RMPDS 20th ANNUAL SCIENTIFIC MEETING

Statewide Surveillance of Drug Use and Emerging Substances in Colorado

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September 15, 2026

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RADARS SYSTEM

Disclosures

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- We are thankful to CDPHE for funding and collaboration on this program

- This program is funded by OD2A-S CDC Overdose Grant Program

Background

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- Drug trends direct public health interventions
- Integrating multiple data sources can guide surveillance
- RMPDS customized data reports use different sources

Objectives

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- Discuss four data sources that track drug use
- Review the reporting systems
- Interpret examples of reported data



Data Sources

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RMPC



NMURx



Local Drug Testing



Emerging Trends

Colorado Dashboard for Monitoring

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Rocky Mountain Poison Center Data (RMPC)

The Rocky Mountain Poison Center (RMPC) is a medical information center that specializes in poison exposure management, consulting, and reporting. For more details on RMPC data, see the FAQ page.

This tab of the dashboard provides several key data elements organized by drug class and drug product. The surveillance period includes October 1, 2023, to December 31, 2025.

Please select a Drug Class and Product

Select Drug Class

Opioid Drugs

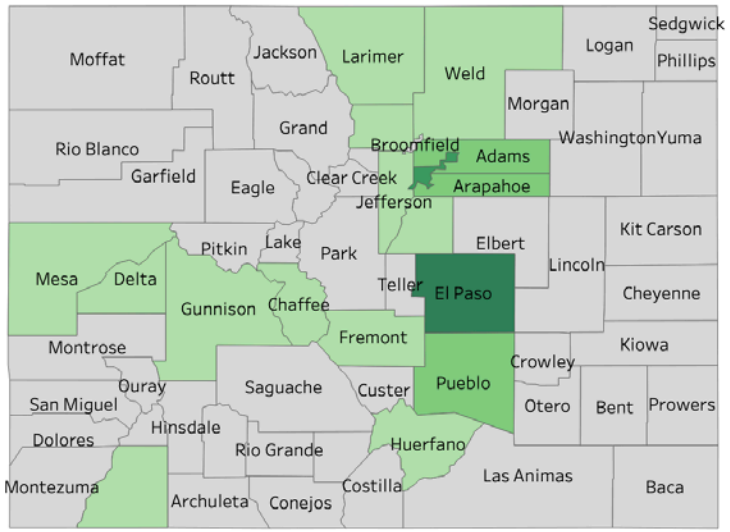
Opioid Drugs

Non-pharmaceutical fentanyl

FAQ

Select Colorado Region Type for Exposure

Colorado County



Map Color Scale

1 — 14

Gray indicates no cases reported for that county.

Denver and **El Paso** counties had the most exposures.

Data Reporting Systems

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Emerging Drug and Drug Use Surveillance for the State of Colorado Report

Rocky Mountain Poison Center Surveillance Period:
4th Quarter 2023 through 4th Quarter 2025

Survey of Non-medical Use of Prescription Drugs Program Surveillance Period:
1st Quarter 2023 through 3rd Quarter 2025

for
Colorado Department of Public Health and Environment
Contract #2025*0410

27 March 2026

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1.3 Survey of Non-Medical Use of Prescription Drugs Program

