



Wastewater Analytics: A Powerful Window into Shifting Drug Use Trends

ONDCP Office of Data and Research

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This newsletter, the first-ever data report from the Office of National Drug Control Policy (ONDCP) on Wastewater-Based Drug Testing, builds on the goals outlined in the first chapter of the *2026 National Drug Control Strategy*: “Defining Current and Emerging Drug Threats.” Under President Trump’s leadership, drug overdose deaths continue to drop each month and American communities are safer and healthier. The publication of this new data is a tool for parents, teachers, medical professionals, and law enforcement officials across the nation to have the most up-to-date information on illicit drug use in their communities. By empowering communities across the nation, more American lives will be saved.

The Story Behind the Data

Wastewater-based drug monitoring provides near real-time data to support timely responses to the evolving drug crisis. ONDCP’s Wastewater-Based Drug Epidemiology analyses span more than 100 counties and cover about 18% of the U.S. population. Although these analyses are not nationally representative, they are the largest effort to date, making them the most extensive wastewater drug-monitoring initiative in the nation. The project measures more than 20 drugs quantitatively and detects the presence of over 500 substances, offering robust, data-driven insights into emerging drug trends. This inaugural newsletter highlights key findings from these data. Throughout this document, the text includes parent drug names, while the graphs and tables display the substance that was measured, whether a metabolite or the parent drug itself. This approach ensures consistency in interpretation while accurately reflecting the analytical methods used. Additional information about the methodology for collecting, testing, and analyzing the wastewater samples can be found in the accompanying Supplement.

July 2026 Newsletter Insights at a Glance

This inaugural ONDCP newsletter advances the National Drug Control Strategy by delivering timely drug use data insights, strengthening early-warning capabilities, and highlighting emerging trends that could inform rapid, coordinated responses. This newsletter examines trends in the use of three major drugs, fentanyl, cocaine, and methamphetamine; and highlights seven additional substances whose rising prevalence has become increasingly concerning.

National wastewater levels of fentanyl, cocaine, and methamphetamine are falling, yet several states are charting a very different path. Emerging substances add another layer of complexity. Inside this issue, we break down where these concerning trends are and which emerging substances deserve greater attention.

Here is what stands out from the latest analyses:

- Wastewater data across sampled sites show national and regional declines in fentanyl, cocaine, and methamphetamine between January and April 2026.
- At the state level, fentanyl’s highest concentrations were in Washington State, cocaine’s highest were in Texas, and methamphetamine’s highest were in Western states, with Colorado and Nevada topping the list (April 2026).
- In April 2026, Texas accounted for three of the top five counties with elevated cocaine concentrations, indicating localized drivers.
- Medetomidine, para-fluorofentanyl, carfentanil, and acetyl fentanyl appeared in every U.S. census region in 2026, signaling potential emerging and re-emerging threats.

Drug Use Is Changing: Fentanyl, Cocaine and Methamphetamine, June 2022-April 2026

As the national drug landscape continues to evolve, tracking how the most prevalent substances (fentanyl, cocaine, and methamphetamine) are shifting over time informs a targeted and timely response. The following figure (Fig.1) presents trends across the U.S. and for the four U.S. census regions.

