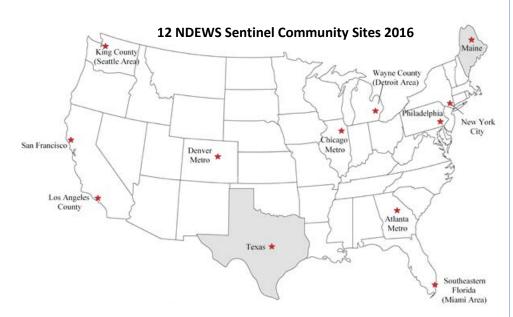
NDEWS National Drug Early Warning System

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

NDEWS Sentinel Community Site Advance Report 2016: Selected Findings for Heroin, Fentanyl, and Methamphetamine

Heroin, fentanyl, and methamphetamine are drugs of concern in many NDEWS sites, according to findings from the 2016 NDEWS Sentinel Community Site (SCS) Drug Trends Reports, to be released next week by the NDEWS Coordinating Center at the Center for Substance Abuse Research (CESAR), at the University of Maryland. A unique feature of NDEWS is its



capability to describe and compare drug use patterns and trends in selected communities across the United States. This Advance Report draws on site reports prepared by Sentinel Community Epidemiologists (SCEs) in each of the 12 NDEWS Sentinel Community Sites (SCSs; see map) along with analyses and information assembled by Coordinating Center staff. All 12 site reports and related information will be available online at www.ndews.org.

I. Heroin Indicators Climbing in All NDEWS Sites—Regional Differences Uncovered

- The six eastern NDEWS sites for which complete data were available and Texas reported that in 2015 heroin-involved deaths (caused or related) reached the highest point since at least 2011 [Maine, New York City, Philadelphia, Atlanta Metro/Georgia, Southeastern Florida, Wayne County (Detroit Area)]. The percentage of heroin-involved intoxication deaths in Philadelphia has been consistently high with heroin detected in more than 50% of the intoxication deaths each year from 2011 to 2015. Texas also reached a high point in 2015. All of the other western sites reported peaks in heroin-related overdose deaths in 2014. (Data cited here are from state/local medical examiners/coroners, CDC WONDER, or both.)
- An NDEWS staff special analysis of 2014 CDC WONDER data (Centers for Disease Control Wide-ranging Online Data for Epidemiologic Research multiple cause of death data) revealed substantial regional differences in heroin-related overdose poisoning deaths with higher

- rates in counties around NDEWS sites east of the Mississippi River and among Whites, as compared with Black or Hispanic populations (Figure 1).
- Treatment admissions where heroin was the primary substance of abuse in 2015 ranged from a low of 11.5% of admissions in Southeastern Florida to a high of 40.5% in San Francisco. In six NDEWS sites, more than 30% of treatment admissions had a primary drug of abuse of heroin. The SCEs in Maine, Southeastern Florida, and King County (Seattle Area) reported that the percentage of admissions that were heroin related has more than doubled since 2011.
- Data from the DEA's National Forensic Laboratory Information System (NFLIS) show that in 2015, Maine (32.8%), King County (29.7%), and Philadelphia (22.2%) had the highest percentage of NFLIS heroin drug reports of total analyzed drug reports submitted by law enforcement, indicating possible law enforcement focus, increased availability of heroin, or both in these three sites (Figure 2).

Related Quotes from NDEWS SCEs:

- *Maine:* "All of the heroin abuse indicators, including deaths, impaired driver toxicology tests, arrests, seizures, and treatment admissions, are very high and increasing dramatically, continuing an upward trend that began in 2012."
- *Atlanta Metro:* "The increase in heroin use appeared in all drug indicators for 2015, and Atlanta has been identified by local DEA officials as an emerging primary distribution center for the drug. Traditionally known for having low indicators for heroin, Atlanta witnessed elevated use of the drug starting in 2013."
- *New York City:* "Heroin was involved in 57% of all overdose deaths in 2014, making it the most common substance involved in overdose deaths. The rate has more than doubled since 2010 when it was 3.1 per 100,000 New Yorkers (209 deaths)."
- **Southeastern Florida:** "Heroin-related deaths increased 109%, rising from 139 in 2014 to 291 in 2015 across the Southeast Florida region with the sharpest rises reported in Palm Beach and Broward counties."
- *Atlanta Metro:* "Heroin-related cases from the Georgia Medical Examiner's Office more than doubled from 2013 to 2015 (243 vs. 556) indicating an increase not only in metropolitan Atlanta but in statewide data as well."
- *King County (Seattle Area):* "Heroin indicators remained elevated, particularly overdose deaths (132 in 2015), and treatment admissions for heroin peaked in 2015, surpassing alcohol for the first time."
- *Maine:* "Heroin arrests by the MDEA [Maine State Drug Enforcement Agency] began increasing in 2011, and during 2015, they constituted 39% of arrests, compared with the 5% low in 2010. Arrestees are frequently from New York City and are often connected to street gangs. NFLIS reported that 32.8% of law enforcement 1,327 items tested in 2015 were positive for heroin, making it number one among all drug frequencies."

