



SPECIAL MAPS RELEASE

December 2020



Tracking **Drug Trends** Across the Nation

## Tracking Fentanyl and Fentanyl-Related Compounds Reported in NFLIS-Drug, by State: 2018–2019



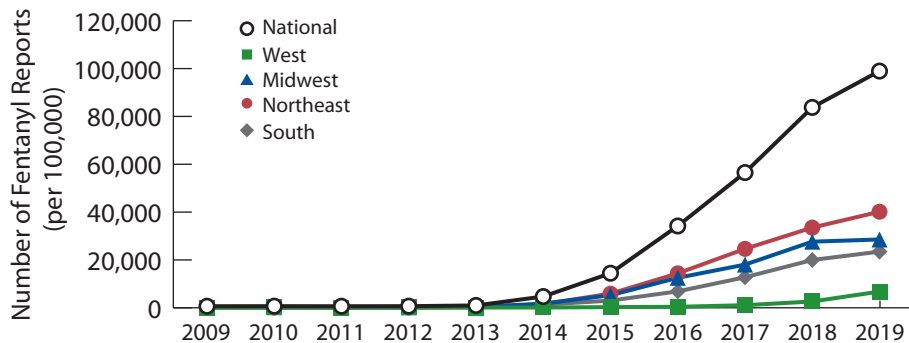
U.S. DEPARTMENT OF JUSTICE  
DRUG ENFORCEMENT ADMINISTRATION  
DIVERSION CONTROL DIVISION

# INTRODUCTION

The National Forensic Laboratory Information System (NFLIS) is an important Drug Enforcement Administration (DEA) resource for monitoring drug abuse and trafficking. Current NFLIS data reflect the results from drug chemistry analyses conducted by Federal, State, and local forensic laboratories across the country (NFLIS-Drug), including 282 laboratories in 2018 and 279 laboratories in 2019, which represent an annual average of 1.5 million drug items processed each year.

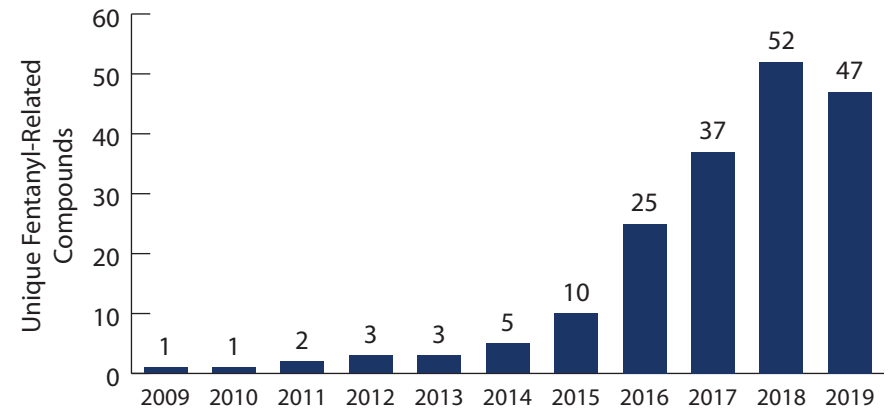
In 2019, the top 25 most frequently identified drugs in NFLIS-Drug included fentanyl (5th), acetyl fentanyl (10th), ANPP (15th), and carfentanil (24th).<sup>1</sup> Figure 1 shows national and regional trend estimates of fentanyl in NFLIS-Drug from 2009 through 2019. In addition to fentanyl, NFLIS-Drug tracks emerging substances such as fentanyl-related compounds. Figure 2 shows the number of unique fentanyl-related compounds in NFLIS-Drug from 2009 to 2019.

**Figure 1.** National and regional trend estimates of fentanyl in NFLIS-Drug: January 2009–December 2019



<sup>1</sup> U.S. Drug Enforcement Administration, Diversion Control Division. (2020). *National Forensic Laboratory Information System: NFLIS-Drug 2019 Annual Report*. Springfield, VA: U.S. Drug Enforcement Administration.

**Figure 2.** Number of unique fentanyl-related compounds in NFLIS-Drug: 2009–2019



The geographic data presented in this publication are actual reported data or counts rather than national or State estimates. This publication is an update to a previous publication containing NFLIS-Drug map data for 2016 and 2017 for similar compounds.<sup>2</sup> It is important to note that these data represent only those items that were analyzed by Federal, State, and local laboratories as of July 31, 2020. This data set is a snapshot in time, so it may not completely reflect all data from each laboratory, depending on whether reporting issues occurred during this period. Of note, NFLIS-Drug recorded a 5% decrease in total drug reports in 2019 compared with 2018 when using estimates<sup>1</sup> and a 9% decrease during this period for actual reported data as presented in this publication.

<sup>2</sup> U.S. Drug Enforcement Administration, Diversion Control Division. (2019). *Special NFLIS-Drug Maps Release: Tracking Fentanyl and Fentanyl-Related Substances Reported in NFLIS-Drug by State, 2016–2017*. Springfield, VA: U.S. Drug Enforcement Administration.

PDFs of these maps can be found in the NFLIS Public Resource Library (<https://www.nflis.deadiversion.usdoj.gov/Resources/NFLISPublicResourceLibrary.aspx>). DEA also encourages interested readers to learn more about NFLIS through the Questions and Answers guide (<https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/2k17NFLISQA.pdf>).

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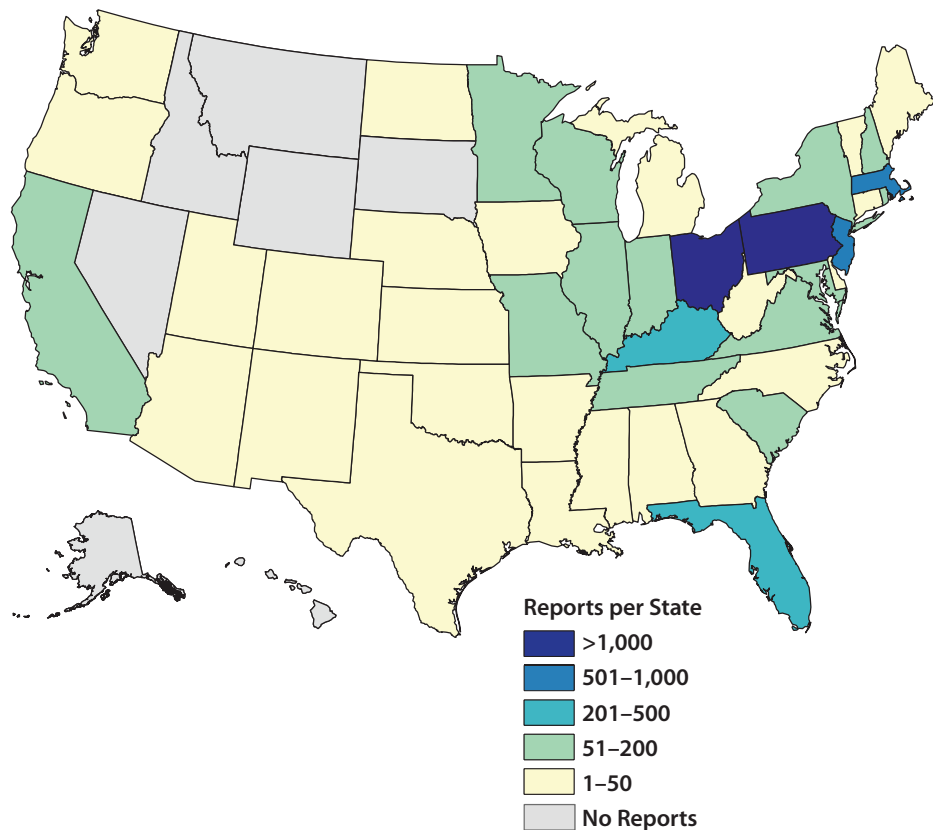
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**Map 1.** Number of **acetyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2018