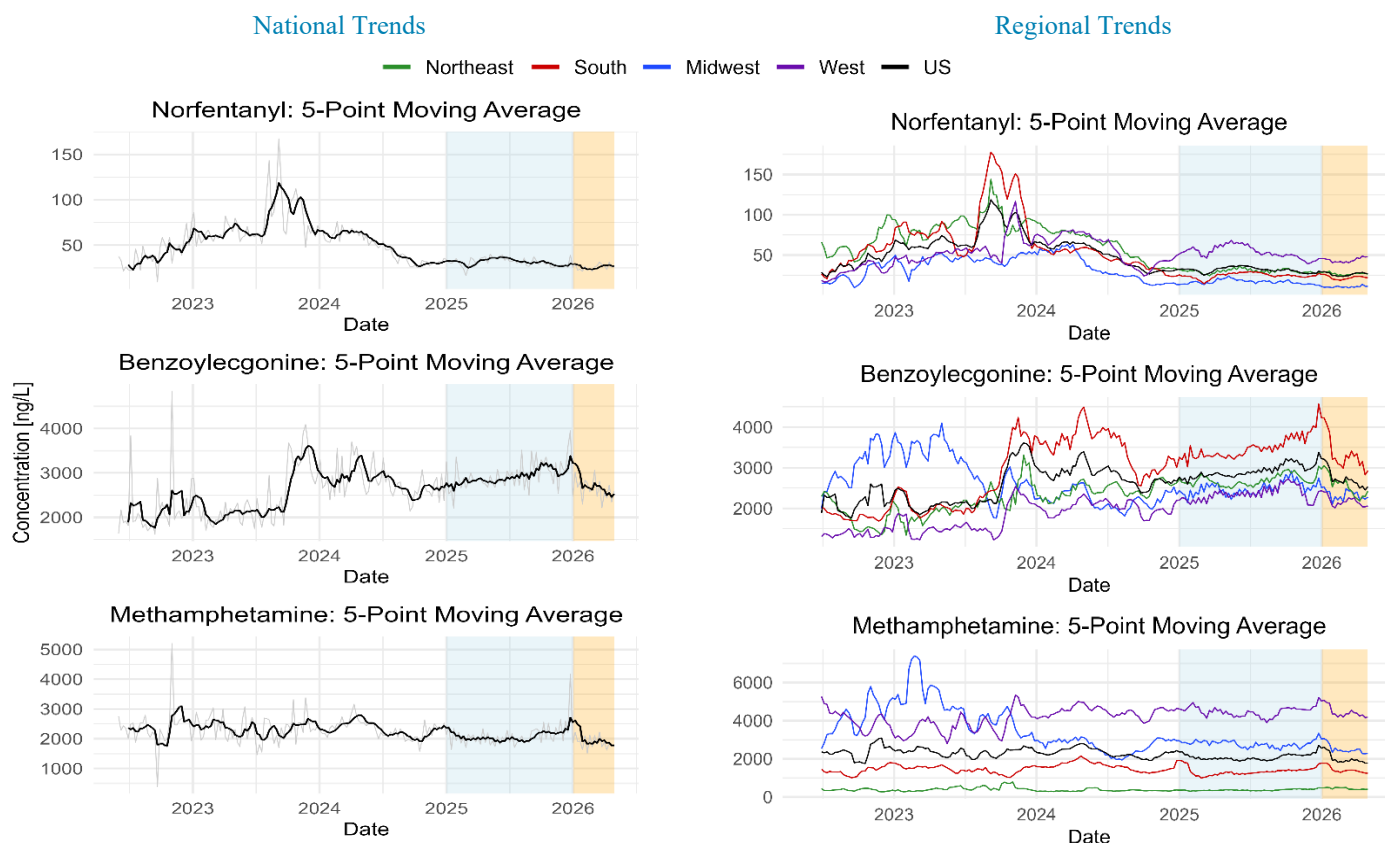
National trends in the Wastewater Sampling Network:

- Fentanyl peaked in 2023 and has been declining since then.
- Cocaine peaked in 2023, decreased in early 2024, then fluctuated, albeit with an increasing trend until 2026, when it decreased again.
- Methamphetamine levels held roughly steady since 2023.

Regional trends in the Wastewater Sampling Network:

- Regional patterns of fentanyl, cocaine, and methamphetamine shifted over time; in the more recent period (2025–2026), levels of fentanyl and methamphetamine were highest in the West, while cocaine peaked in the South.

Figure 1. National and Regional Trends Across Sampling Sites for Fentanyl, Cocaine and Methamphetamine, June 2022-April 2026



