Drug Cases Submitted to the Virginia Department of Forensic Science Calendar Year 2016

A Joint Report by the Virginia Departments of Forensic Science and Criminal Justice Services
Drug Cases Submitted to the Virginia Department of Forensic Science

- DFS receives tens of thousands of drug samples every year
- Data presented here are for select drug categories of interest
  - Cocaine
  - Heroin
  - Methamphetamine
  - Marijuana
  - Cannabimimetic Agents*
  - "Club Drugs"**
  - Prescription Opioids***
  - Prescription Stimulants
  - Benzodiazepines
  - Illicit Fentanyl***

*Cannabimimetic agents were previously labeled "synthetic cannabinoids."

**Includes various designer and other drugs including Ecstasy, Ketamine, Phenethylamines, Tryptamines, Piperazines, bath salts, and others. Use of these drugs is not limited to clubs or parties, and in fact some of these designer drugs might not be identified as "club drugs" per se, but in lieu of a better category label, they are included here. Any drug listed specifically above is not included in this category.

***Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Comparing DFS Cases to Arrest Data
Select drug types, calendar years 2001-2016

Heroin

Arrests

Cases Submitted to DFS

Amphetamine/ Methamphetamine

Arrests

Cases Submitted to DFS

Cocaine

Arrests

Cases Submitted to DFS

Marijuana

Arrests

Cases Submitted to DFS
Comparing DFS Cases to Arrest Data
Select drug types, calendar years 2001-2016

- For cocaine, heroin, and amphetamine/methamphetamine, DFS cases and VSP arrest data show a similar pattern.
  - DFS cases (the left axis and the green line in each chart here) are consistently more numerous than arrests (right axis, red line). Each year there are 40-50% as many arrests as there are DFS cases.

- DFS cases and VSP arrest data for marijuana do not share a similar pattern. There is a clear break in the series of data for both DFS cases (left axis, green line) and arrests (right axis, red line).
  - Changes in the Code of Virginia relating to law enforcement testimony with regard to marijuana field test kits (beginning July 2006) coincided with an increase in marijuana arrests and a decrease in marijuana cases submitted to DFS.
  - Marijuana case data before and after this change cannot be compared. Because of this, marijuana cases are given less focus in this report.
Drug Cases Submitted to DFS
Selected Drugs in CY2016, By VSP Division

- Benzodiazepines
- "Club Drugs"
- Cocaine
- Heroin
- Marijuana
- Methamphetamine
- Prescription Opioids*
- Prescription Stimulants
- Cannabimimetic Agents
- Illicit Fentanyl*

Note: Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Regional Variations in Drug Submissions
Distribution of Select Drug Cases Submitted to DFS, CY2016

The table above presents the proportion of each of the selected drug types submitted by the individual VSP Divisions. The proportion of the state’s population is also presented, for comparison. For example: 20% of benzodiazepine submissions in 2016 were submitted by Division 4, which had 5% of the state population.

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Benzodiazepine Submissions
Cases submitted to DFS, calendar years 2001-2016

- VSP1
- VSP2
- VSP3
- VSP4
- VSP5
- VSP6
- VSP7

Graph showing the number of benzodiazepine submissions from 2001 to 2016, with a color-coded legend for each category.
Benzodiazepine Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016

率为百万人中每 10 万人的提交率，2006 至 2016 年
Benzodiazepine Summary
Statewide and by VSP Division

- Number of benzodiazepine case submissions:
  - Benzodiazepine cases submitted to DFS increased 16% statewide between 2015 and 2016.
  - Between 2011 and 2016, benzodiazepine case submissions increased 49%.
  - VSP Divisions 4 and 7 each reported 20% of the statewide total number of benzodiazepine cases in 2016.
  - Relatively few cases were submitted by Division 3 (5% of the statewide total).

- Rate of submissions, per 100,000 population
  - The 2016 rate of benzodiazepine cases submitted by Division 4 was more than three times higher than the rate for any other Division.
  - Division 7 has seen the most growth in the rate of benzodiazepine submissions, increasing 195% between 2011 and 2016.
The Court Districts with the highest rate of benzodiazepine submissions in 2016 were the 29th, 30th, and 28th.