• **Los Angeles:** "Los Angeles High Intensity Drug Trafficking Area (LA HIDTA) reported that law enforcement operations related to heroin increased during 2015 and that there were indications of increasing availability of Mexican brown heroin on the street."

II. Fentanyl Was Found in All NDEWS Sites, But Fentanyl-Related Overdose Deaths Increased Predominantly in Eastern Sites

- Six sites east of the Mississippi River reported increases in overdose deaths related to fentanyl or substances structurally related to fentanyl in 2015. (Although complete trend data were not available for the full Chicago Metro site, 189 fentanyl-involved deaths were reported in Cook County from June 2015 to May 2016.)
- The Philadelphia report indicated that 27% of drug-related deaths were positive for fentanyl in 2015, and in Maine, illicitly produced fentanyl contributed to 32% of deaths. Fentanyl-related deaths were reported to have increased 502% in Southeastern Florida from 43 in 2012 to 259 in 2015.
- San Francisco was the only western site to report on outbreaks of fentanyl-related overdoses. There were sporadic outbreaks in 2015 but no regular access to fentanyl in the local drug market. The King County report indicated that the first documented overdose involving acetyl-fentanyl occurred in 2015, and preliminary data indicate two deaths involving acetyl-fentanyl in May 2016.
- Data from the DEA's National Forensic Laboratory Information System (NFLIS) show that
 fentanyl (which includes fentanyl and substances structurally related to fentanyl) reports are
 rare but increasing. In 2015, fentanyl reports have now been recorded in all NDEWS sites,
 and the number of fentanyl reports identified from items submitted to laboratories doubled
 or more from 2014 to 2015 in all but two sites (although low compared with other drugs).
- In Maine, fentanyl was identified in 10.9% of its 1,327 NFLIS reports from drug items tested by law enforcement, which was higher than any other NDEWS Sentinel Site.
- Five fentanyls were found in the NDEWS sites in 2015. The most commonly found were fentanyl and acetyl fentanyl. Chicago Metro (3), Southeastern Florida (4), and Texas (3) were the only sites to have more than two fentanyls.

Related Quotes from NDEWS SCEs:

- *Maine*: Illicitly produced fentanyl contributed "to 87 (32%) of Maine's drug-induced deaths, up dramatically from 38 (18%) deaths in 2014 and 10 (3%) deaths in 2013."
- New York City: "[T]here were 925 confirmed overdose deaths in 2015, and 144 (16%) involved fentanyl. Previously, fentanyl was relatively uncommon in NYC, accounting for less than 3% of deaths in the last 10 years. Fentanyl-involved overdose deaths occurred among residents of all New York City boroughs."

