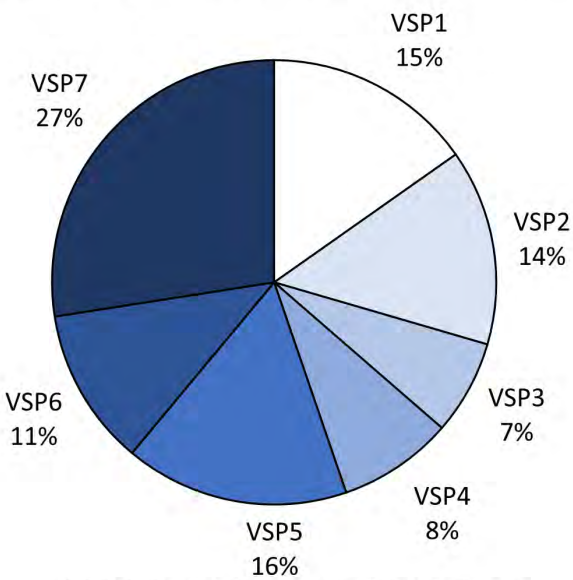
Hallucinogenic Substances



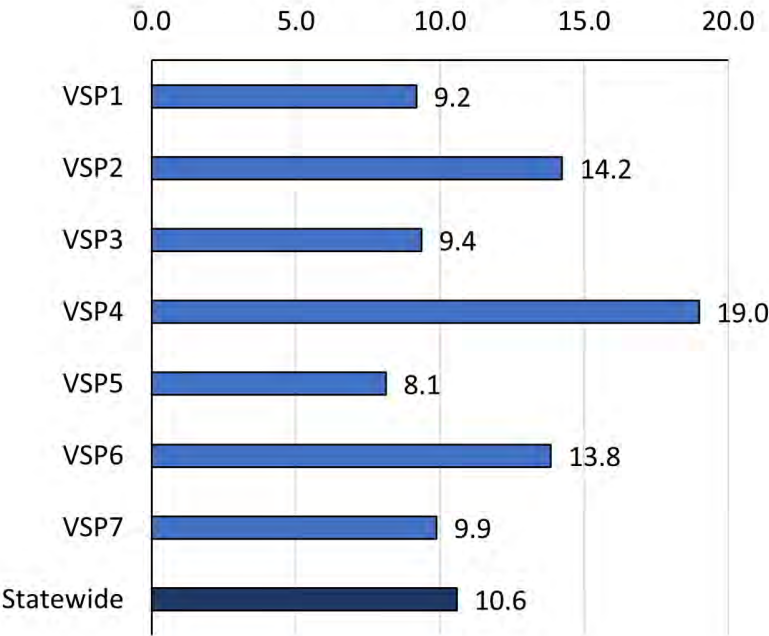
Hallucinogenic Substance Submissions
CY2015-2024



2024 Hallucinogenic Substances Submissions
Across Virginia State Police (VSP) Divisions



2024 Hallucinogenic Substances
Submissions Rate per 100,000



Statewide, the rate of hallucinogenic substance submissions in 2024 was 10.6 per 100,000, up 23% from 2019.

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

Hallucinogenic Substances Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Psilocyn-Psilocybin	487	675	1,527
PCP & analogs	552	600	399
LSD & analogs	881	734	322
Ketamine & analogs	174	201	275
Tryptamines	123	133	79
Benzylpiperazine (BZP)	15	1	1
Other	256	230	112

*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 2024.

Hallucinogenic substances have not demonstrated a consistent year-to-year trend over time. However, submissions have increased in the last two years, by 10% in 2023 and by 13% in 2024.

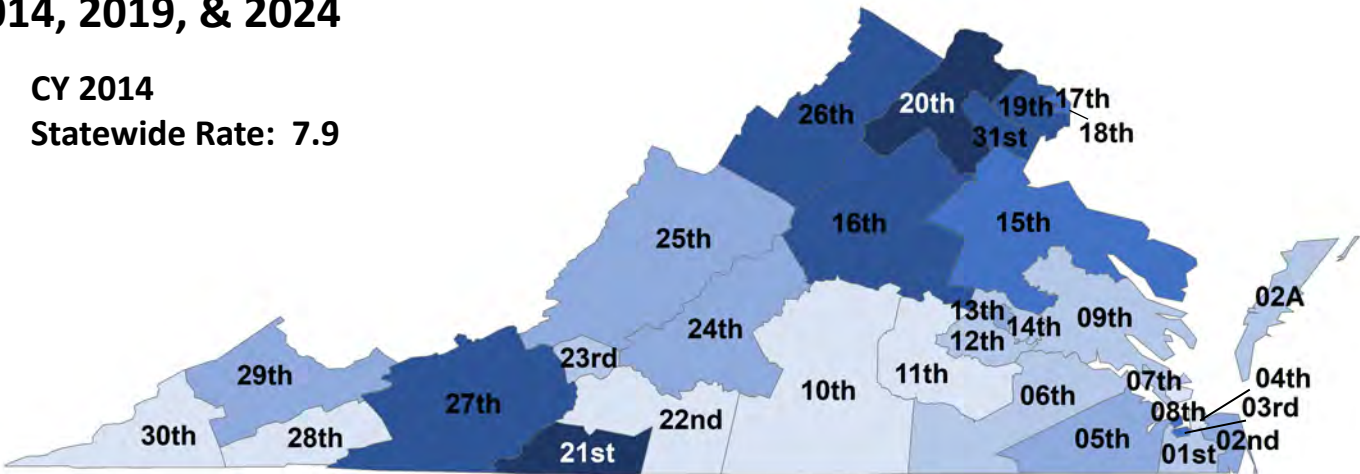
The most common hallucinogenic substance group identified in submissions to DFS in the past several years is Psilocyn-Psilocybin (mushrooms), and the second most common is PCP & PCP analogs. Detailed ten-year trends on individual hallucinogenic substances are provided in Appendix B.

The largest number of hallucinogenic substance submissions in 2024 were from VSP 7, but the Division with the highest rate of submissions per 100,000 population was VSP 4.

