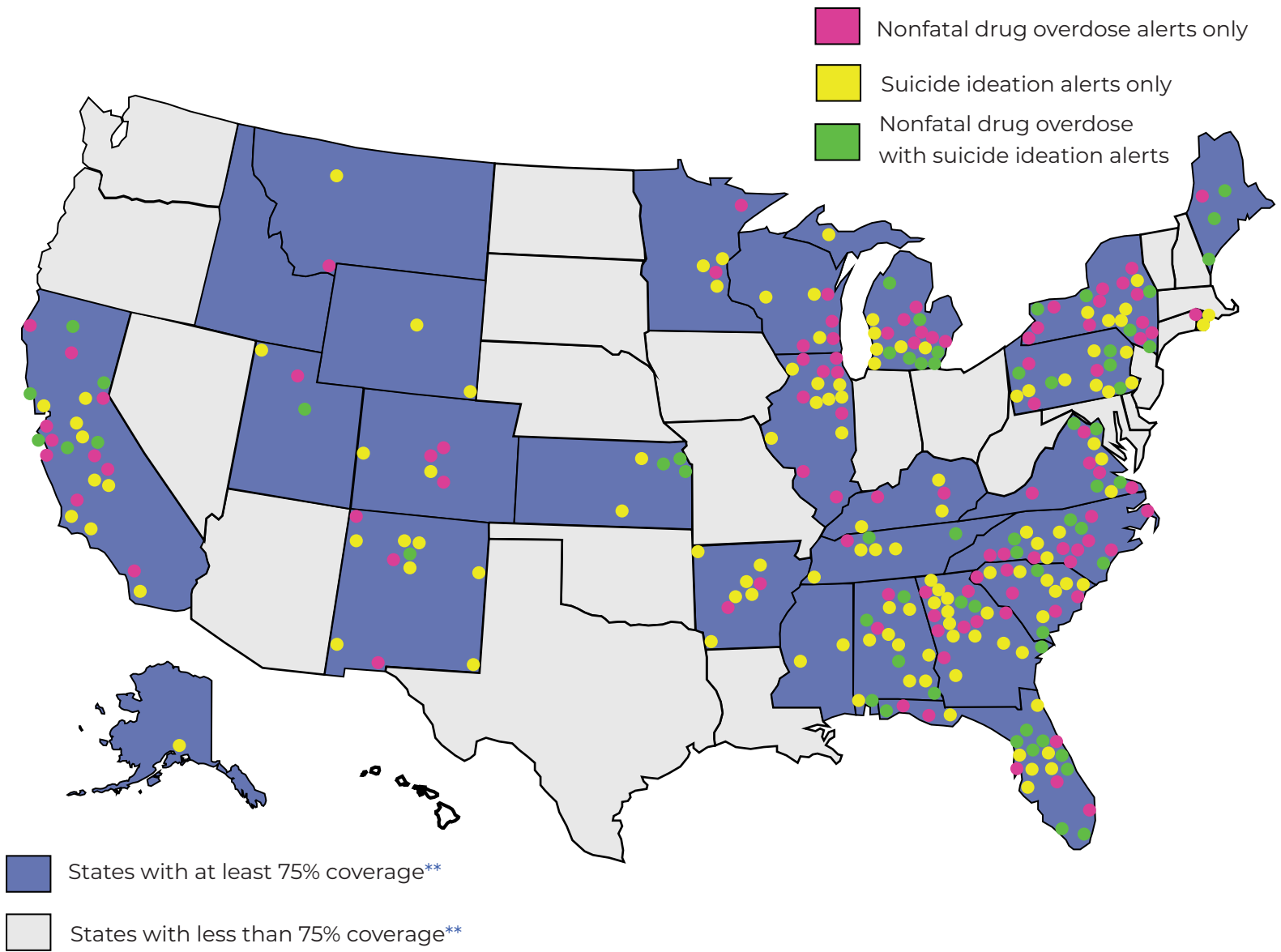


NDEWS Special Report

EMS encounters for nonfatal drug overdoses and suicide ideation in the US January 1 - December 31, 2024

NDEWS highlights observations from biospatial detailing EMS encounters for nonfatal drug overdoses and suicide ideation in the US during 2024. Among states with at least 75% coverage,** between January 1 to December 31, 2024, there were a total of 493 alerts* across 27 states, from 278 different counties, identified by biospatial.

Of the 493 alerts, 160 (32.5%) were for nonfatal drug overdose only, 156 (31.6%) were for suicide ideation only, and 177 (35.9%) were for nonfatal drug overdose with suicide ideation.



*Alerts indicate days on which the number of EMS encounters for nonfatal drug overdoses and suicide ideation exceeds the expected number for a given county. This expected count, or threshold, is calculated through biospatial, and accounts for population, seasonality, and other factors.

See page 2 for top 5 US states ranked by alert type

Top five US states ranked based on number of EMS encounter alerts for nonfatal drug overdose only, suicide ideation only, and nonfatal drug overdose with suicide ideation between January 1 - December 31, 2024

Alerts for nonfatal drug overdose only	Alerts for suicide ideation only	Alerts for nonfatal drug overdose with suicide ideation
New York (24 alerts)	Georgia (18 alerts)	Florida (33 alerts)
Illinois (17 alerts)	Illinois (12 alerts)	California (26 alerts)
California (15 alerts)	California (11 alerts)	Michigan (21 alerts)
Georgia (14 alerts)	Alabama (10 alerts)	Pennsylvania (18 alerts)
Michigan (12 alerts)	New Mexico (10 alerts)	North Carolina (16 alerts)

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 drug overdose-related EMS encounters are based on the Rhode Island Department of Health definition for detecting incidents involving nonfatal drug overdoses. EMS encounters for nonfatal overdose-related were included if two or more of the following were true: (1) NEMSIS v3 primary impression included specific drug-related codes, or secondary impression contained keywords related to substances; (2) Narrative or chief complaint mentioned terms like "overdose," "opioid," "heroin," or related variants; (3) Naloxone (or brand names) was administered or mentioned in the narrative/chief complaint; (4) NEMSIS v2 primary or secondary impression indicates drug overdose or poisoning. Fatalities were excluded.

Suicide Ideation-related EMS encounters are based on the Center for Disease Control and Prevention's Suicide Ideation definition for ESSENCE, which is intended to detect incidents involving suicide ideation. EMS encounters for suicide ideation were included if provider impressions included ICD-10 code R45.851 (Suicidal ideations) or the chief complaint/narrative contained phrases related to suicidal thoughts or intent excluding negative statements like denies suicide or did not want to kill self.

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