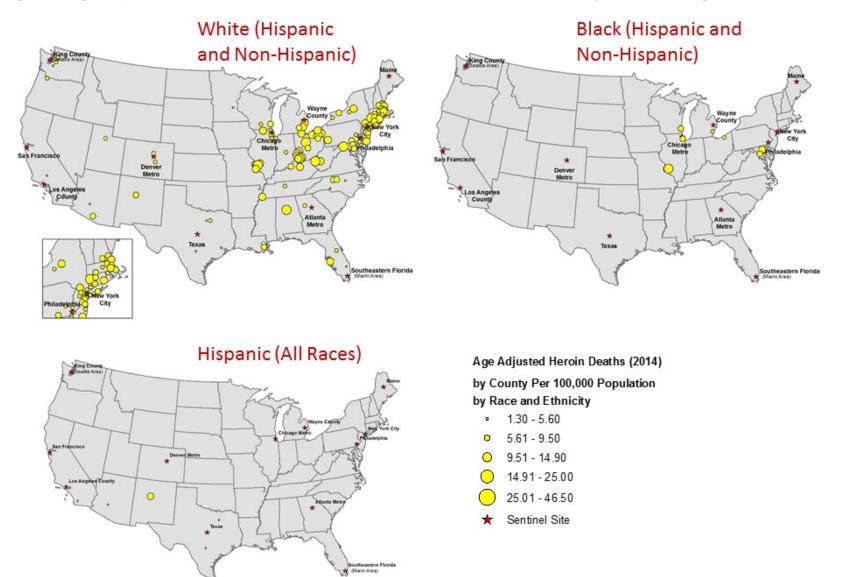
- *Philadelphia:* "The outbreak of fentanyl-related intoxication deaths that began in 2014 continued unabated in 2015. Of the 688 alcohol and/or drug intoxication deaths in 2015, 183 (27%) tested positive for fentanyl, which was an increase from 100 (16%) reported for 2014." "In the initial months after the start of the current outbreak, focus groups with users in treatment revealed heroin users unknowingly purchased heroin mixed with fentanyl."
- **Atlanta Metro:** "Among decedents reported by the Georgia Medical Examiner's Office, there was nearly a tripling of cases [in Georgia] that tested positive for fentanyl from 2014 [112] to 2015 [305]. In Fulton County alone, nearly 30% of all deaths tested positive for the drug in 2015."
- Wayne County (Detroit Area): "The most dramatic finding with regard to opioids was the increase in drug-associated deaths with laboratory-confirmed fentanyl detected. Over the 3-year period of fiscal years 2013–2015, the number of deaths increased from 11 in FY2013 to 148 in FY2015."
- III. In Contrast to the Eastern NDEWS Sites, More Than 10% of People Entering Drug
 Treatment in 2015 in All Five Western Sites Reported Methamphetamine as Their
 Primary Substance of Abuse
 - Methamphetamine ranks in the top four primary substances reported by treatment admissions in all five NDEWS sites west of the Mississippi River; 10% or more of drug treatment admissions in each of these sites reported methamphetamine as their primary substance of abuse (Figure 3). Texas and Los Angeles reported a steady increase from 2012 to 2015 (10.2% to 15.9% in Texas; 16.9% to 25.3% in Los Angeles).
 - In contrast, less than 1% of treatment admissions in six NDEWS sites east of the Mississippi River mentioned methamphetamine as their primary substance of abuse in 2015; the exception was Atlanta Metro, which had a steady increase in admissions with methamphetamine as a primary substance of abuse from 5.6% in 2011 to 8.8% in 2014. (Data were only available through 2014.)
 - Data from the DEA's National Forensic Laboratory Information System (NFLIS) show that in 2015, methamphetamine was one of the top three drugs identified by law enforcement in all five NDEWS sites west of the Mississippi River; in four of the western sites, the percentage of methamphetamine drug reports was more than 25% of total analyzed drug reports submitted.

Related Quotes from NDEWS SCEs:

• *Texas:* "Methamphetamine indicators are higher than before the pseudoephedrine ban in 2007–2008. ... The methamphetamine made in Mexico using the P2P process is increasingly pure and more potent with more reports by Texas outreach workers of use by men who have sex with men and high-risk heterosexuals with increases in HIV and syphilis. The HIV mode of exposure among men who have sex with men is at the same level in 2015 (70% of all cases) as it was in 1988 when data on mode of exposure were first collected in Texas."

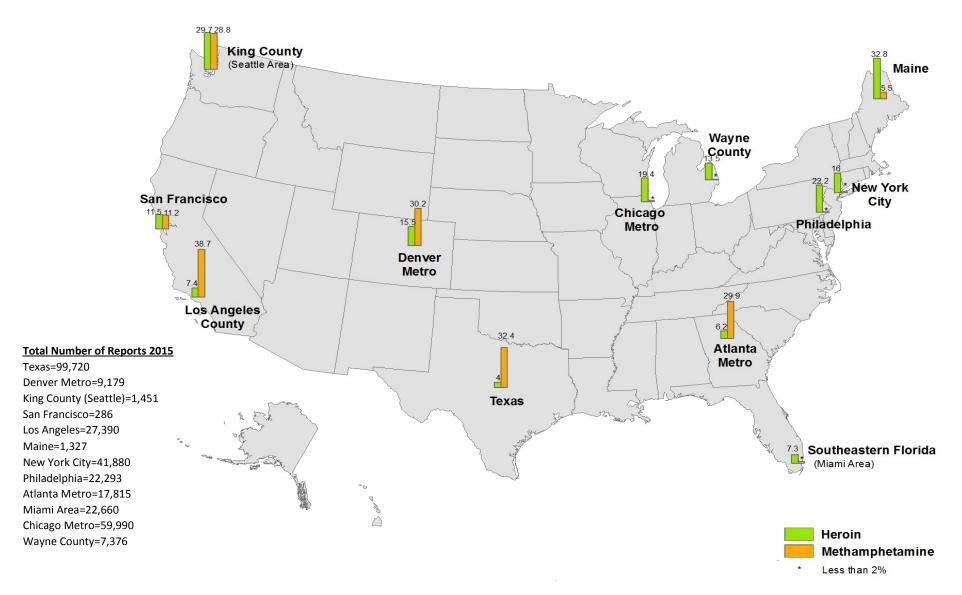
- *King County (Seattle Area):* "Methamphetamine-involved deaths totaled 86 in 2015, which was the highest number recorded for the drug after a relatively constant number of deaths, approximately 20 per year, from 2003 to 2011. In 2014 and 2015, half of the methamphetamine deaths also involved heroin."
- *San Francisco:* "The number of SFGH [San Francisco General Hospital] hospitalizations involving methamphetamine has also increased consistently since 2009 as have the number of deaths involving methamphetamine as a causal agent; methamphetamine-involved deaths exceeded cocaine-involved deaths for the first time in 2015."
- Los Angeles: "Across five major indicators of Los Angeles County substance use and consequences trends (treatment admissions, National Forensic Laboratory Information System (NFLIS) drug reports, medical examiner toxicology cases, poison control center calls, and nonfatal emergency department (ED) visits), consistent increases were seen for methamphetamine for 2015 over 2014 (for ED visits, 2014 over 2013), which showed continuing upward trends for the past 4–6 years."
- **Denver Metro:** "Methamphetamine had declined from peak years in 2005-06 through 2010 in the DMA [Denver Metropolitan Area], but it has resurged sharply since 2011 with all indicators (treatment admissions, hospital discharges, ED visits, mortality, RMPDC calls, and NFLIS and DCL exhibits) on the rise."
- Atlanta Metro: "Atlanta has traditionally had the highest rates of methamphetamine use than any other major U.S. city east of the Mississippi River. In 2015, death-related data and Georgia Poison Control Center call results suggest that methamphetamine use in Atlanta continued to increase, supply was up, and demand continued to be strong."
- *Maine*: "Methamphetamine indicators continue to show mixed trends at mostly low levels. There were 3 deaths in 2015, only 3% of impaired drivers with methamphetamine-positive urine, and the treatment admissions numbered only 47. Yet, the incidence of methamphetamine small lab incidents has been rising sharply over the last several years, going from 28 in 2014 to 56 in 2015. Early 2016 indicators suggest this number may double."