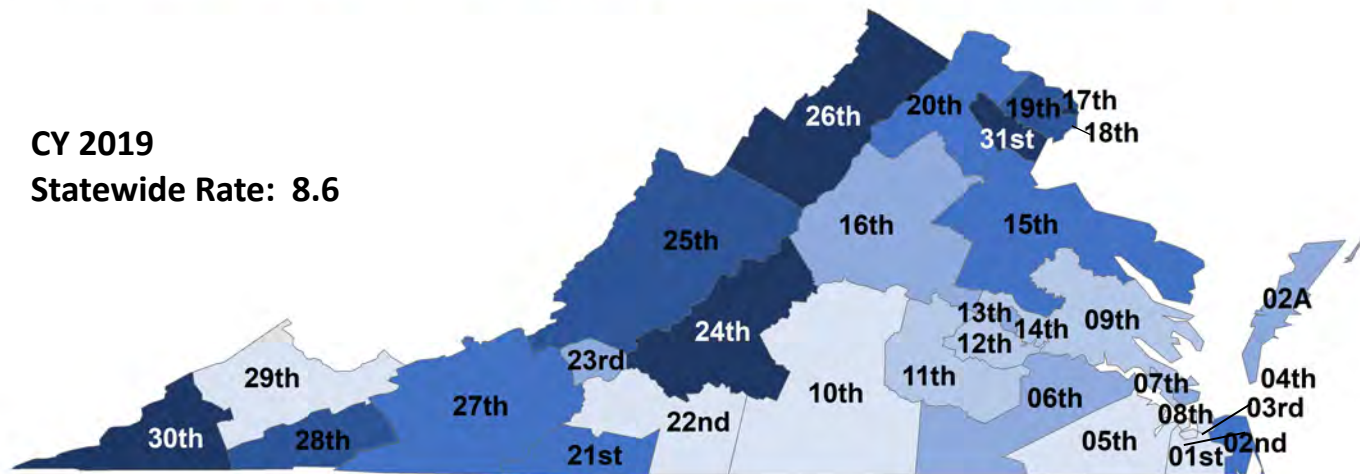
Hallucinogenic Substances

Hallucinogenic Substance Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

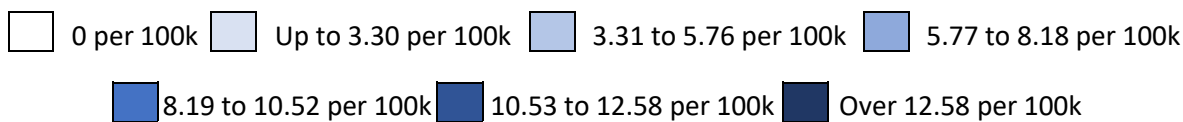
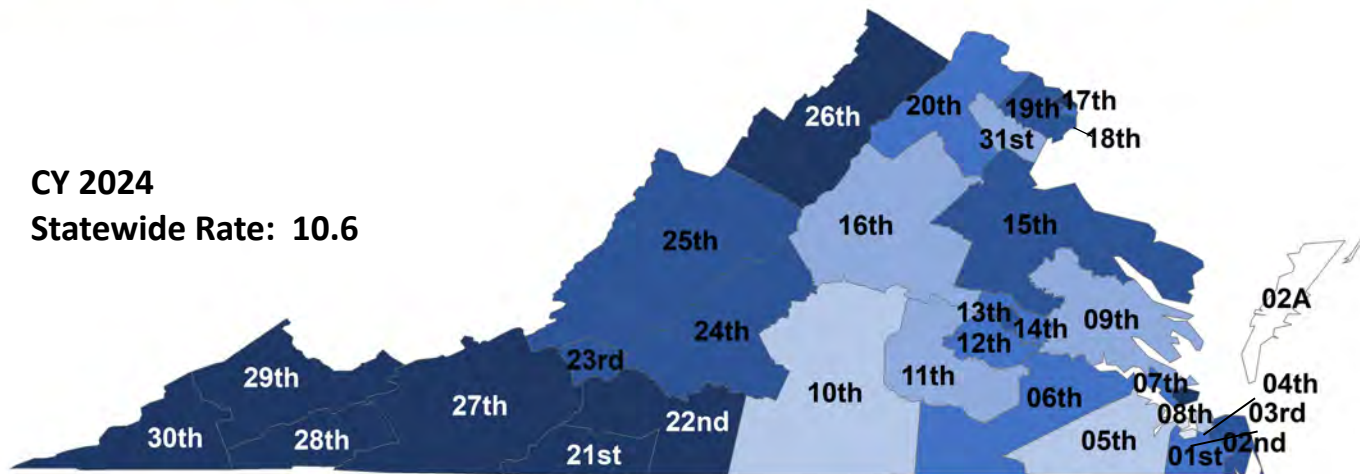
CY 2014
Statewide Rate: 7.9



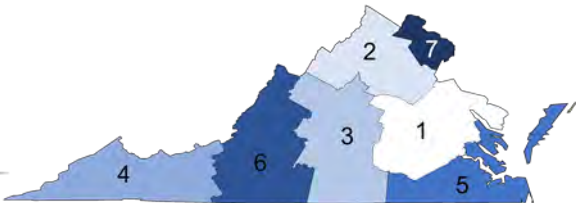
CY 2019
Statewide Rate: 8.6



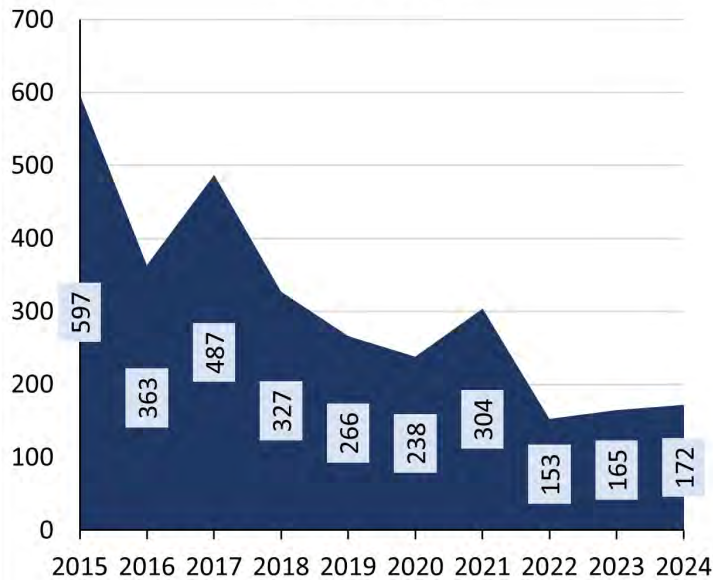
CY 2024
Statewide Rate: 10.6



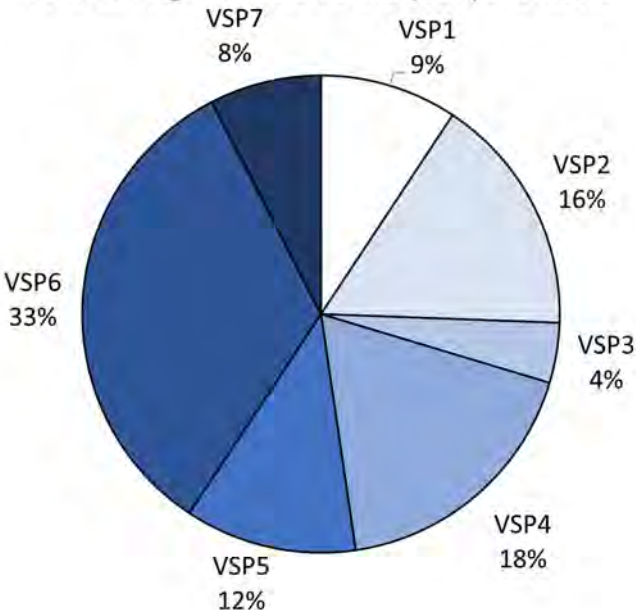
Cannabimimetic Agents



Cannabimimetic Agent Submissions
CY2015-2024



2024 Cannabimimetic Agent Submissions
Across Virginia State Police (VSP) Divisions



Cannabimimetic Agents Identified*

Substance Identified	CY2016-18	CY2019-21	CY2022-24
Indazole carboxamides	1,045	571	482
Alkoylindoles	51	14	2
Indole carboxamides	3	275	2
Benzoylindoles	0	1	1
Naphthoylindoles	7	0	1
Indole carboxylates	47	0	0
Phenylacetylindoles	1	0	0
Other or unclear	80	20	5