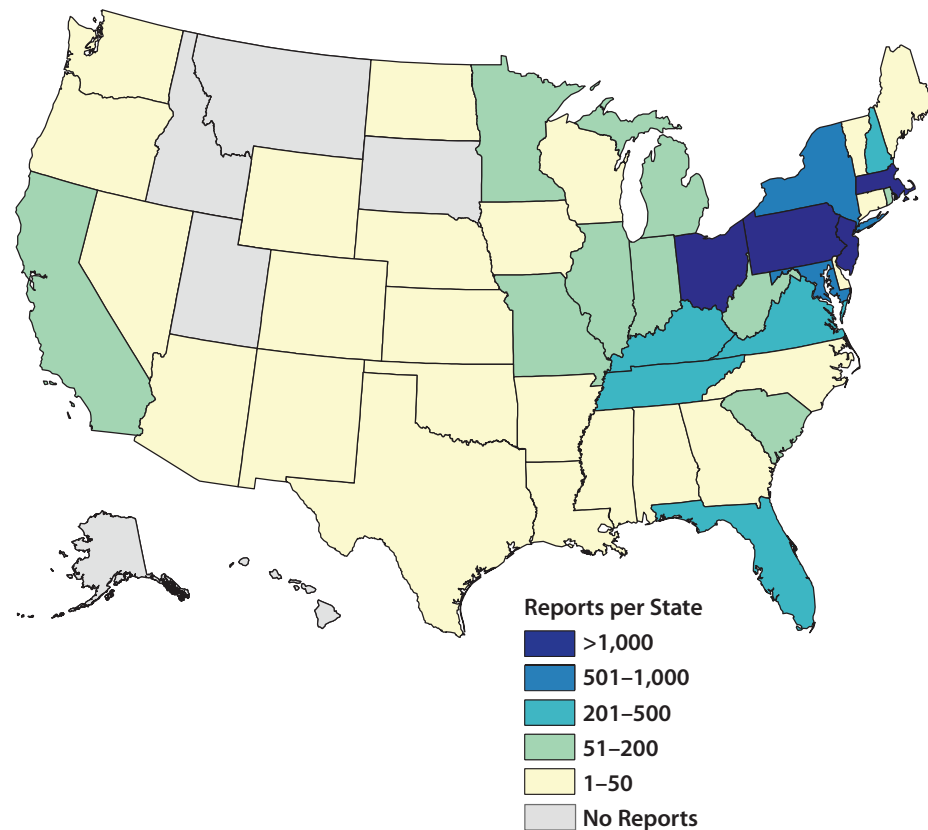
- In 2018, 24 States and the District of Columbia had between 1 and 50 acetyl fentanyl reports.
- In 2018, Massachusetts and New Jersey had between 501 and 1,000 acetyl fentanyl reports, and Ohio and Pennsylvania had over 1,000 acetyl fentanyl reports.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of acetyl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 2.** Number of **acetyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2019



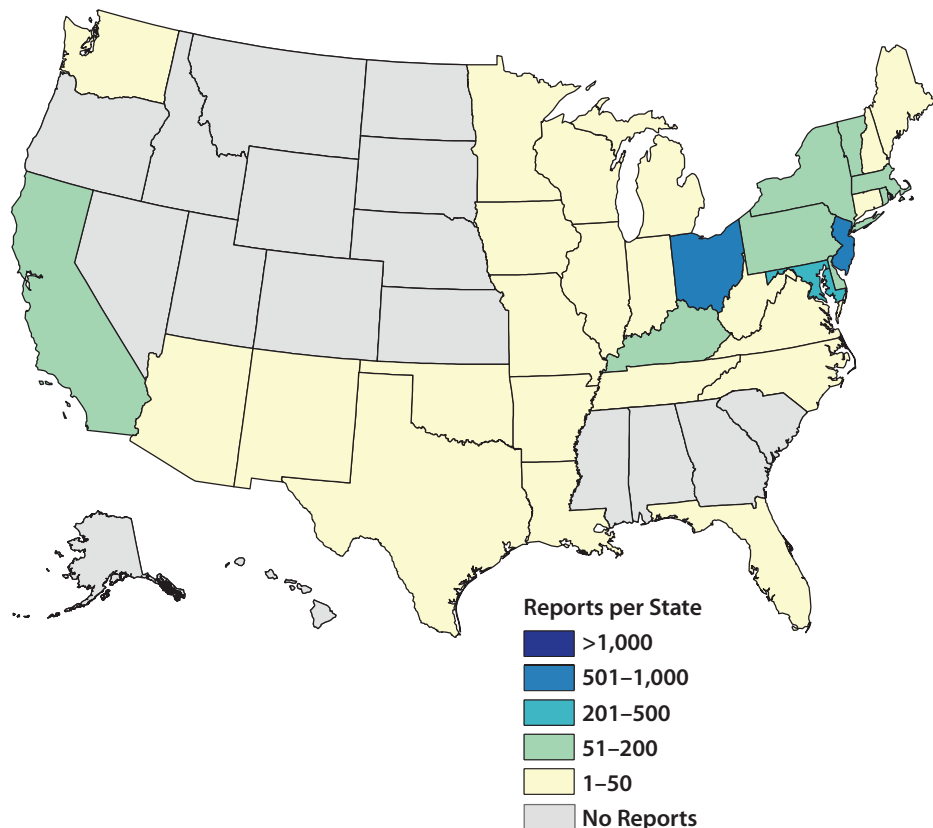
- In 2019, the numbers of acetyl fentanyl reports in Maryland and New York were between 501 and 1,000.
- In 2019, the numbers of acetyl fentanyl reports in Massachusetts, New Jersey, Ohio, and Pennsylvania were greater than 1,000.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of acetyl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 3.** Number of ANPP reports in NFLIS-Drug in the United States, by State: 2018



- In 2018, California, Delaware, Kentucky, Massachusetts, Maryland, New York, Pennsylvania, Rhode Island, and Vermont had between 51 and 500 ANPP reports.
- New Jersey and Ohio had the highest numbers of ANPP reports in 2018: 616 and 669 reports, respectively.

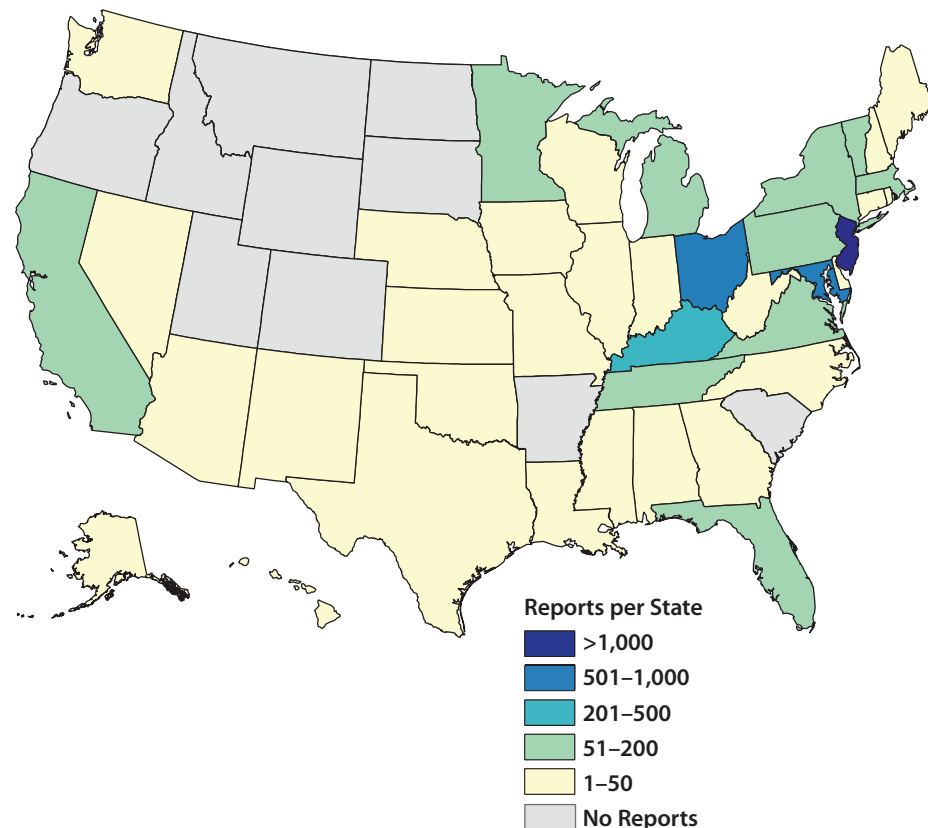
ANPP=4-anilino-N-phenethyl-4-piperidine.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of ANPP reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 4.** Number of ANPP reports in NFLIS-Drug in the United States, by State: 2019



- In 2019, Kentucky had between 201 and 500 ANPP reports, and Maryland and Ohio had between 501 and 1,000 ANPP reports.
- In 2019, New Jersey had the highest number of ANPP reports (2,713).