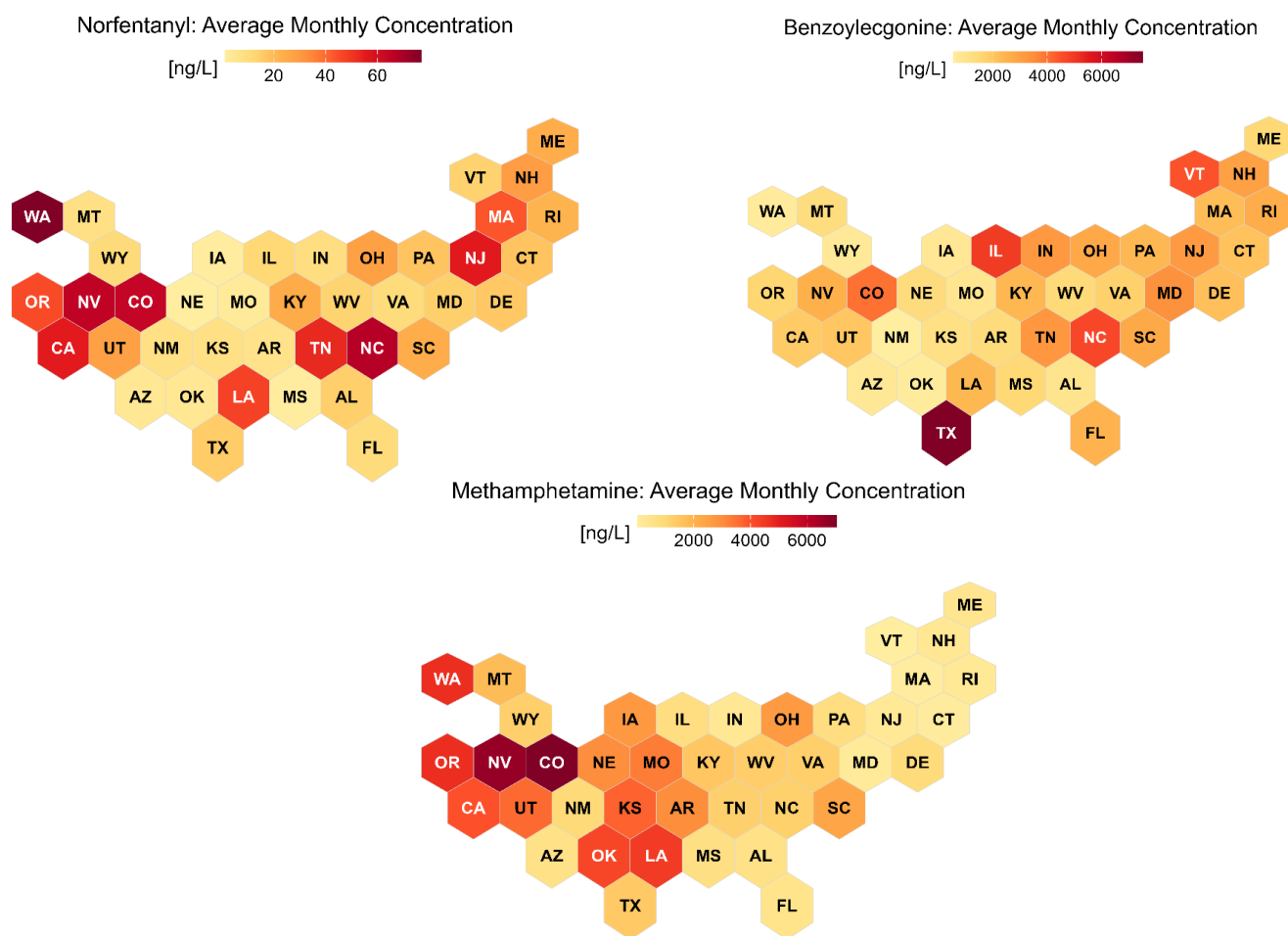
Norfentanyl- fentanyl metabolite, Benzoyllecgonine-cocaine metabolite. 2025 data are shaded in blue, and 2026 data (January -April) are shaded in yellow.

April 2026 Surge: State Trends for Fentanyl, Cocaine and Methamphetamine Across Contributing Sites

Analyzing state-level data across contributing sites provides additional information, beyond national and regional trends. In this section, we focus on recent data for insights into current patterns (Fig.2).¹

- In April 2026, Washington State had the highest concentrations of fentanyl; Texas had the highest concentrations of cocaine, and Colorado and Nevada had the highest concentrations of methamphetamine.
- Between January 2025 and April 2026, states that consistently ranked in the top 20% for each of these three drugs include: California, Nevada, North Carolina (16 months) and Washington State (15 out of 16 months) – for fentanyl; Maryland, Colorado, Illinois, and Texas (16 months) – for cocaine; and Colorado and Nevada (16 months) – for methamphetamine (data not shown).
- The wastewater data did not show alignment between states with high fentanyl levels and those with high concentrations of opioid overdose reversal medications (such as naloxone) or medications for opioid use disorder (data not displayed). In April 2026, Iowa had the highest naloxone levels, Louisiana had the highest buprenorphine levels, while Colorado had the highest methadone levels.

Figure 2. April 2026 Wastewater Drug Signals Across States (Based on 100 Counties)



Norfentanyl- fentanyl metabolite, Benzoylcegonine- cocaine metabolite.