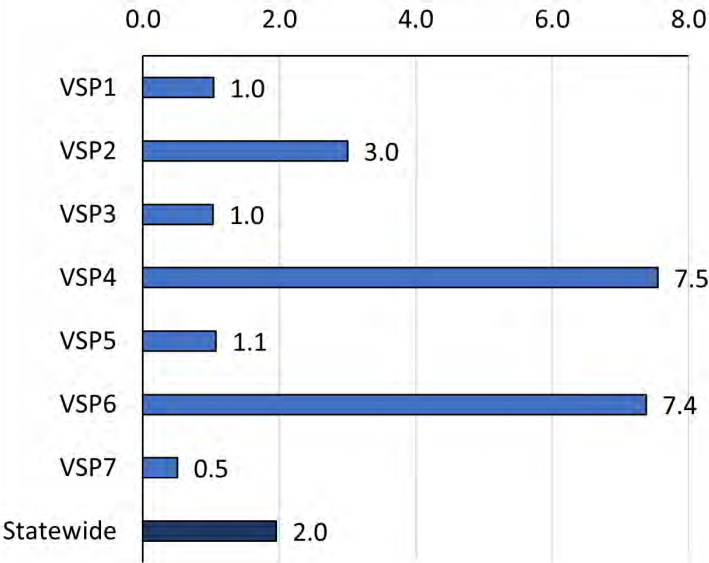
*Sum of individual substances will not match the total, as some cases involved more than one cannabimimetic agent.

Cannabimimetic agent submissions to DFS represented less than 0.4% of total drug submissions in 2024.

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 have increased since; by 8% in 2023 and 4% in 2024.

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-

2024 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 2024. VSP4 had the highest rate of cannabimimetic agent submissions in 2024, followed closely by VSP6.

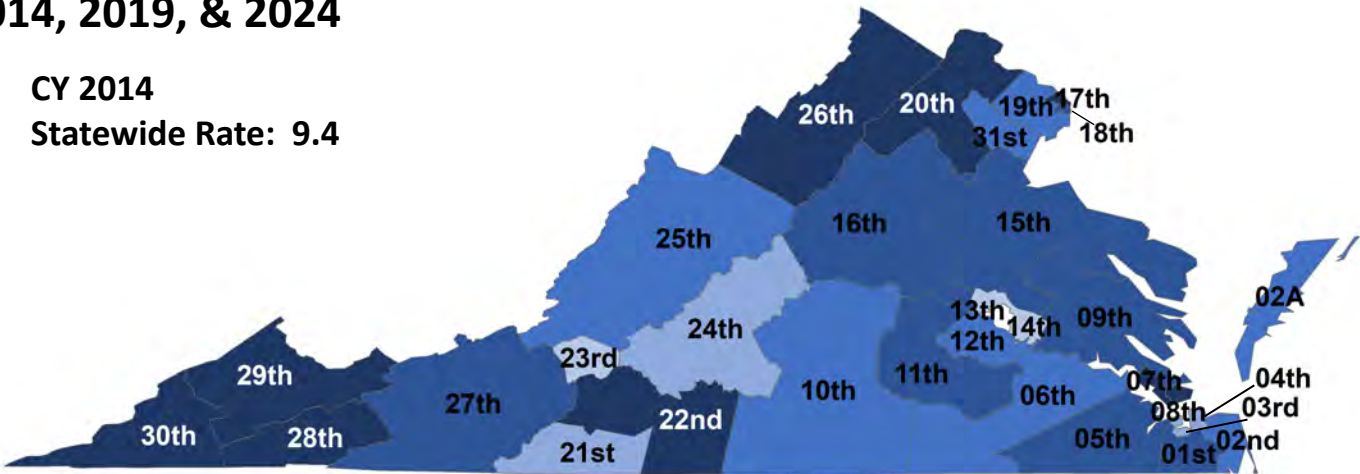
Statewide, the rate of cannabimimetic agent submissions in 2024 was 2.0 per 100,000, down 37% from 2019.