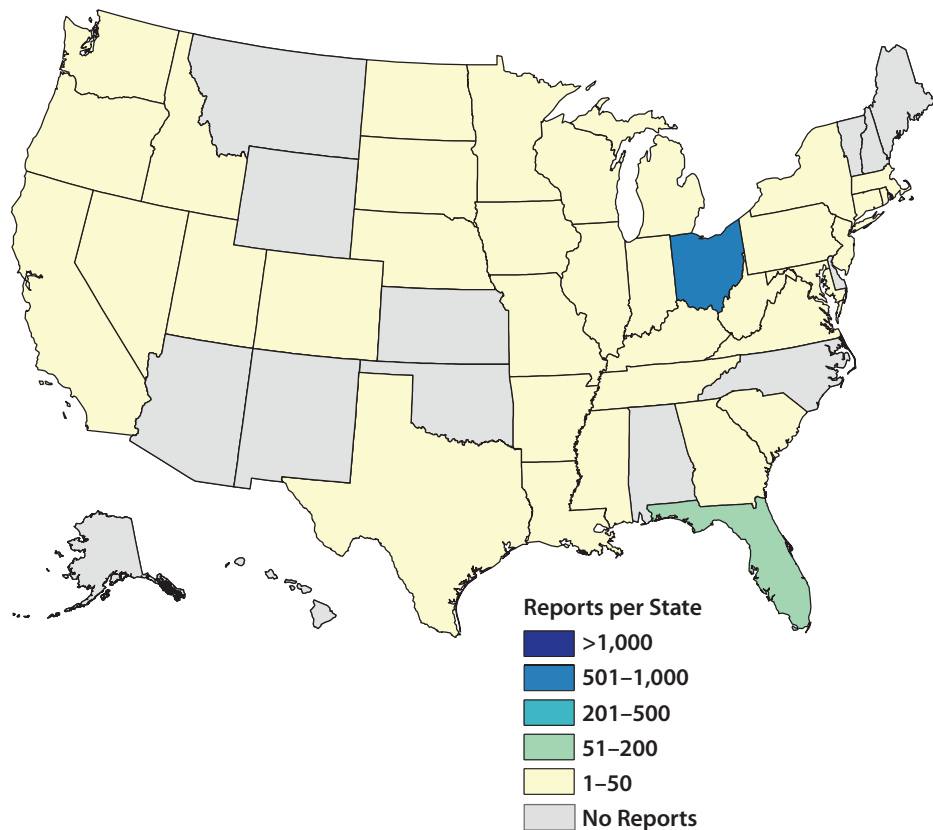
ANPP=4-anilino-N-phenethyl-4-piperidine.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of ANPP reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 5.** Number of **carfentanil** reports in NFLIS-Drug in the United States, by State: 2018



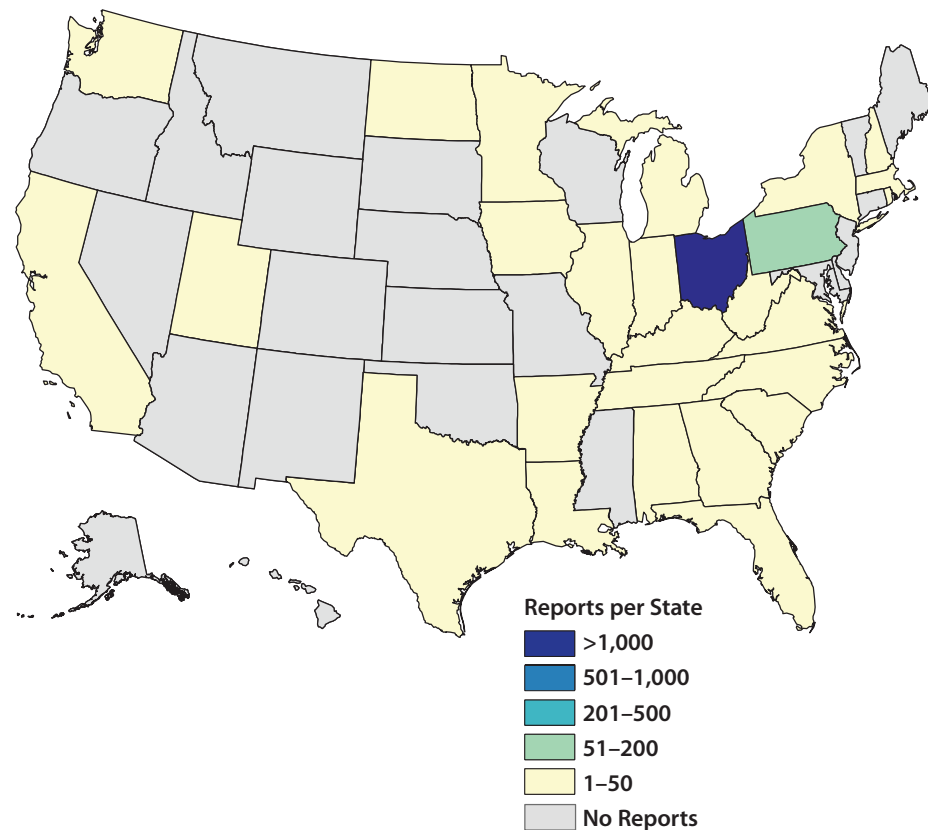
- More than half of the States had at least 1 carfentanil report in 2018.
- In 2018, Florida and Ohio had the highest numbers of carfentanil reports (more than 100 each).

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of carfentanil reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 6.** Number of **carfentanil** reports in NFLIS-Drug in the United States, by State: 2019



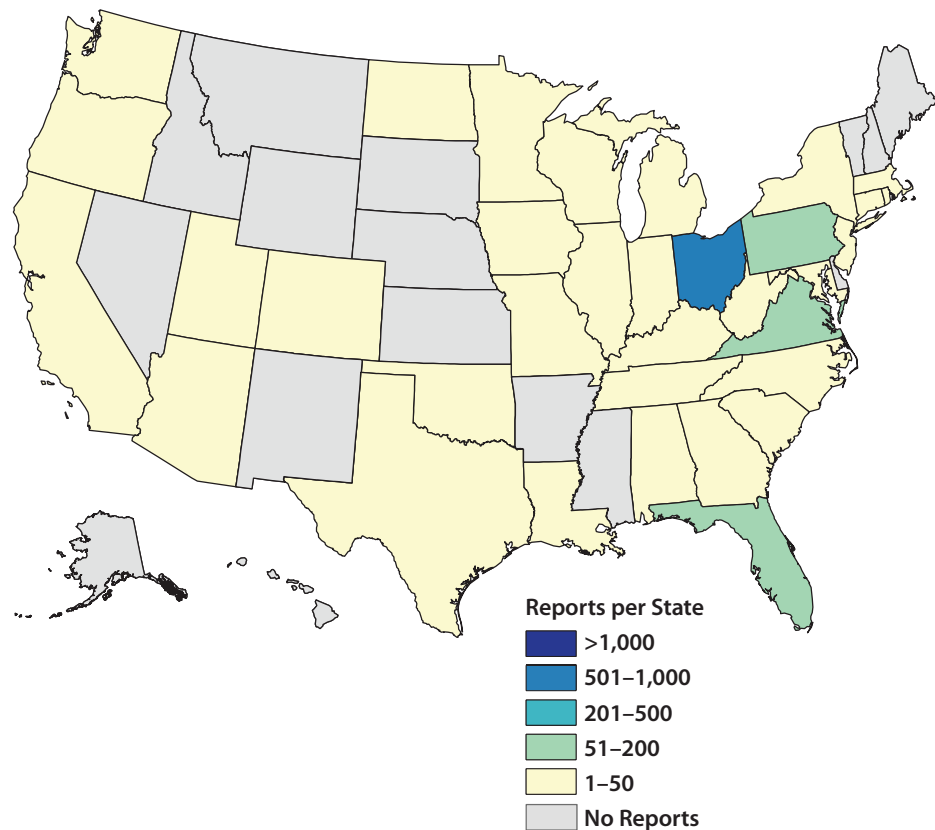
- More than half of the States had at least 1 carfentanil report in 2019.
- Pennsylvania had between 51 and 200 carfentanil reports, and Ohio had more than 1,000 carfentanil reports in 2019.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of carfentanil reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 7.** Number of **cyclopropyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2018