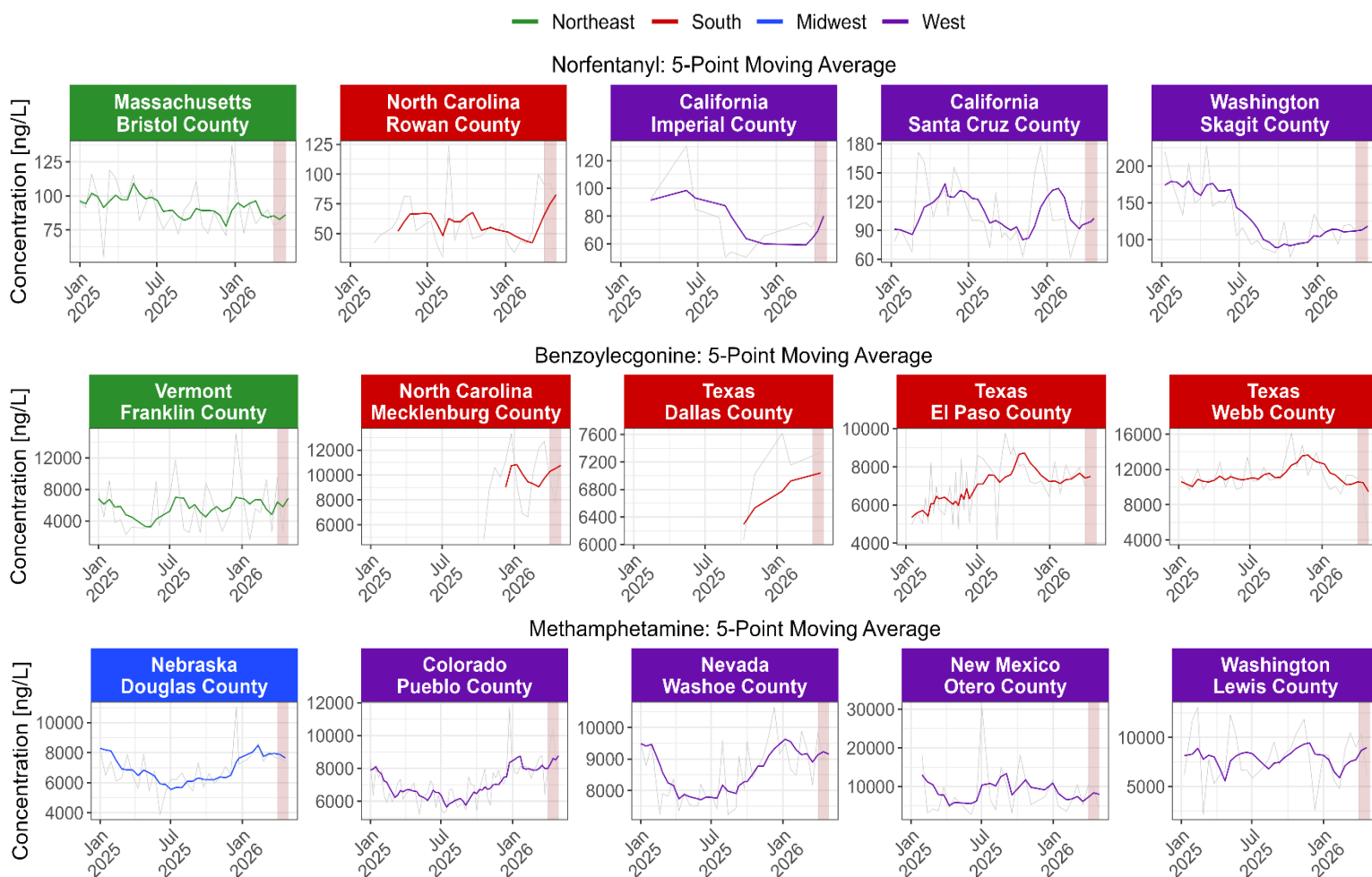
¹ States varied in the number of counties providing wastewater samples (from one to nine), therefore findings should not be viewed as representative of the entire state. Instead, they indicate which states may include potential hotspots that warrant further examination of drug consumption and trafficking. In addition, for states with multiple sampled counties, the presence of elevated signals across more than one county suggests the issue may not be isolated to a single locality and could reflect a broader pattern across the state.

Counties with Hotspots: Fentanyl, Cocaine and Methamphetamine, January 2025-April 2026

State-level profiles average indicators across multiple wastewater sites in contributing counties, which can obscure the highest-burden areas. Examining longer-term patterns (Fig. 3) shows how the counties with elevated drug concentrations were trending leading into April 2026.²

- The top five counties with hotspots varied by drug: those with the highest fentanyl concentrations were in the Northeast, South, and West; those with the highest cocaine concentrations were in the Northeast and South; and those with the highest methamphetamine concentrations were in the Midwest and West.
- However, less regional county representation was observed for cocaine and methamphetamine compared to fentanyl; in April 2026, four of the top five counties with the highest cocaine concentrations were in the South (and three of those were in Texas), and four of the top five counties with the highest methamphetamine concentrations were in the West.
- Two of the top five counties with the highest fentanyl concentrations in April 2026 were in California.