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

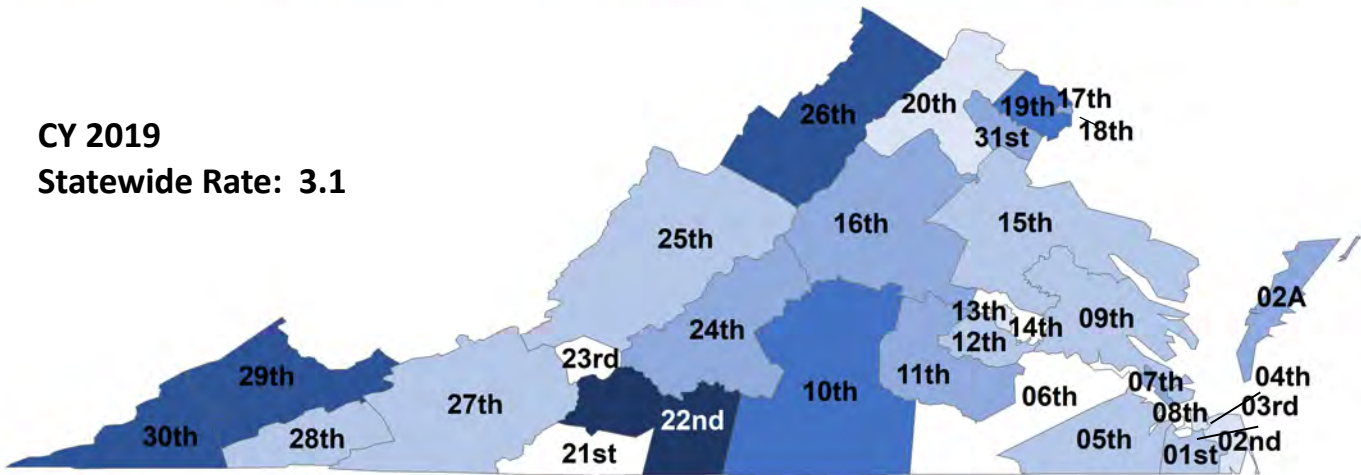
Cannabimimetic Agents

Cannabimimetic Agent Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

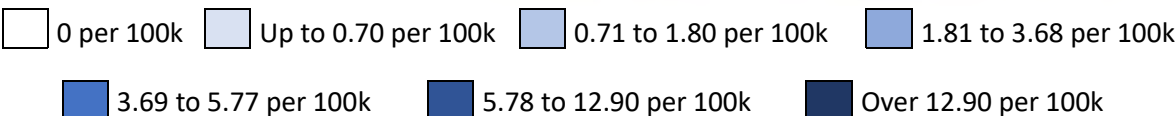
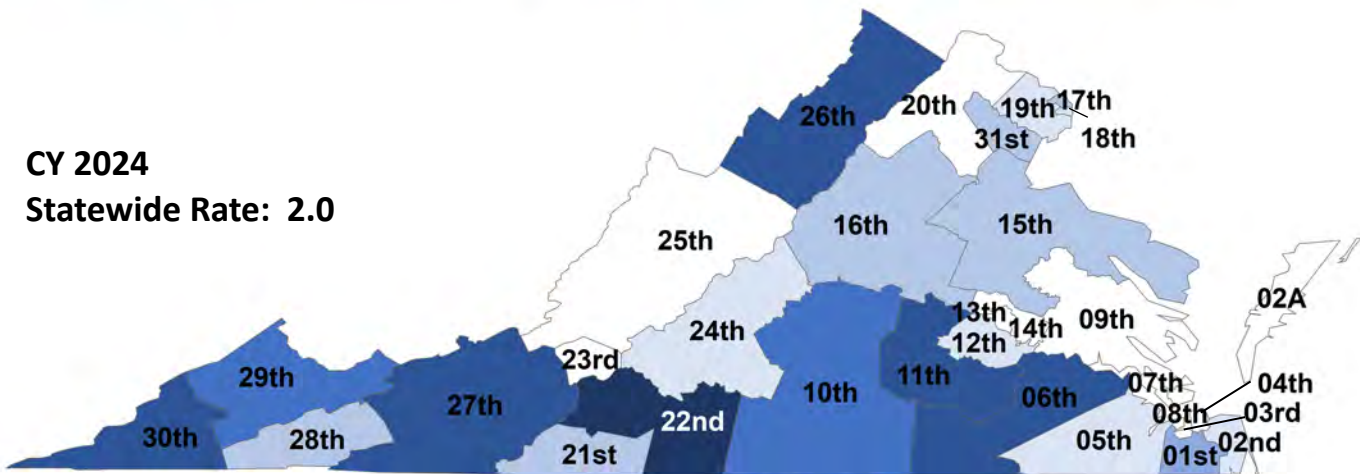
CY 2014
Statewide Rate: 9.4



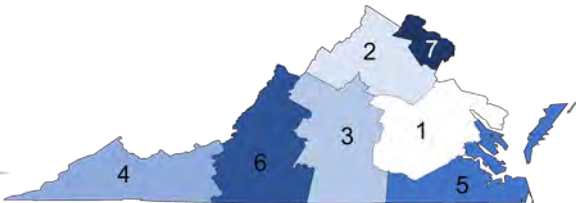
CY 2019
Statewide Rate: 3.1



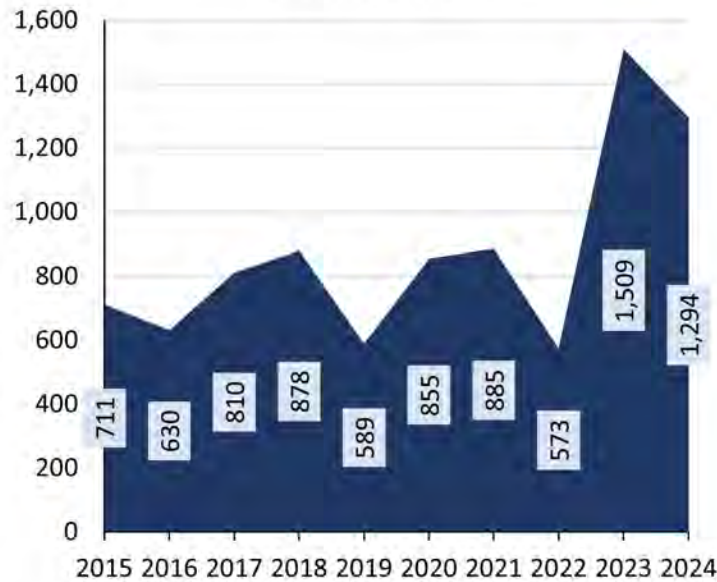
CY 2024
Statewide Rate: 2.0



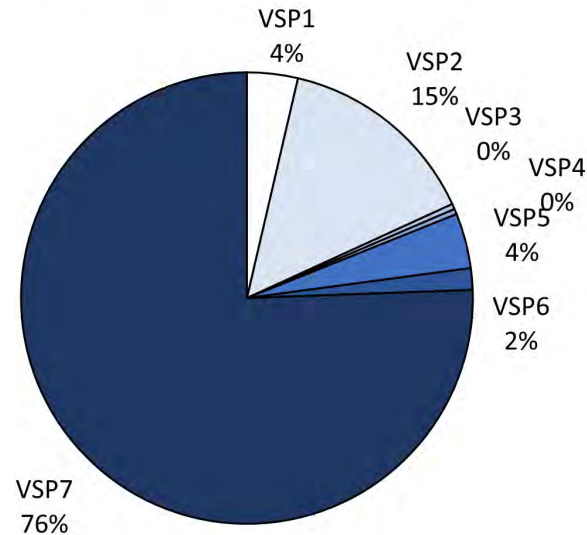
Other Designer Drugs



Other Designer Drug Submissions
CY2015-2024



2024 Designer Drug Submissions Across
Virginia State Police (VSP) Divisions



Designer Drugs Identified*

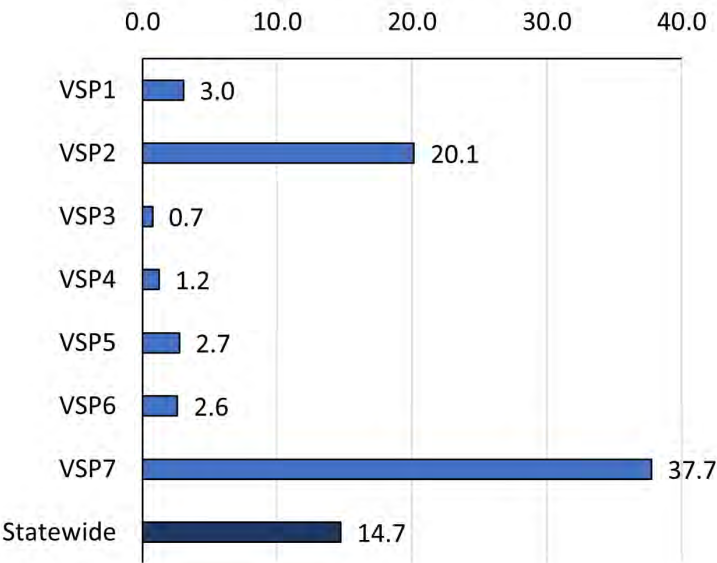
Substance Identified	CY2016-18	CY2019-21	CY2022-24
Synthetic Cathinone			
N,N-dimethylpentylone	0	16	2,692
Eutylone	3	1,709	169
Alpha-PVP	21	1	7
N-ethylpentylone	1,061	76	2
Dibutylone	435	2	0
Ethylone	77	3	0
MDPV	4	2	0
Methylone	20	1	0
Other	115	143	237
Substituted Amphetamine			
MDMA (Ecstasy)	543	382	332
Other	163	94	58

