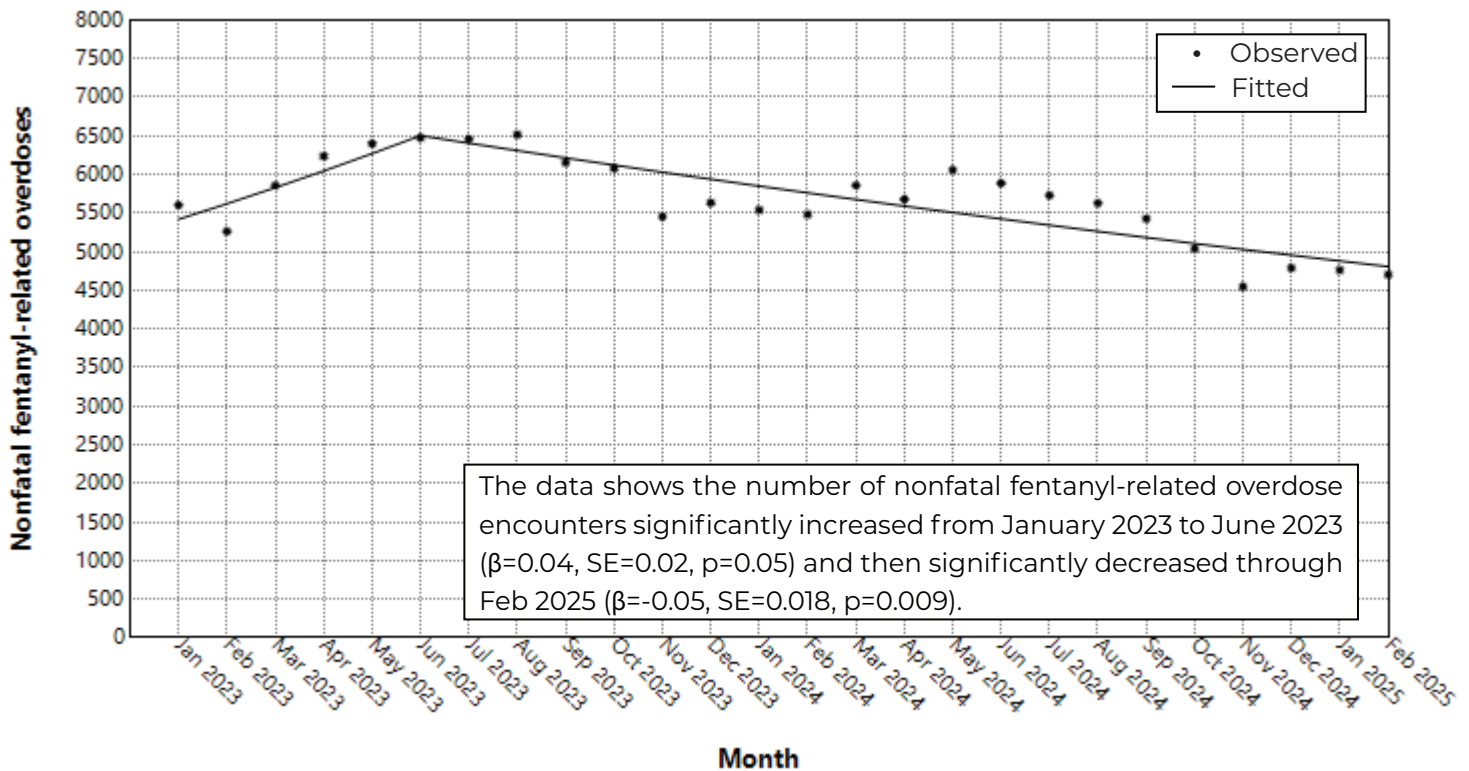


NDEWS Special Report Trends in EMS encounters in the US for nonfatal fentanyl-related overdoses by month January 1, 2023 – February 28, 2025

In this week's report, NDEWS highlights observations from biospatial.io detailing the monthly trends in EMS encounters in the US for nonfatal fentanyl-related overdoses from 2023 to 2025. Joinpoint regression* version 5.3.0 (National Cancer institute, 2024) was used to examine trends. Among states with at least 75% coverage, ** there were 147,282 nonfatal fentanyl-related overdose encounters.

Trends in EMS encounters in the US for nonfatal fentanyl-related overdoses by month January 1, 2023 - February 28, 2025 n = 147,282



All dispatch types above follow the guidelines set by the National Emergency Medical Services Information System (NEMSIS). Data is limited to 28 US states/districts with statewide partnerships with biospatial.io: Alabama, Alaska, Arkansas, California, Colorado, District of Columbia, Florida, Georgia, Idaho, Illinois, Kansas, Kentucky, Maine, Michigan, Minnesota, Mississippi, Montana, New Mexico, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Wisconsin, and Wyoming.

Nonfatal fentanyl-related EMS encounters were based on the Rhode Island Department of Health definition for detecting incidents involving nonfatal fentanyl-related overdoses. EMS encounters for nonfatal fentanyl-related overdoses were included if Patient Complaint or Narrative mentioned fentanyl (common misspellings included) and fentanyl was not documented as a medication administered by EMS. Fatalities were excluded.

***Joinpoint regression**, also known as broken line, piecewise, multi-phase, or segmented regression, fits weighted least-square regression models to rates or counts on a log transformed scale. It also uses Monte Carlo permutation tests with a Bonferroni correction for multiple testing and identifies models with the best-fit set of joinpoints. These are points (or knots) in trends that indicate significant shifting points. Poisson models were specified under the assumption of non-constant variance or heterogeneity over time.

**States included in this report met or exceeded a 75% coverage during the surveillance period, indicating that biospatial.io has received at least 75% of the expected data for the given time and region.