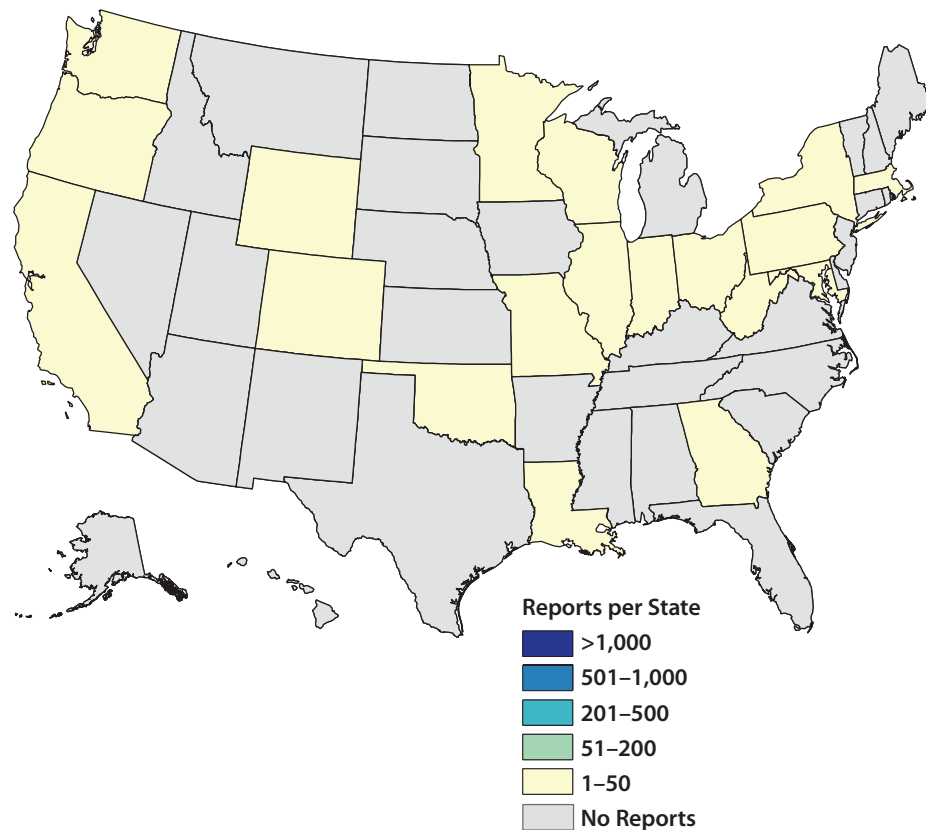
- A total of 34 States and the District of Columbia had at least 1 cyclopropyl fentanyl report in 2018.
- Florida, Pennsylvania, and Virginia had between 51 and 200 cyclopropyl fentanyl reports in 2018.
- Ohio had 511 cyclopropyl fentanyl reports in 2018.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of cyclopropyl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 8.** Number of **cyclopropyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2019



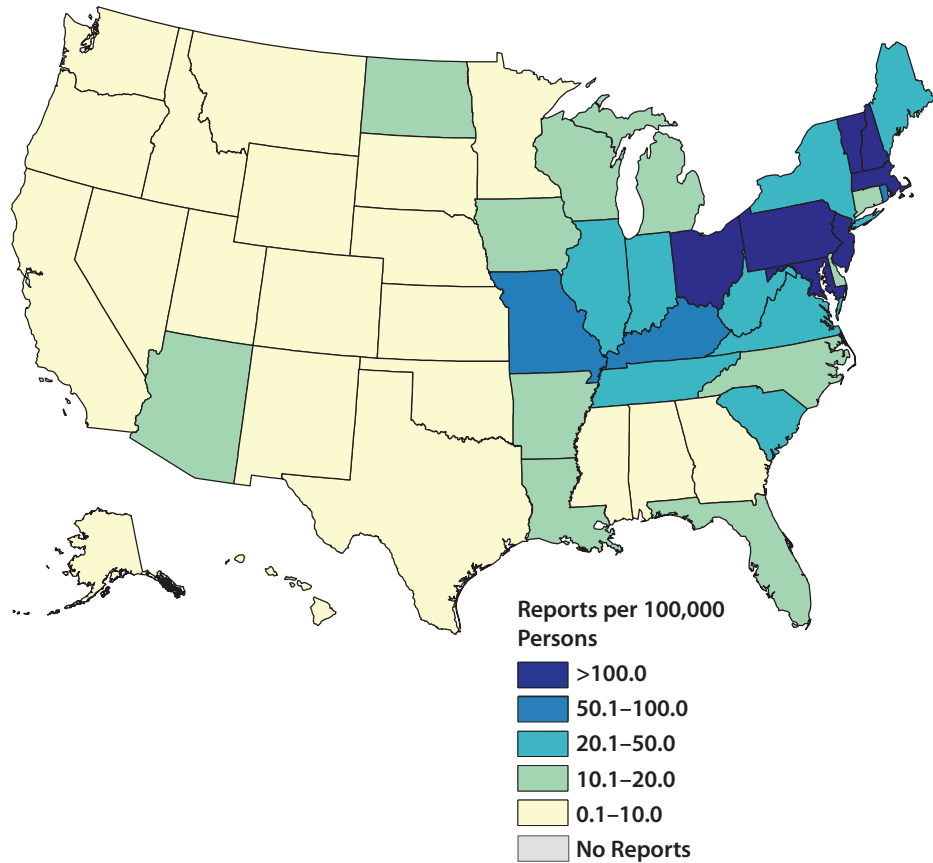
- In 2019, 31 States and the District of Columbia had no cyclopropyl fentanyl reports.
- Nineteen States had between 1 and 50 cyclopropyl fentanyl reports in 2019.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of cyclopropyl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 9.** Number of **fentanyl** reports in NFLIS-Drug per 100,000 persons, by State: 2018<sup>1</sup>



- In 2018, 11 States had between 20.1 and 100.0 fentanyl reports per 100,000 persons.
- Maryland, Massachusetts, New Hampshire, New Jersey, Ohio, Pennsylvania, and Vermont had rates greater than 100.0 per 100,000 persons in 2018.

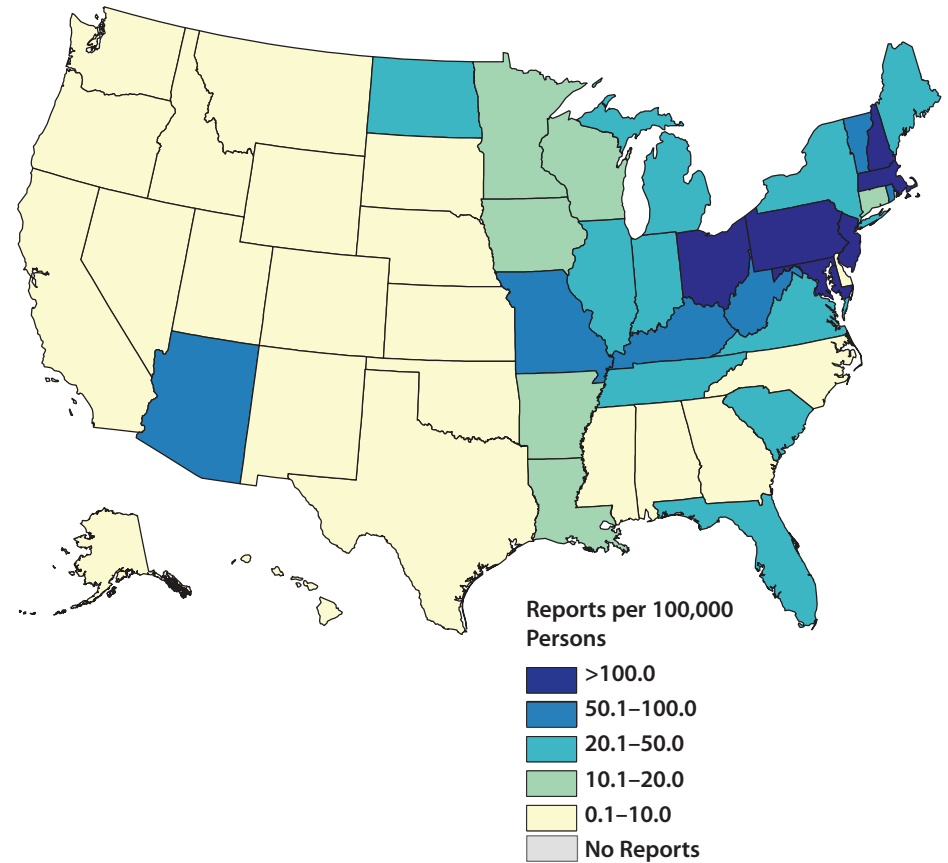
<sup>1</sup> Refers to 2018 census estimates of the U.S. population aged 15 years or older.