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

Designer drugs comprised 3% of submissions in 2024. The frequency of designer drug submissions, and the type submitted, has not displayed a consistent trend. After dropping 35% in 2022, submissions increased 163% in 2023, then decreased 14% in 2024.

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,N-dimethylpentylone was first submitted in 2021, and has recently

2024 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 2024 were from VSP 7.

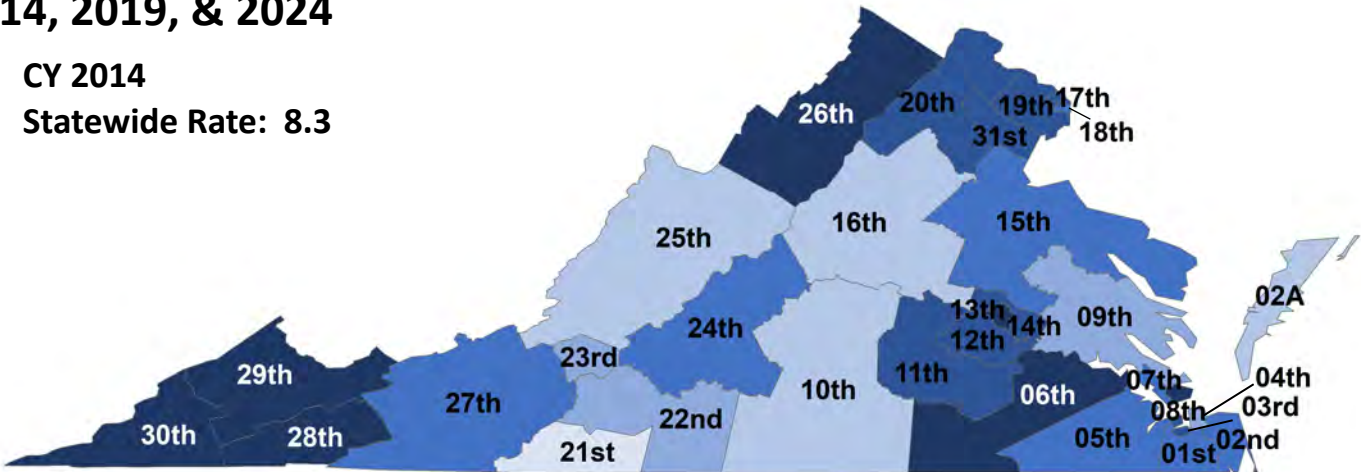
Statewide, the rate of designer drug submissions in 2024 was 14.7 per 100,000, up 113% from 2019.

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

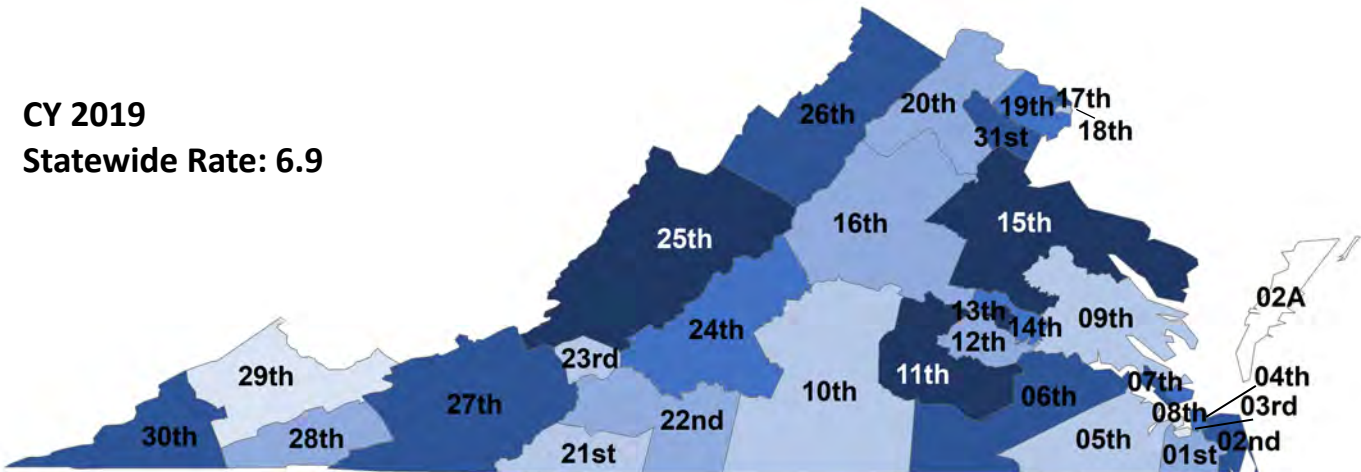
Other Designer Drugs

Other Designer Drug Submissions by Court District, Rate per 100,000 CY 2014, 2019, & 2024