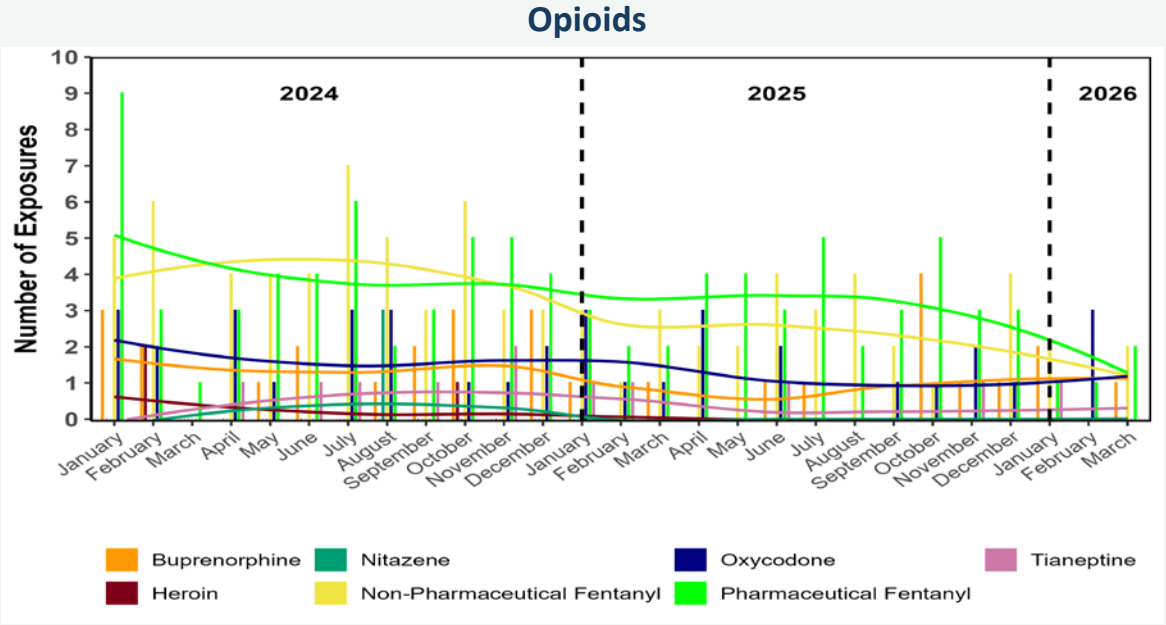
Ongoing surveillance in the NMURx Program was divided into two categories: prescription drugs and illicit drugs. Of all drugs monitored, the highest prevalence of non-medical use (NMU) in Colorado was observed for prescription benzodiazepines (3,978 per 100,000), cocaine (2,525 per 100,000), methamphetamine (2,434 per 100,000) and prescription amphetamine (2,284 per 100,000).

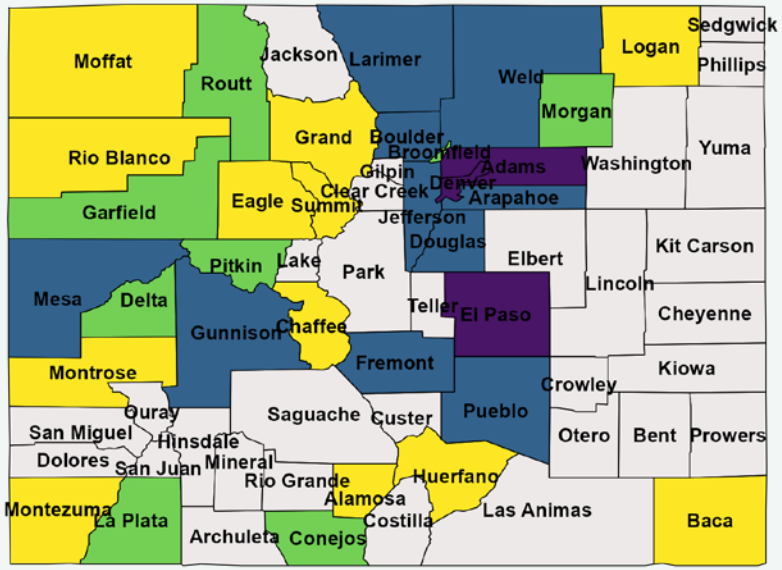
RMPC Surveillance Data

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190

illicit opioid exposures





Monthly exposures reported to the Rocky Mountain Poison Center. Source: RADARS® System.

Emerging Substances: Nitazene Prevalence

NMURx

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- Added to NMURx in Q1 2025 following identification from CDPHE program
- 2025 12 month use
  - National prevalence: 0.55 % (95% CI: 0.48, 0.62) of adults in the use have endorsed use of nitazenes in the past 12 months
  - Colorado prevalence: 0.48%** (95% CI: 0.23, 94)

Emerging Substances: Nitazene Detection

Poison Center Data

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Table 9.3.1: Colorado Counties with Exposures to Select Opioid Drugs (Prescription, Illicit, and Others)
RADARS® System Rocky Mountain Poison Center Data
4th Quarter 2023 through 4th Quarter 2025