Data were retrieved on July 31, 2020.

Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of fentanyl reports in NFLIS-Drug per 100,000 persons, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 10.** Number of **fentanyl** reports in NFLIS-Drug per 100,000 persons, by State: 2019<sup>1</sup>



- In 2019, 16 States had between 20.1 and 100.0 fentanyl reports per 100,000 persons.
- Maryland, Massachusetts, New Hampshire, New Jersey, Ohio, and Pennsylvania had rates greater than 100.0 per 100,000 persons in 2019.

<sup>1</sup> Statistical modeling based on prior-year census estimates was used to project estimates for the 2019 U.S. population aged 15 years or older.

Data were retrieved on July 31, 2020.

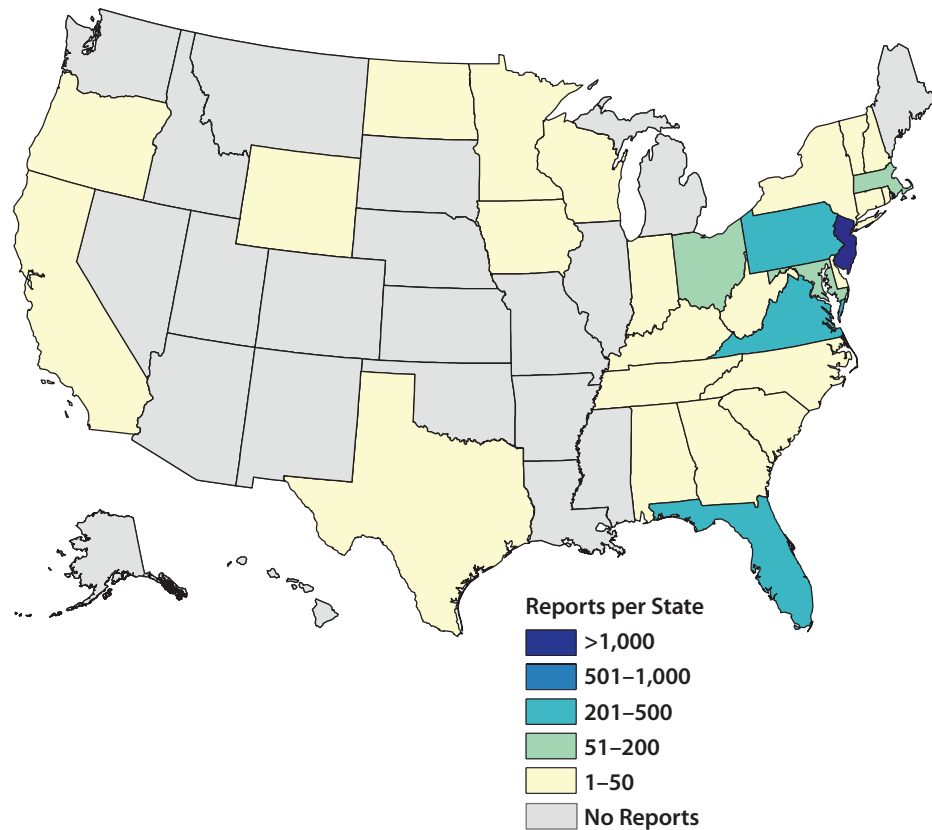
Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of fentanyl reports in NFLIS-Drug per 100,000 persons, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.





**Map 13.** Number of **fluoroisobutyryl fentanyl**<sup>1</sup> reports in NFLIS-Drug in the United States, by State: 2018



- In 2018, the numbers of fluoroisobutyryl fentanyl reports in Maryland, Massachusetts, and Ohio were between 51 and 200.
- Florida, Pennsylvania, and Virginia had between 201 and 500 fluoroisobutyryl fentanyl reports in 2018.
- In 2018, New Jersey had more than 1,000 fluoroisobutyryl fentanyl reports.

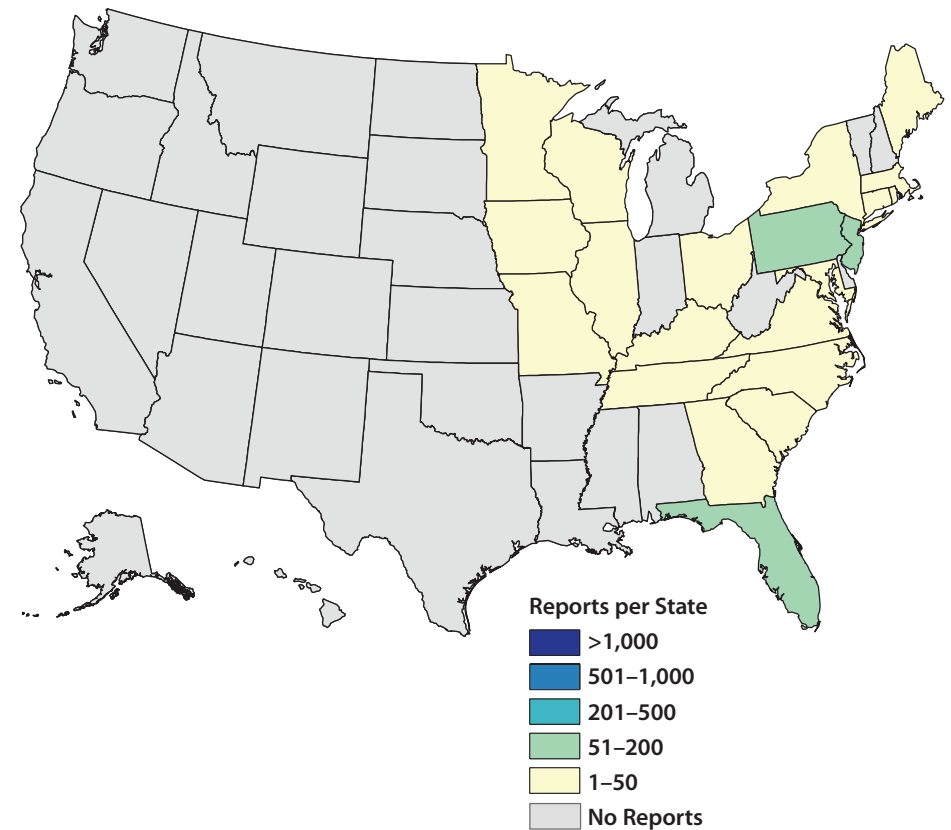
<sup>1</sup> Includes all positional and unspecified isomers as reported by participating laboratories.

Data were retrieved on July 31, 2020.

Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of fluoroisobutyryl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 14.** Number of **fluoroisobutyryl fentanyl**<sup>1</sup> reports in NFLIS-Drug in the United States, by State: 2019



- In 2019, 21 States and the District of Columbia had at least 1 fluoroisobutyryl fentanyl report.
- Florida, New Jersey, and Pennsylvania had between 51 and 200 fluoroisobutyryl fentanyl reports in 2019.