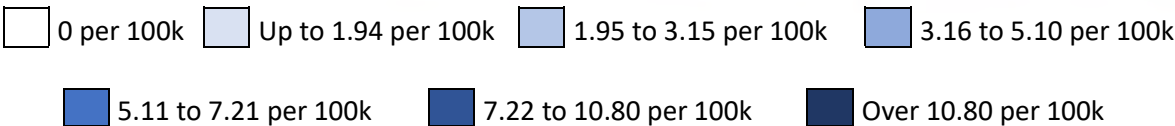
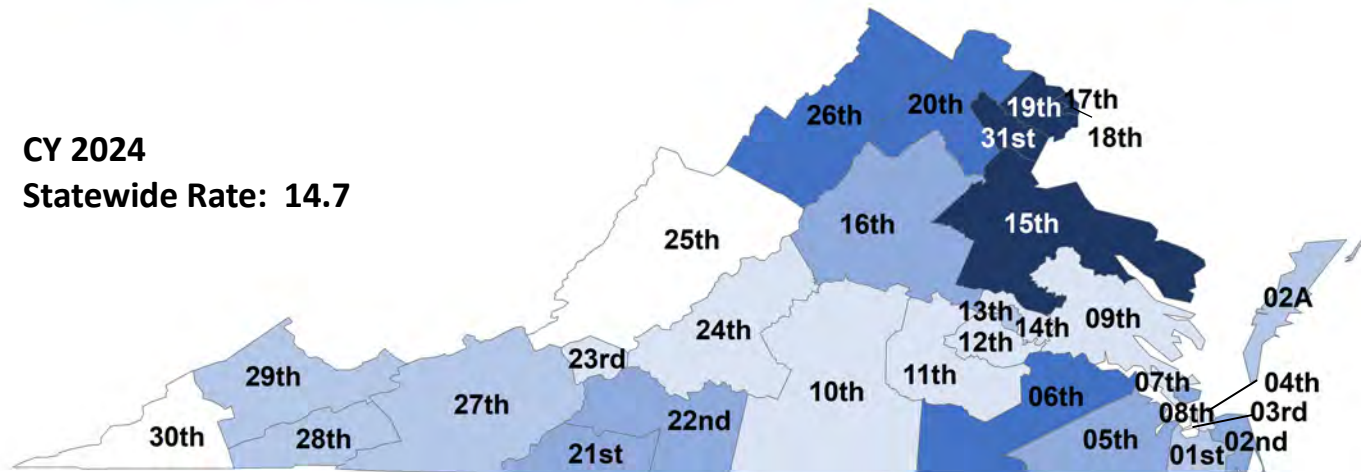
CY 2014
Statewide Rate: 8.3



CY 2019
Statewide Rate: 6.9



CY 2024
Statewide Rate: 14.7



Appendix A

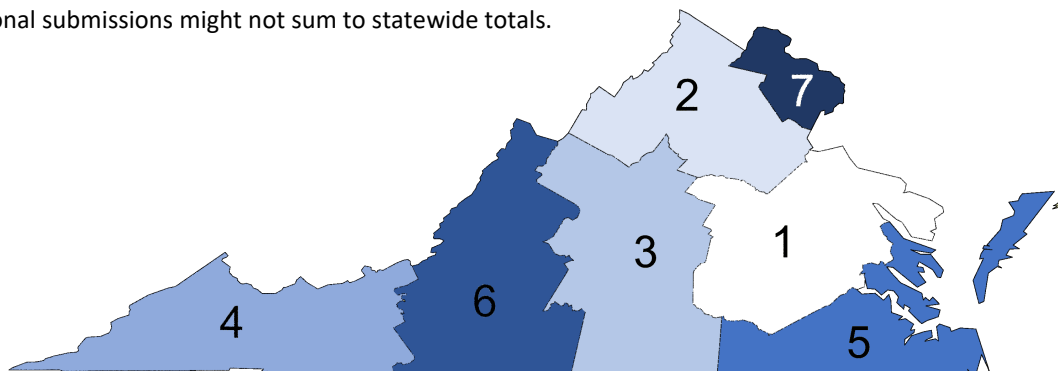
Regional Trends—Number of Submissions

Cocaine										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	1,973	2,082	2,586	2,911	3,035	2,309	2,167	2,166	2,303	2,472
VSP2	610	748	1,006	1,083	942	801	766	808	1,167	1,135
VSP3	816	768	871	763	700	468	387	392	566	665
VSP4	123	195	155	144	134	85	79	81	139	164
VSP5	1,639	1,891	2,415	2,414	2,372	1,827	1,648	1,989	2,310	2,347
VSP6	921	812	947	941	844	529	487	586	636	760
VSP7	945	1,101	1,346	1,449	1,426	944	985	1,226	1,812	1,710

Methamphetamine										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	80	110	171	300	525	743	774	775	873	1,015
VSP2	314	423	660	845	1,171	1,387	1,492	1,427	1,381	1,411
VSP3	292	680	1,051	1,295	1,460	1,410	1,236	1,271	1,229	1,231
VSP4	678	1,172	1,582	2,461	3,107	2,799	2,678	2,324	2,442	2,305
VSP5	102	191	251	398	702	840	946	1,027	1,112	942
VSP6	644	906	1,352	2,164	2,513	2,314	2,118	2,258	2,195	2,228
VSP7	95	99	158	218	247	215	286	306	367	377

Prescription Stimulants										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	177	200	230	184	155	161	113	101	96	103
VSP2	139	164	164	153	133	110	82	84	61	52
VSP3	69	76	79	68	53	33	16	35	25	28
VSP4	71	74	93	81	75	51	39	41	21	22
VSP5	174	193	235	211	202	159	97	132	113	109
VSP6	116	123	140	112	100	57	53	38	48	42
VSP7	193	218	217	216	148	82	77	77	68	53

Regional submissions might not sum to statewide totals.



Appendix A

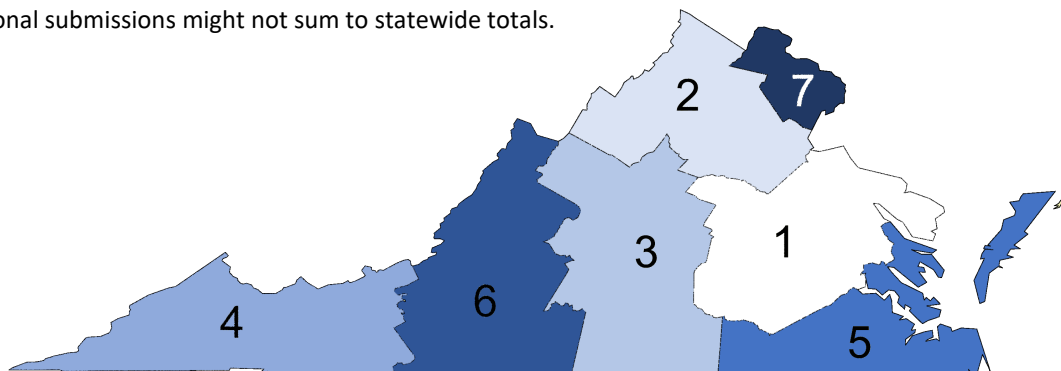
Regional Trends—Number of Submissions

Heroin										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	1,608	1,661	1,657	1,378	1,418	940	668	469	197	314
VSP2	953	1,032	840	619	521	351	223	147	94	98
VSP3	213	238	281	251	245	192	140	86	69	61
VSP4	46	58	63	46	81	132	82	50	33	31
VSP5	1,165	1,247	1,255	1,059	1,041	776	582	345	247	252
VSP6	365	413	532	787	771	557	319	200	211	267
VSP7	736	766	597	485	338	229	135	85	73	109

Illicit Synthetic Opioids										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	117	363	752	666	767	1,268	1,367	1,296	1,182	1,151
VSP2	112	246	442	570	555	883	965	874	1,008	690
VSP3	14	29	113	101	118	226	259	297	373	328
VSP4	4	11	23	24	33	126	209	298	374	383
VSP5	217	532	660	568	723	934	1,034	1,050	1,119	866
VSP6	25	48	193	225	240	594	660	789	803	798
VSP7	50	261	437	453	463	640	945	1,275	2,316	2,023

Prescription Opioids										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	778	792	732	693	752	574	606	412	312	337
VSP2	769	756	591	517	463	454	401	307	249	196
VSP3	316	368	277	248	270	196	166	155	152	125
VSP4	1,579	1,374	1,264	1,052	1,005	813	765	609	550	489
VSP5	507	534	513	390	420	344	322	324	312	266
VSP6	646	646	730	665	498	418	404	372	366	338
VSP7	442	388	386	351	338	196	195	212	200	151

Regional submissions might not sum to statewide totals.