Between 2015 and 2016, the rate of submissions from the 28th District increased 86%. In that same period, the rate of submissions from the 29th and 30th Districts decreased (20% and 16%, respectively).
“Club Drug” Submissions
Cases submitted to DFS, calendar years 2001-2016
“Club Drug” Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016
“Club Drug” Summary
Statewide and by VSP Division

- Number of “club drug” case submissions:
  - After dropping in 2013 and 2014, “Club drug” cases submitted to DFS increased 9% statewide between 2015 and 2016. However, submissions in 2016 were less than 1% higher than 2011.
  - VSP Division 7 reported 40% of the statewide total number “club drug” cases in 2016.
  - Relatively few cases were submitted in 2016 by Divisions 4 or 3 (3% and 6% of the statewide total, respectively).

- Rate of submissions, per 100,000 population
  - Divisions 2 and 7 have usually had the highest rates of “club drug” case submissions.
  - The spike in Division 4 in 2014 was driven by a large number of arrests for alpha-PVP, also known as “flakka,” a stimulant with hallucinogenic properties.
“Club Drug” Data by Court District
Rate of submissions per 100,000 population, CY2016

- The Court Districts with the highest rate of “club drug” submissions in 2016 were the 17th, 27th, and 19th.
- Between 2015 and 2016, the rate of submissions from the 30th District decreased 88%. In the same period, the rate of submissions from the 17th, 27th, and 19th Districts increased (98%, 71%, and 54%, respectively).
Cocaine Submissions
Cases submitted to DFS, calendar years 2001-2016
Cocaine Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016
Cocaine Summary
Statewide and by VSP Division

- **Number of cocaine case submissions:**
  - After declining 58% between 2006 and 2014, statewide cocaine cases submitted to DFS increased 2% in 2015 and 10% between 2015 and 2016.
  - VSP Divisions 1 and 5 submitted the majority of the statewide total number of cocaine cases in 2016 (28% and 25%, respectively).
  - Relatively few cases were submitted by Division 4 (3% of the statewide total).

- **Rate of submissions, per 100,000 population**
  - VSP Division 4 saw the greatest increase in the rate of cocaine submissions in 2016, up 62% from 2015.
  - VSP Division 1 had highest rate of cocaine submissions in 2016.
Cocaine Data by Court District
Rate of submissions per 100,000 population, CY2016

- The Court Districts with the highest rate of cocaine submissions in 2016 were the 13th, 2A, and the 7th.
- Between 2015 and 2016, the rate of submissions from the 5th District decreased 44%. In that same period, the rate of submissions from the 29th and 7th Districts, as well as District 2A, increased (87%, 43%, and 66%, respectively).
Heroin Submissions
Cases submitted to DFS, calendar years 2001-2016
Heroin Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016
Heroin Summary
Statewide and by VSP Division

- **Number of heroin case submissions:**
  - Heroin cases submitted to DFS increased 8% statewide between 2015 and 2016.
  - Between 2011 and 2016, heroin submissions increased 154% statewide.
  - VSP Divisions 1 and 5 submitted the majority of the statewide total number of heroin cases in 2016 (31% and 23%, respectively).
  - Relatively few cases were submitted by Divisions 4 and 3 in 2016 (1% and 4%, respectively).

- **Rate of submissions, per 100,000 population**
  - The rate of heroin cases submitted from Divisions 1 and 2 were each almost twice as high as any other Division.
The Court Districts with the highest rate of heroin submissions were the 13th, 3rd, and 14th.