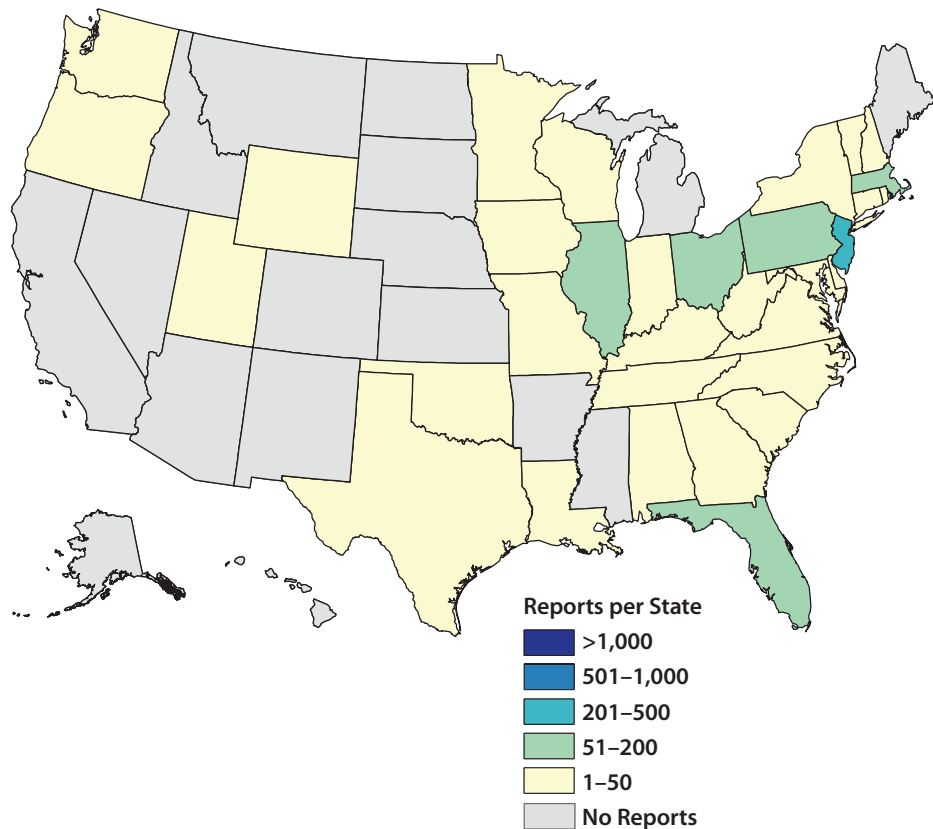
<sup>1</sup> Includes all positional and unspecified isomers as reported by participating laboratories.

Data were retrieved on July 31, 2020.

Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of fluoroisobutyryl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 15.** Number of **furanyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2018



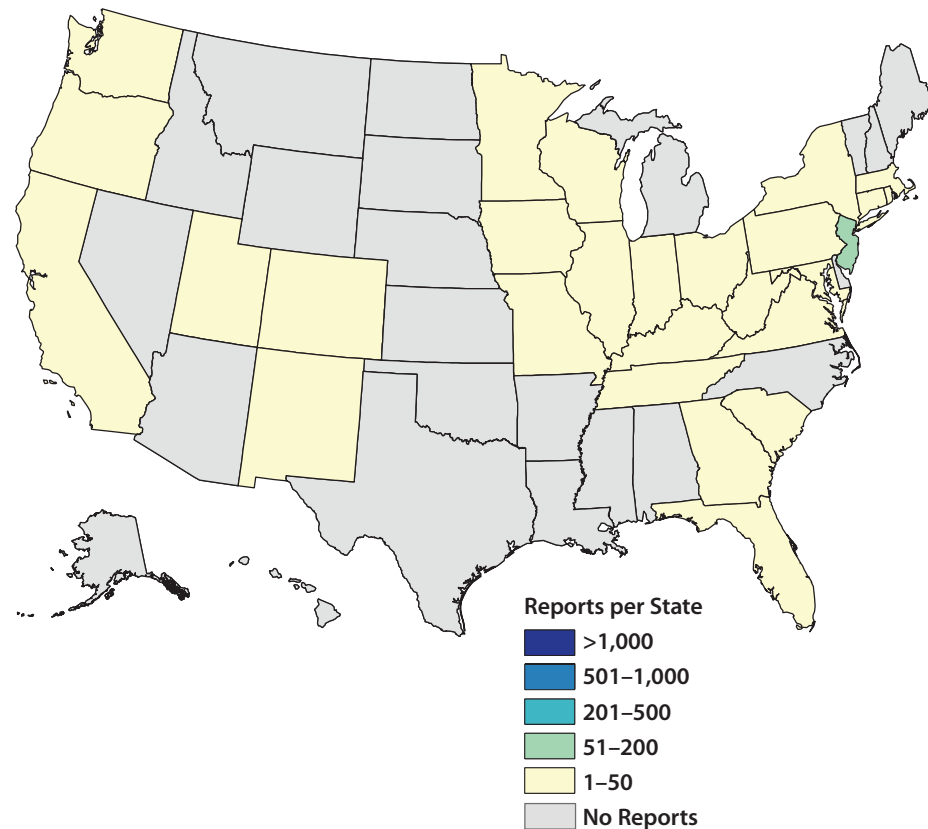
- In 2018, 27 States and the District of Columbia had between 1 and 50 furanyl fentanyl reports.
- Five States (Florida, Illinois, Massachusetts, Ohio, and Pennsylvania) each had between 51 and 200 furanyl fentanyl reports in 2018.
- In 2018, New Jersey had between 201 and 500 furanyl fentanyl reports.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of furanyl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 16.** Number of **furanyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2019



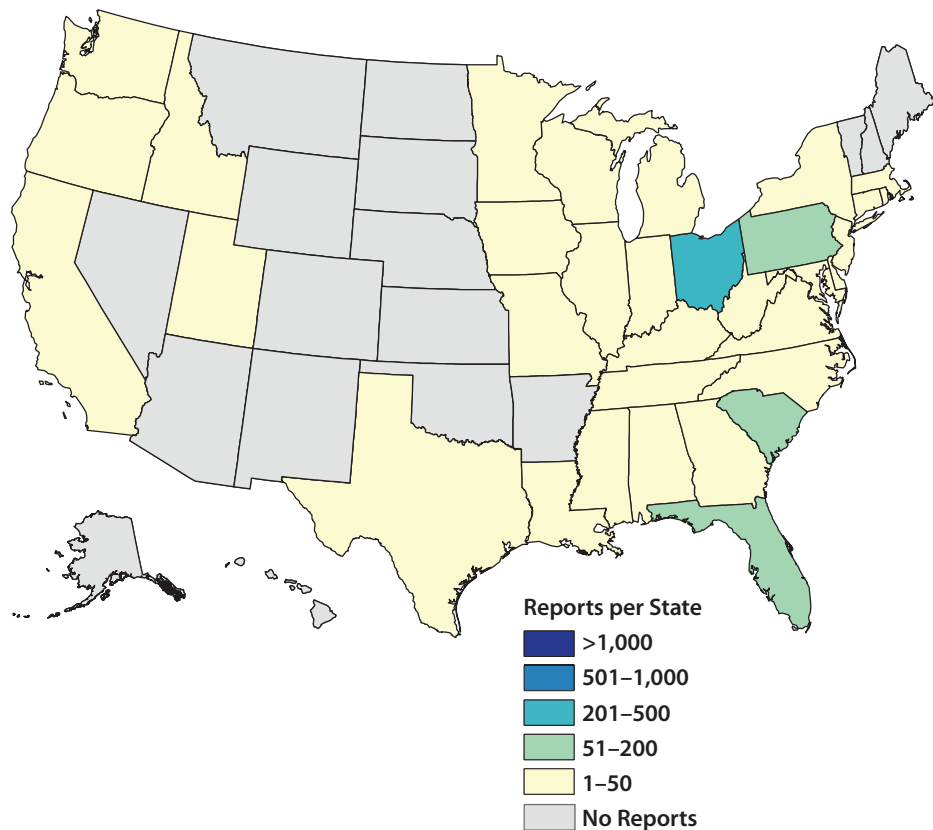
- In 2019, 26 States and the District of Columbia had between 1 and 50 furanyl fentanyl reports.
- New Jersey had between 51 and 200 furanyl fentanyl reports in 2019.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of furanyl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 17.** Number of **methoxyacetyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2018