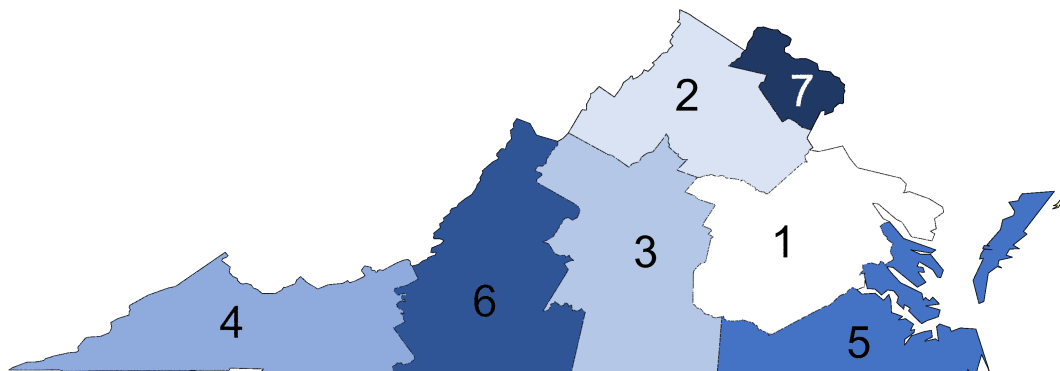
Appendix A

Regional Trends—Number of Submissions

Illicit Benzodiazepines										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	1	2	16	25	64	150	147	58	74	74
VSP2	1	5	10	33	124	244	201	53	53	43
VSP3	0	4	7	10	37	67	47	13	15	22
VSP4	1	0	4	18	36	60	82	30	30	29
VSP5	3	4	16	16	63	119	140	60	54	49
VSP6	0	0	5	6	26	54	89	54	18	52
VSP7	3	18	38	50	167	306	174	72	75	56

Prescription Benzodiazepines										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	362	404	377	344	239	201	178	132	135	130
VSP2	238	266	271	253	163	117	110	88	86	73
VSP3	79	106	116	101	88	37	48	42	45	32
VSP4	442	440	392	342	301	233	194	179	164	155
VSP5	273	364	330	245	179	141	112	112	131	87
VSP6	237	238	289	287	222	129	122	126	106	108
VSP7	340	484	391	387	190	109	75	65	65	64

Regional submissions might not sum to statewide totals.



Appendix A

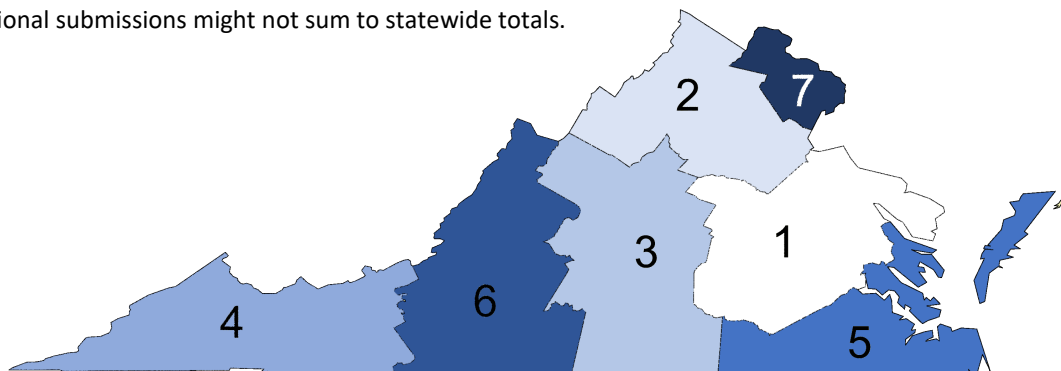
Regional Trends—Number of Submissions

Hallucinogenic Substances										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	93	80	90	80	73	109	78	98	110	142
VSP2	88	89	129	107	117	158	166	122	118	133
VSP3	39	55	44	63	55	65	47	55	54	64
VSP4	17	26	37	24	32	47	41	30	34	78
VSP5	70	75	86	84	95	89	89	130	165	152
VSP6	56	76	122	80	68	45	50	64	77	107
VSP7	223	309	288	289	296	267	301	251	267	256

Cannabimimetic Agents										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	79	62	35	8	11	4	11	2	5	16
VSP2	131	63	104	46	37	56	82	26	33	28
VSP3	42	10	14	14	14	13	28	14	11	7
VSP4	124	92	45	9	15	20	62	67	41	31
VSP5	56	45	36	16	19	15	5	4	19	20
VSP6	86	33	95	106	76	70	87	36	45	57
VSP7	79	58	158	128	94	60	29	4	11	13

Other Designer Drugs										
VSP	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
VSP1	138	129	204	227	116	218	181	72	97	47
VSP2	86	78	108	159	99	222	269	135	278	188
VSP3	28	27	49	39	36	37	35	9	7	5
VSP4	62	20	26	14	28	22	18	14	16	5
VSP5	135	116	133	130	105	128	90	52	55	51
VSP6	37	45	67	46	39	45	31	17	10	20
VSP7	225	215	223	263	166	183	261	274	1,046	978

Regional submissions might not sum to statewide totals.