Between 2015 and 2016, the rate of submissions from the 13th District decreased 14%. In that same period, the rate of submissions from the 12th, 14th, and 3rd Districts increased (30%, 10%, and 7%, respectively).
Illicit Fentanyl* Submissions
Cases submitted to DFS, calendar years 2001-2016

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as “illicit” for purposes of this report.
Illicit Fentanyl* Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Illicit Fentanyl* Summary
Statewide and by VSP Division

- Number of illicit fentanyl case submissions:
  - Illicit fentanyl cases submitted to DFS increased 207% statewide between 2015 and 2016.
  - Illicit fentanyl cases began increasing rapidly in 2013. Between 2013 and 2016, cases increased 1,656%.
  - VSP Divisions 5 and 1 submitted the majority of the statewide total number of illicit fentanyl cases in 2016 (37% and 23%, respectively).
  - Relatively few cases were submitted by Divisions 4 and 3 in 2016 (1% and 2%, respectively).

- Rate of submissions, per 100,000 population
  - The rate of illicit fentanyl cases submitted from Divisions 5, 2, and 1 were each more than twice as high as any other Division.

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
The Court Districts with the highest rate of illicit fentanyl submissions were the 3rd, 1st, and 13th.

Between 2015 and 2016, the rate of submissions from the 7th, 19th, and 8th Districts increased (1,369%, 559%, and 539% respectively). The rate of submissions from the 3rd, 1st, and 13th Districts also increased substantially (198%, 180%, and 314%, respectively).

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Methamphetamine Submissions
Cases submitted to DFS, calendar years 2001-2016
Methamphetamine Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016
Methamphetamine Summary
Statewide and by VSP Division

- Number of methamphetamine case submissions:
  - Methamphetamine cases submitted to DFS increased 63% statewide between 2015 and 2016.
  - After remaining flat for several years, methamphetamine cases began to rise in 2012. Between 2011 and 2016, methamphetamine submissions increased 329% statewide.
  - VSP Divisions 4, 6, and 3 submitted three quarters of the statewide total number of methamphetamine cases in 2016 (32%, 23%, and 19% respectively).
  - Relatively few cases were submitted by Divisions 1, 7, and 5 in 2016 (3%, 3%, and 6%, respectively).

- Rate of submissions, per 100,000 population
  - The rate of methamphetamine cases submitted from Division 4 was over twice the rate from Divisions 3 and 6, which were each over twice as high as any other Division.
The Court Districts with the highest rate of methamphetamine submissions were the 28th, 25th, and 27th.

Between 2015 and 2016, the rate of submissions from the 24th, 28th, 25th, and 27th Districts increased (190%, 160%, 64%, and 28%, respectively).
Prescription Opioid* Submissions
Cases submitted to DFS, calendar years 2001-2016

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as “illicit” for purposes of this report.
Prescription Opioid* Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016

VSP1 VSP2 VSP3 VSP4 VSP5 VSP6 VSP7 State

<table>
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<th>Year</th>
<th>VSP1</th>
<th>VSP2</th>
<th>VSP3</th>
<th>VSP4</th>
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</tbody>
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*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Prescription Opioid* Summary
Statewide and by VSP Division

- Number of prescription opioid case submissions:
  - The number of prescription opioid cases submitted to DFS decreased 3% statewide between 2015 and 2016.
  - After peaking in 2012, the number of prescription opioid submissions dropped each year. Between 2012 and 2016, submissions dropped 18% statewide.
  - VSP Division 4 has consistently submitted the most prescription opioid cases. In 2016, 28% of the statewide prescription opioid cases were from Division 4.

- Rate of submissions, per 100,000 population
  - The rate of prescription opioid submissions from Division 4 was more than three times higher than any other Division.

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Prescription Opioid* Data by Court District
Rate of submissions per 100,000 population, CY2016

- The Court Districts with the highest rates of submissions in 2016 were the 29th, 30th, and 28th.
- Between 2015 and 2016, the rate of submissions from the 30th and 29th Districts decreased (46% and 6%, respectively). In the same period, the rate of submissions from the 28th District increased 71%.