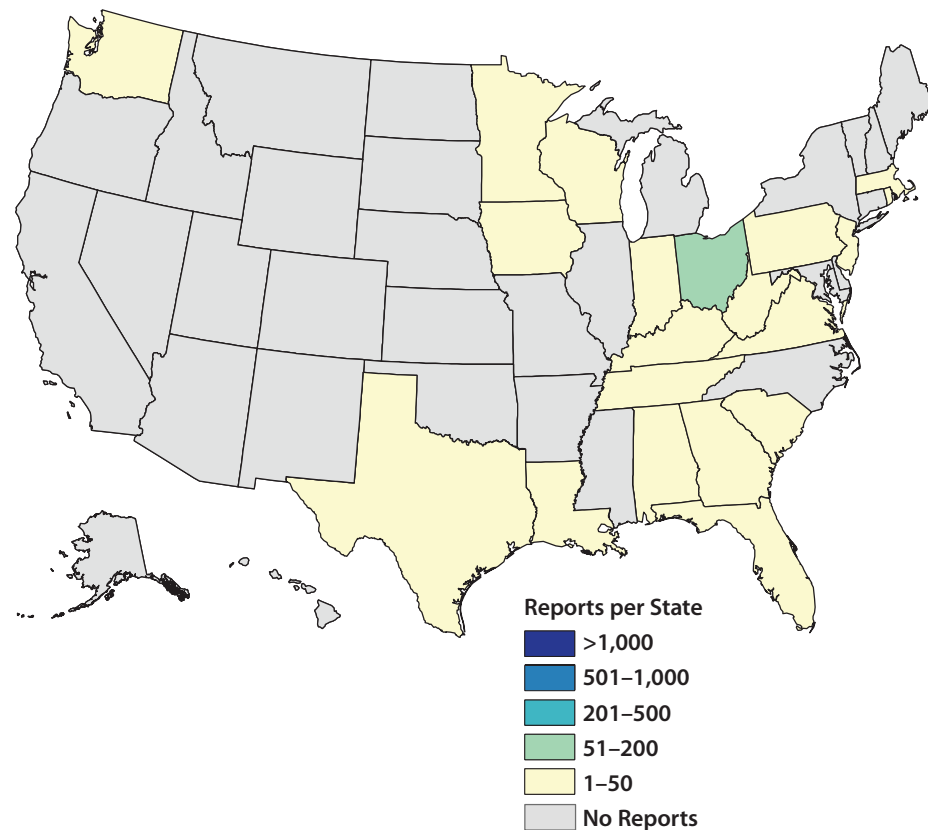
- In 2018, 33 States had at least 1 methoxyacetyl fentanyl report.
- Florida, Pennsylvania, and South Carolina had between 51 and 200 methoxyacetyl fentanyl reports in 2018.
- Ohio had between 201 and 500 methoxyacetyl fentanyl reports in 2018.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of methoxyacetyl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 18.** Number of **methoxyacetyl fentanyl** reports in NFLIS-Drug in the United States, by State: 2019



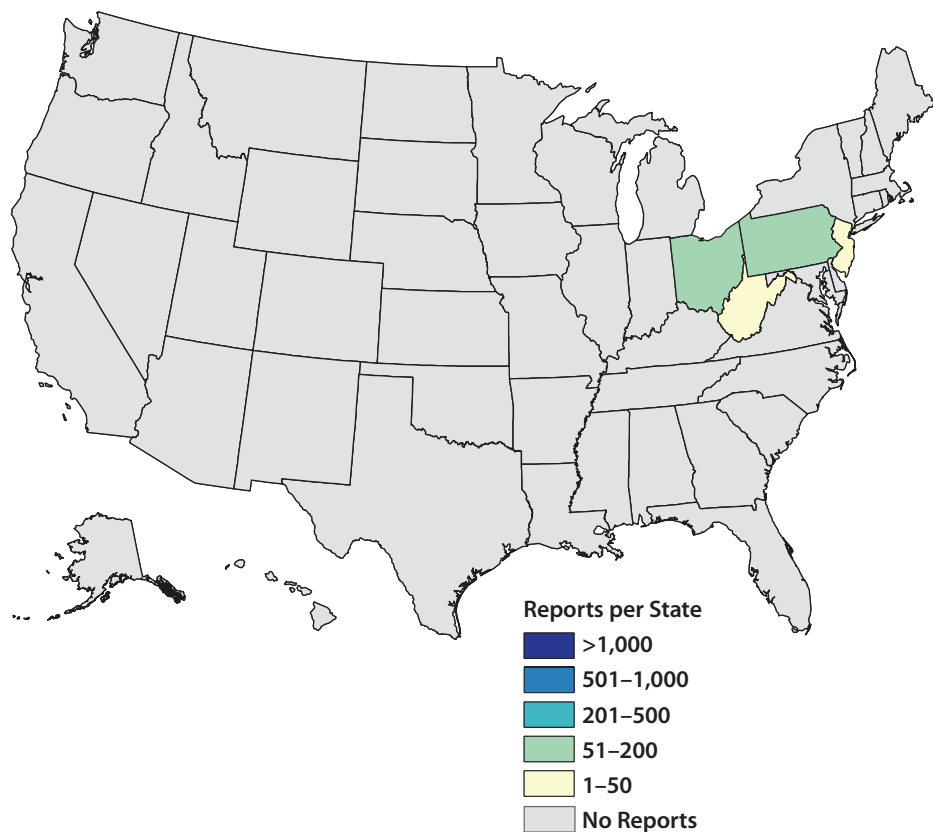
- In 2019, 20 States and the District of Columbia had at least 1 methoxyacetyl fentanyl report.
- Ohio had between 51 and 200 methoxyacetyl fentanyl reports in 2019.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of methoxyacetyl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 19.** Number of **methylfentanyl**<sup>1</sup> reports in NFLIS-Drug in the United States, by State: 2018



- In 2018, the majority of the States and the District of Columbia had no methylfentanyl reports.
- New Jersey and West Virginia had between 1 and 50 methylfentanyl reports in 2018.
- Ohio and Pennsylvania had between 51 and 200 methylfentanyl reports in 2018.

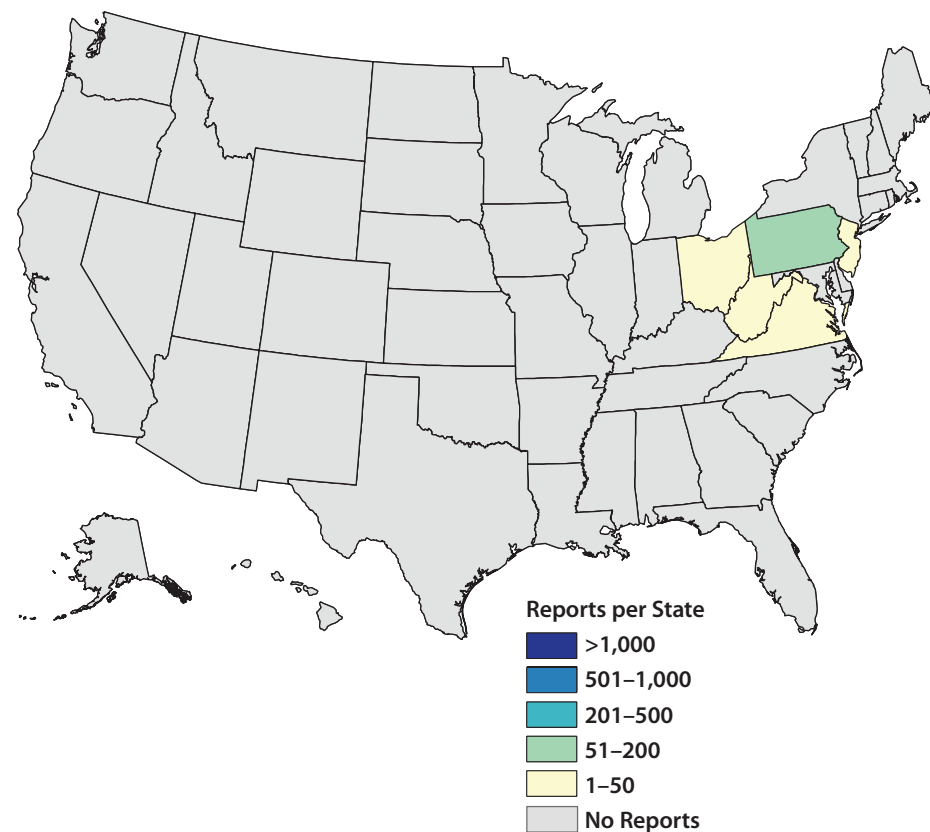
<sup>1</sup> Includes all positional and unspecified isomers as reported by participating laboratories.