Appendix B – Ten-Year Trends, Statewide

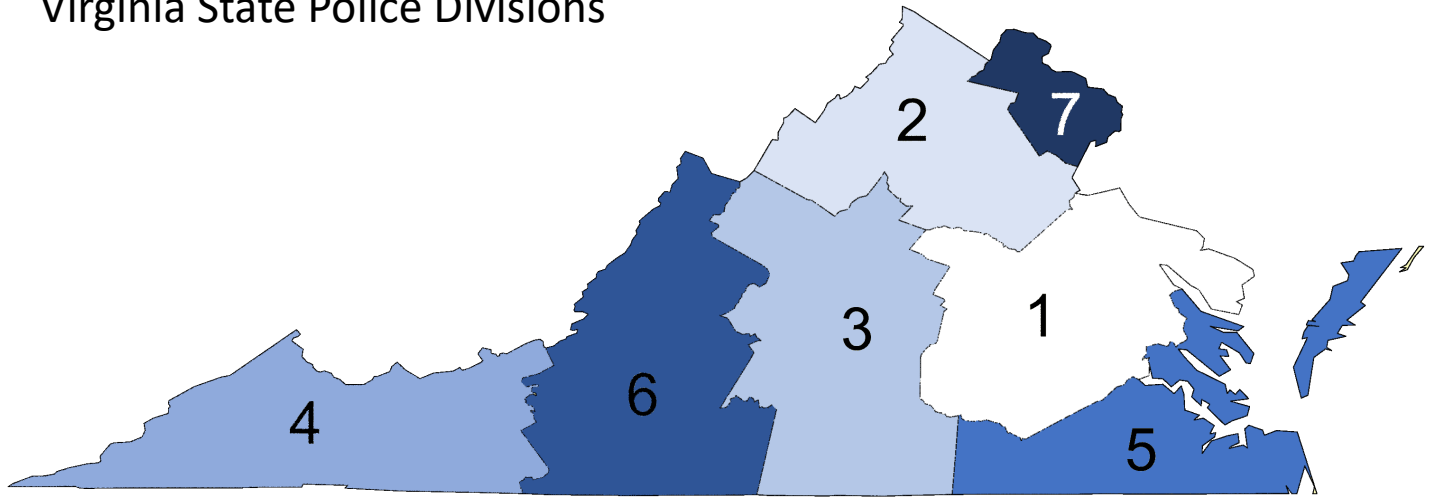
Stimulants	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Cocaine	7,027	7,597	9,326	9,706	9,453	6,964	6,519	7,250	8,935	9,253
Methamphetamine	2,205	3,581	5,225	7,681	9,726	9,708	9,530	9,388	9,599	9,508
Prescription Stimulants										
Amphetamine	694	798	932	828	686	552	404	415	363	343
Lisdexamfetamine	112	135	112	89	75	46	32	43	33	20
Methylphenidate	161	149	137	122	112	66	43	52	42	41
Other	24	18	29	22	20	12	20	14	11	14
Opioids	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Heroin	5,086	5,415	5,225	4,626	4,415	3,177	2,149	1,382	924	1,132
Illicit Synthetic Opioids										
Fentanyl	426	1,177	1,706	2,346	2,814	4,623	5,295	5,727	7,088	6,125
Para-Fluorofentanyl	0	1	0	0	0	24	463	730	421	506
Acetyl Fentanyl	42	28	12	141	276	97	65	42	49	31
FIBF	0	22	378	187	29	7	2	0	0	0
Furanyl Fentanyl	0	228	538	24	1	0	1	0	0	0
Other	1	12	122	85	47	26	4	12	16	17
Nitazenes	0	0	0	0	0	1	46	16	17	23
Other Illicit Synthetic Opioids	80	103	187	69	82	60	31	24	11	11
Prescription Opioids										
Buprenorphine	1,307	1,221	1,394	1,438	1,592	1,385	1,336	1,160	1,108	1,018
Codeine	80	97	88	66	66	48	38	28	35	21
Hydrocodone	1,098	982	847	598	495	325	244	226	221	225
Hydromorphone	282	296	197	164	93	52	70	44	56	25
Methadone	220	226	191	153	137	110	96	82	67	68
Morphine	324	301	261	175	154	80	72	54	41	43
Other	190	225	183	123	82	35	30	23	19	11
Oxycodone	1,861	1,792	1,552	1,277	1,163	763	626	627	648	520
Tramadol	225	256	249	274	305	413	587	325	134	106

Appendix B – Ten-Year Trends, Statewide

Benzodiazepines	CY2015	CY2016	CY2017	CY2018	CY2019	CY2020	CY2021	CY2022	CY2023	CY2024
Illicit Benzodiazepines										
Bromazolam	0	0	0	0	0	0	40	120	270	295
Clonazolam	0	5	8	55	50	221	400	121	39	14
Etizolam	7	27	61	79	353	544	372	52	10	8
Flualprazolam	0	0	0	7	111	265	81	38	7	5
Other	2	1	31	17	25	29	47	58	16	22
Prescription Benzodiazepines										
Alprazolam (Xanax)	1,338	1,726	1,541	1,423	930	625	531	466	464	410
Clonazepam (Klonopin)	493	471	478	422	362	283	248	254	225	201
Diazepam (Valium)	221	200	190	168	146	99	82	60	72	65
Lorazepam (Ativan)	104	101	115	95	87	37	47	39	41	26
Other	21	18	21	12	12	11	7	6	3	4
Hallucinogenic Substances										
Benzylpiperazine (BZP)	17	13	2	0	1	0	0	0	1	0
Ketamine & analogs	58	54	63	57	66	74	61	58	71	146
LSD & analogs	142	263	358	260	239	269	226	129	106	87
Other	117	98	53	105	95	62	73	33	36	43
PCP & analogs	147	186	181	185	192	216	192	158	134	107
Psilocyn-Psilocybin (mushrooms)	124	135	179	173	199	188	288	424	516	587
Tryptamines	45	39	39	45	59	38	36	15	20	44
Cannabimimetic Agents										
Alkoylindoles	197	33	9	9	6	8	0	1	1	0
Benzoylindoles	2	0	0	0	0	0	1	1	0	0
Indazole carboxamides	390	256	470	319	132	143	296	148	164	170
Indole carboxamides	1	0	0	3	165	106	4	1	1	0
Indole carboxylates	43	45	1	1	0	0	0	0	0	0
Naphthoylindoles	8	2	5	0	0	0	0	0	1	0
Other or unclear	48	61	13	6	9	6	5	3	0	2
Phenylacetylindoles	2	1	0	0	0	0	0	0	0	0
Other Designer Drugs										
Substituted Amphetamines										
MDMA (Ecstasy)	133	173	201	169	204	102	76	84	90	158
Other	22	45	82	36	56	23	15	31	18	9
Synthetic Cathinones										
Alpha-PVP	77	17	3	1	0	0	1	2	4	1
Dibutylone	2	224	167	44	2	0	0	0	0	0
Ethylone	465	57	13	7	3	0	0	0	0	0
Eutylone	0	0	0	3	239	704	766	60	49	60
MDPV	4	3	1	0	2	0	0	0	0	0
Methylone	14	15	3	2	1	0	0	0	0	0
N,N-dimethylpentylone	0	0	0	0	0	0	16	376	1,354	962
N-ethylpentylone	0	83	353	625	66	8	2	1	1	0
Other	29	59	36	20	55	51	37	49	27	161

Appendix C – Virginia Regions

Virginia State Police Divisions



<u>Division 1</u>	<u>Division 2</u>	<u>Division 3</u>	<u>Division 4</u>	<u>Division 5</u>	<u>Division 6</u>	<u>Division 7</u>
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						

Virginia Court Districts

CY 2024 Drug Cases Submitted to the Virginia Department of Forensic Science