Figure 3. County-level Profiles (2025–2026) for the Top Five Counties with the Highest Concentration of Fentanyl, Cocaine or Methamphetamine in April 2026



Norfentanyl- fentanyl metabolite, Benzoylcegonine- cocaine metabolite. April 2026 is shaded in red. Note the different y-axis scales, which correspond to varying levels of drugs across counties.

² Counties also varied in the number and distribution of wastewater sampling sites; therefore, drug concentration levels should not be interpreted as representative of the entire county. Instead, they highlight counties where localized areas may be exhibiting elevated drug concentration levels.

What Else Do the 2026 Data Show? – Qualitative Trends for Selected Drugs

Less prevalent or highly potent drugs cannot be reliably quantified in wastewater, so qualitative detection provides an early signal of their presence. We selected seven substances for qualitative testing: acetyl fentanyl, carfentanil, ketamine, medetomidine, para-fluorofentanyl, tianeptine, and xylazine (Tables 1 and 2). These drugs represent a mix of potent synthetic opioids, veterinary sedatives, and potentially emerging drugs that have raised growing concern due to increasing reports in the news, rising detection in forensic laboratories, and expanding presence in illicit drug markets.

- In 2026, all seven drugs were found in all four census regions.
- Ketamine was detected in all counties; Tianeptine (often referred to as “gas station heroin”) was the second most prevalent, detected in 77% of counties tested; acetyl fentanyl was the least prevalent, detected in 17% of counties tested.

Table 1. Number of Counties with Detected Drug Biomarkers by Region, 2026

Biomarker	Northeast	Midwest	South	West	U.S.	% of U.S. counties
Acetyl norfentanyl	1 (22)	3 (15)	8 (32)	4 (28)	16 (97)	17
Carfentanil	14 (22)	7 (15)	14 (32)	17 (28)	52 (97)	54
Ketamine	23 (23)	15 (15)	34 (34)	29 (29)	101 (101)	100
Medetomidine	9 (23)	5 (15)	9 (34)	13 (29)	36 (101)	36
para-Fluorofentanyl	2 (22)	5 (14)	4 (31)	7 (28)	18 (95)	19
Tianeptine MC5	17 (22)	12 (15)	26 (32)	20 (28)	75 (97)	77
Xylazine	21 (23)	9 (15)	24 (34)	8 (29)	62 (101)	61

Acetyl norfentanyl-acetyl fentanyl metabolite, Tianeptine MC5- tianeptine metabolite

Numbers without parentheses indicate the number of counties where the drug was detected at least once.

Numbers in parentheses show the total number of counties tested for that drug.

In subsequent analyses, we focused on counties with detections of at least six of the seven drugs. Counties where at least six drugs were detected may signal broader polysubstance activity, making them important areas for closer monitoring.

- Five counties (one in the Midwest, one in the South, and three in the West) had six of the seven drugs detected in their wastewater in 2026, while one county in the South had all seven drugs present.

Table 2. Counties Meeting the Threshold of Six Drugs Detected Out of Seven Selected, 2026

County Name	Acetyl norfentanyl	Carfentanil	Ketamine	Medetomidine	para-Fluorofentanyl	Tianeptine MC5	Xylazine
Anderson County, SC	X	X	X	X		X	X
Clark County, NV	X	X	X	X		X	X
Lancaster County, NE		X	X	X	X	X	X
New Castle County, DE	X	X	X	X	X	X	X
Washoe County, NV	X	X	X	X	X	X	
Yamhill County, OR		X	X	X	X	X	X

Acetyl norfentanyl-acetyl fentanyl metabolite, Tianeptine MC5- tianeptine metabolite

Definitions

Acetyl norfentanyl: acetyl fentanyl metabolite

Benzoylecgonine: cocaine metabolite

Biomarker: a specific chemical (either a parent drug or a metabolite) measured in wastewater to indicate the presence and relative amount of a substance

EDDP: 2-ethylidene-1,5-dimethyl-3,3-diphenylpyrrolidine, a methadone metabolite

Moving average: referred to as rolling average as well, is a smoothing method that reduces short-term fluctuations in the data

5-point moving average: a smoothing method whereby each value is replaced by the average of five consecutive points that includes the point itself, the two before it, and the two after it

ng/L: nanogram per liter

Norbuprenorphine: buprenorphine metabolite

Norfentanyl: fentanyl metabolite

Population-weighted average concentration: the average concentration of a drug adjusted for how many people contribute to the wastewater testing site

Tianeptine MC5: tianeptine metabolite