Data were retrieved on July 31, 2020.

Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of methylfentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 20.** Number of **methylfentanyl**<sup>1</sup> reports in NFLIS-Drug in the United States, by State: 2019



- In 2019, the majority of the States and the District of Columbia had no methylfentanyl reports.
- New Jersey, Ohio, Virginia, and West Virginia had between 1 and 50 methylfentanyl reports in 2019.
- Pennsylvania had between 51 and 200 methylfentanyl reports in 2019.

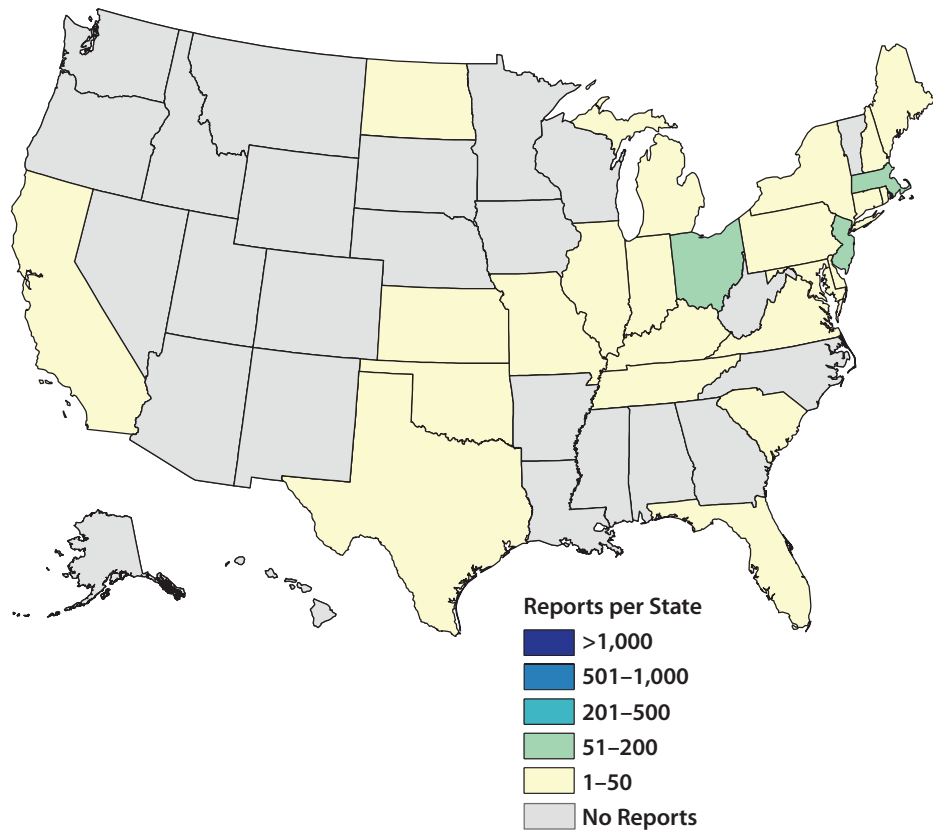
<sup>1</sup> Includes all positional and unspecified isomers as reported by participating laboratories.

Data were retrieved on July 31, 2020.

Suggested Citation

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of methylfentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 21.** Number of **valeryl fentanyl** reports in NFLIS-Drug in the United States, by State: 2018



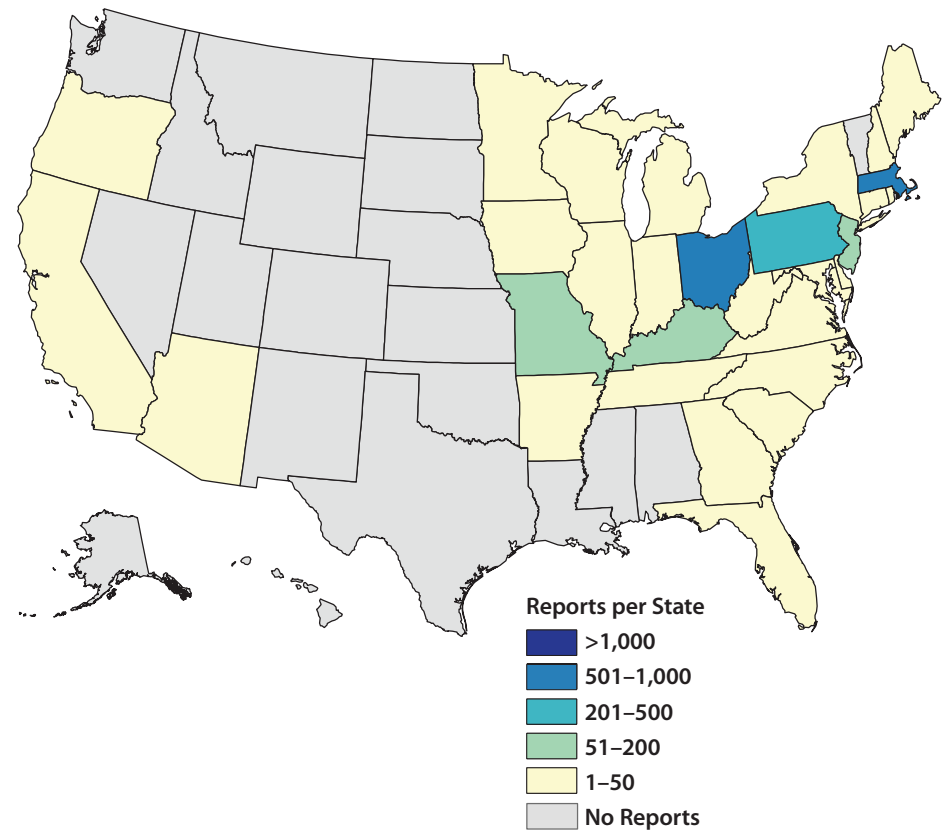
- In 2018, 25 States had at least 1 valeryl fentanyl report.
- Massachusetts, New Jersey, and Ohio had between 51 and 200 valeryl fentanyl reports in 2018.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of valeryl fentanyl reports in NFLIS-Drug in the United States, by State: 2018. Springfield, VA: U.S. Drug Enforcement Administration.

**Map 22.** Number of **valeryl fentanyl** reports in NFLIS-Drug in the United States, by State: 2019



- In 2019, 30 States had at least 1 valeryl fentanyl report.
- Kentucky, Missouri, and New Jersey had between 51 and 200 valeryl fentanyl reports in 2019.
- Pennsylvania had between 201 and 500 valeryl fentanyl reports in 2019.
- Massachusetts and Ohio had between 501 and 1,000 valeryl fentanyl reports in 2019.

Data were retrieved on July 31, 2020.

**Suggested Citation**

U.S. Drug Enforcement Administration, Diversion Control Division. (2020). Number of valeryl fentanyl reports in NFLIS-Drug in the United States, by State: 2019. Springfield, VA: U.S. Drug Enforcement Administration.

## Appendix A: Fentanyl-Related Substances

2018 Substances	2019 Substances
4'-Methyl acetyl fentanyl	3,4'-Dimethoxy fentanyl
beta-Methylfentanyl	3-Furanyl fentanyl
Crotonyl fentanyl	alpha'-Methyl butyryl fentanyl
Fentanyl carbamate	beta-Methylfentanyl
Fluoro furanyl fentanyl	Crotonyl fentanyl
Methyl cyclopropyl fentanyl	Fentanyl carbamate
<i>ortho</i> -Fluorobutyryl fentanyl	Fluoro furanyl fentanyl
<i>ortho</i> -Methyl acetyl fentanyl	Isovaleryl fentanyl
<i>para</i> -Fluoro furanyl fentanyl	<i>ortho</i> -Fluoro furanyl fentanyl
Phenyl fentanyl	<i>para</i> -Fluoro furanyl fentanyl
	<i>para</i> -Methoxy furanyl fentanyl
	Phenyl fentanyl