Colorado County	Buprenorphine N=23	Heroin N=2	Nitazenes N=0	Non-pharmaceutical Fentanyl and Analogues N=59	Oxycodone N=28	Pharmaceutical Fentanyl N=69	Tianeptine N=9
Adams	1	0	0	4	2	7	0
Alamosa	0	0	0	0	0	1	0
Arapahoe	1	0	0	6	2	3	0
Archuleta	0	0	0	0	0	1	0
Baca	0	0	0	0	0	0	0
Bent	0	0	0	0	0	0	0
Boulder	1	0	0	2	0	1	1
Broomfield	0	0	0	0	1	0	0
Chaffee	1	0	0	1	0	0	0
Cheyenne	0	0	0	0	0	0	0
Clear Creek	0	0	0	0	0	0	0
Conejos	0	0	0	0	0	0	0
Costilla	0	0	0	0	0	0	0
Crowley	0	0	0	0	0	0	0
Custer	0	0	0	0	0	0	0
Delta	0	0	0	1	0	1	0
Denver	1	0	0	9	3	10	3

Drug Testing

iC42 Laboratory

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iC42 Toxicology
University of Colorado AMC
Department of Anesthesiology

DRUG PRODUCT TESTING REPORT

HRMS Qualitative Testing · iC42 Toxicology

SAMPLE INFORMATION

Requisition #:	1011800
Location:	Colorado Health Network
Collected:	2026-03-06
Reported:	2026-04-30
Dilution:	N/A

HRMS TEST

Analyte	Category
ILLICIT	
Cocaine	Major
OPIATES	
Fentanyl	Minor
UNKNOWN	
Levamisole	Major

Docusign Envelope ID: 42740144-B5FC-87C3-802D-0CD350F333F8

iC42 Toxicology
University of Colorado AMC
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DRUG PRODUCT TESTING REPORT

HRMS Qualitative Testing · iC42 Toxicology

DRUG INFORMATION

Cocaine:

This drug is sometimes used by doctors in nose and throat procedures to help constrict blood vessels. However, most people know it for its use as a drug that gives a high feeling. Taking too much cocaine can be dangerous, but some people have survived even with very high levels in their blood. The amount that could be harmful is not well defined and can vary a lot. Common doses for recreational use are around 1 to 2 mg per kg when snorted, 0.5 to 1 mg when smoked, and 0.25 to 1 mg when injected, with a lot of differences between users.

Fentanyl:

Fentanyl is a very strong opioid, about 80 to 100 times more powerful than morphine. It works quickly but only lasts a short time. Like other opioids, it can cause breathing problems.

Levamisole:

This drug is used as a treatment for worm infections and can also modify the immune system. It's often found mixed with cocaine and can lead to serious blood issues like low white blood cell counts, along with skin problems. It may make cocaine last longer.

Drug Surveillance

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> Addict Behav. 2026 Jul:178:108671. doi: 10.1016/j.addbeh.2026.108671. Epub 2026 Mar 14.

Levamisole in opioid overdose patients: An evolving adulterant landscape

Alyssa M Falise [1], Jennie Buchanan [2], Rachel Culbreth [3], Michael Levine [4], Evan Schwarz [4], Kim Aldy [5], Sharan Campleman [3], Alex Krotulski [6], Jeffrey Brent [7], Paul Wax [3], Will Goodrich [8], Alex F Manini [9]; Toxicology Investigators Consortium ToxIC Fentalog Study Group

Affiliations + expand

PMID: 41849961 PMCID: PMC13159170 (available on 2027-03-14)
DOI: 10.1016/j.addbeh.2026.108671



Source: Buchanan et al. (2011), *Journal of Medical Toxicology*

Summary

- Utilizing local poison center, community-based, and population-level data enables comprehensive surveillance for monitoring of illicit and emerging substances.
- Customized data reports and dashboards can be developed by state or for national surveillance.
- This allows for resources and agility to study safety outcomes

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Thank you

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Acknowledgments

Harrison Hutchings, BS[1], Jill Bowman, BS, MPH[1], Heather Olsen, MPH[1], Uwe Christians, MD, PhD[2], Wanzhu Zhao, MA[2], Andrew Monte, MD, PhD[1]

[1]Rocky Mountain Poison & Drug Safety, Denver Health and Hospital Authority [2]iC42 Clinical Research and Development, University of Colorado

Funding: This program is funded by the CDC Overdose Data to Action in States (OD2A-S) Grant Program

We thank:

- Colorado Department of Public Health and Environment (CDPHE) for funding and collaboration on this program
- iC42 Laboratory, University of Colorado School of Medicine for drug product testing
- Our partnering addiction clinics and the participants who contributed drug samples

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