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.
Prescription Stimulant Submissions
Cases submitted to DFS, calendar years 2001-2016

VSP1  VSP2  VSP3  VSP4  VSP5  VSP6  VSP7

Graph showing the number of prescription stimulant submissions to DFS from 2001 to 2016, with the number of cases increasing over time.
Prescription Stimulant Submission Rate
Rate of submissions per 100,000 Population, calendar years 2006-2016
Prescription Stimulant Summary
Statewide and by VSP Division

- Number of prescription stimulant case submissions:
  - The number of prescription stimulant cases submitted to DFS increased 11% statewide between 2015 and 2016. Between 2011 and 2016, submissions increased 51%.
  - VSP Divisions 7, 1, and 5 submitted almost three-fifths of the statewide total in 2016 (21%, 19%, and 19%, respectively).

- Rate of submissions, per 100,000 population
  - Until 2015, Division 4 consistently had the highest rate of prescription stimulant submissions. In 2015 and 2016, Division 2 had the highest rate.
  - The rate of submissions for Division 2 increased 29% between 2011 and 2016. The rate for Division 4 dropped 6% during that period.
The Court Districts with the highest rates of submissions in 2016 were the 27th, 26th, and 25th.

Between 2015 and 2016, the rate of submissions from the 25th, 26th, and 27th Districts increased (29%, 20%, and 2%, respectively).
Cannabimimetic Agent* Submissions
Cases submitted to DFS, calendar years 2011-2016

*Previously labeled "synthetic cannabinoids." Includes substances that were not listed as cannabimimetic agents by Code at the time they were identified, but appear to have included a cannabimimetic agent-type substance.
Cannabimimetic Agent* Submission Rate
Rate of submissions per 100,000 Population, calendar years 2012-2016

*Previously labeled "synthetic cannabinoids." Includes substances that were not listed as cannabimimetic agents by Code at the time they were identified, but appear to have included a cannabimimetic agent-type substance.
Cannabimimetic Agent* Summary
Statewide and by VSP Division

- Number of cannabimimetic agent case submissions:
  - The number of cannabimimetic agent cases submitted to DFS decreased 40% statewide between 2015 and 2016.
  - After peaking in 2012, the number of cannabimimetic agent submissions dropped each year. Between 2012 and 2016, submissions dropped 67%.
  - Almost one-third of submissions in 2016 were from VSP Division 4.

- Rate of submissions, per 100,000 population
  - The rate of submissions from Division 4 was more than three times the rate from any other Division in 2016.

*Previously labeled "synthetic cannabinoids." Includes substances that were not listed as cannabimimetic agents by Code at the time they were identified, but appear to have included a cannabimimetic agent-type substance.
Cannabimimetic Agent* Data by Court District
Rate of submissions per 100,000 population, CY2016

- The Court District with the highest rate of submission in 2016 was the 30th, which was more than four times higher than any other District.
- Between 2015 and 2016, the rate of submissions from the 30th District increased 6%. In the same period, the rate of submissions from the 12th District decreased 81%.

*Previously labeled “synthetic cannabinoids.” Includes substances that were not listed as cannabimimetic agents by Code at the time they were identified, but appear to have included a cannabimimetic agent-type substance.
In 2001, cocaine and marijuana made up 77% of DFS cases. In 2016, they were only 33% of the total. During this same period of time, heroin, prescription opioids, and illicit fentanyl grew from 7% to 28% of the total.

*Fentanyl submissions identified as being in the form of a transdermal patch are counted with other prescription opioids. All other forms of fentanyl and fentanyl derivatives are counted as "illicit" for purposes of this report.

**Includes all substances other than those listed, including those not presented in this report.
Data Sources

Drug submission data for this report were provided by DFS, using information collected for the National Forensic Laboratory Information System. When multiple drug samples of the same type of drug were submitted as part of the same case, they were only counted a single time, as one case. When multiple samples of different drug types were submitted as part of the same case, they were counted as a single case for each included drug type.

Arrest data were taken from the annual *Crime in Virginia* reports prepared by the Virginia State Police (VSP), [http://www.vsp.state.va.us/Crime_in_Virginia.shtm](http://www.vsp.state.va.us/Crime_in_Virginia.shtm).

Population data used to calculate rates were provided by the Weldon Cooper Center for Public Service, [http://www.coopercenter.org/demographics](http://www.coopercenter.org/demographics).

Data analysis was provided by the DCJS Criminal Justice Research Center.