Figure 1. Age-Adjusted Heroin Death Rates in U.S. Counties in 2014 Predominantly Found Among Whites in Eastern U.S.



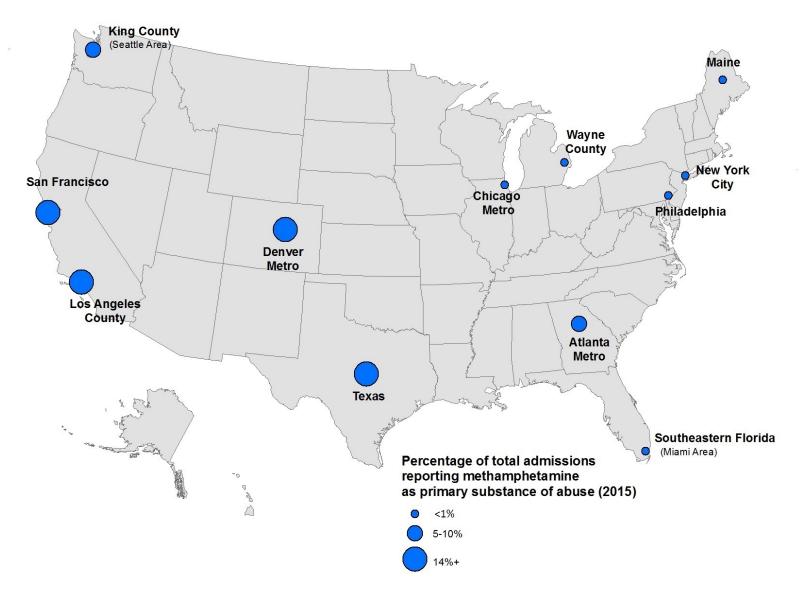
Source: Adapted by NDEWS staff from data taken from the U.S. Census Bureau and the Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple cause of death 1999-2014, available on the CDC WONDER Online Database, released 2015. Retrieved between December 2015 and May 2016, from http://wonder.cdc.gov/mcd-icd10.html

Figure 2. Percentage of Heroin or Methamphetamine Drug Reports of All Analyzed Drug Reports Submitted by Law Enforcement to DEA NFLIS in 2015



Source: Adapted by NDEWS staff from data provided by U.S. DEA Diversion Control Division, Drug & Chemical Evaluation Section, Data Analysis Unit. Retrieved from NFLIS DQS 5/18/16.

Figure 3. People Entering Drug Treatment in 2015 in Western NDEWS Sites Were More Likely to Report Methamphetamine as the Primary Substance of Abuse



Source: Adapted by NDEWS staff from data provided by NDEWS SCEs for each site.

Note: Chicago data are by fiscal year. Data for Atlanta Metro are for 2014; 2015 data are not available.