NDEWS National Drug Early Warning System

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

Highlights from NDEWS Sentinel Community Site 2020 Reports

Introduction

A unique feature of NDEWS is its capability to describe and compare drug use patterns and trends in selected communities across the United States. The NDEWS Coordinating Center works closely with Sentinel Community Epidemiologists (SCEs) in 12 Sentinel Community Sites (SCSs)

across the U.S. (see



Figure). Emerging drugs and changing drug trends are monitored by each local SCE utilizing indicators such as drug overdose deaths, treatment admissions, hospital cases, poison center exposure calls, and law enforcement seizures. For the 2020 SCS reports, we used the same reporting format as in 2019. Each SCE was asked to review available indicators, identify up to five drugs they considered most important to summarize for their site, and provide presentations at a special meeting of the NDEWS SCESAG core collaborators group. However, due to the COVID-19 pandemic, many SCEs experienced delays and complications in requesting and receiving their data. Impacts of the pandemic included staff being re-assigned to COVID-related duties, changes or delays in reporting, changes in the types of services provided, substantial lag times in receiving data, and an inability to access data as in the past. Eleven of the 12 NDEWS SCEs were able to provide presentations and highlights of recent drug trends in their areas on May 27, 2020.

Four Evolving Trends Described in the 2020 NDEWS SCS Annual Reports

- 1. Polysubstance use plays a prominent role in drug overdose deaths.
- 2. Increases in methamphetamine-related overdose deaths were reported in 7 sites.
- 3. Fentanyl remains the most lethal drug in many NDEWS sites.
- 4. Minorities are becoming increasingly impacted by drug overdoses in some areas.

As part of their 2019 reports, all 11 SCEs providing reports assessed recent trends in drug overdose deaths. Provisional data recently released by the CDC through November 2019 shows an apparent increase in drug overdose deaths nationwide, increasing approximately 5% in 2019 to nearly 72,000 deaths after a slight decline in 2018. A special analysis by the New York Times shows increases in deaths involving fentanyl and deaths involving stimulants with abuse potential (such as methamphetamine) (CDC; Katz, Goodenough and Sanger-Katz, NYT, 7/15/20).

The NDEWS SCEs are a unique and valuable source for a local context for understanding this shift in trend. Many of the SCEs also reported increases in these deaths in 2019 in their local areas. According to the SCE's annual reports, polysubstance use involving varying combinations of stimulants and opioids continues to dominate local drug trends, illicit stimulant overdose deaths (many of which also involve opioids) are increasing, and fentanyl remains the most lethal drug in many sites. For example, many sites are continuing to face high numbers of fentanyl-related drug overdose deaths or are reporting that fentanyl plays an increasing role in deaths involving other drugs, such as illicit stimulants. In addition, several SCEs reported that minorities are increasingly impacted by drug overdoses. The rest of this report summarizes site specific findings on these four themes from 11 SCSs. The complete SCS annual reports are available on the NDEWS website: www.NDEWS.org.

Is COVID-19 Having an Impact on Drug Overdose Death Trends?

The United States is now facing two public health emergencies simultaneously. The combination of the opioid crisis and the COVID-19 pandemic in 2020 has influenced drug availability, use, packaging, and trafficking methods as well as the availability and delivery of treatment, prevention, and recovery services for those with substance use disorder. Drug monitoring systems around the world, like NDEWS, are actively working to assess the impact of these dual crises on recent drug overdose trends.

Stories in the popular press, reports, and journal articles have offered a variety of theories, anecdotes, and opinions. A recent news scan conducted by the AMA, for example, found local news reports from more than 30 states highlighting increases in drug overdoses in recent months (AMA, Issue Brief, July 8, 2020). However, the availability of clear, timely empirical data is limited. One valuable source of timely empirical data is the ODMap suspected overdose detection mapping system maintained by the High Intensity Drug Trafficking Area (HIDTA) Program.

ODMap currently includes dozens of counties in 49 states. A recent analysis conducted by Washington/ Baltimore HIDTA staff revealed that nearly 62% of participating counties nationwide showed an increase in suspected overdose information submissions to the central database after March 19. When comparing the weeks before and after the initiation of stay-at-home orders, they found a 17.6% increase in suspected overdose submissions. In fact, for every 10 suspected overdoses submitted in May 2019, there were 14 submitted in May 2020 (Alter and Yeager, W/B HIDTA May 2020). A variety of factors could impact the local trends noted in recent publications, including economic factors, seasonality, evolution of drug trends, changes in the use and availability of naloxone, social and personal characteristics of people who use drugs, the geographic locations of COVID-19 hotspots and local drug markets, and the duration, intensity, and timing of local lockdowns. Additional research will be necessary to understand the true impact of the COVID-19 pandemic on local drug trends.

Key Findings 2020

The following sections explore the four continuing trends identified earlier.

Polysubstance Use Plays a Prominent Role in Drug Overdose Deaths

Many of the SCEs reported on polysubstance use and related deaths. SCEs from eastern sites, such as New York City and Maine, discussed cocaine and fentanyl, while the SCEs in Philadelphia, San Francisco, and Denver Metro provided more general findings about opioids and stimulants.

- New York City: Sharp increase in cocaine-involved overdose deaths from 2014-2018 from 4.7 per 100,000 residents to 10.7 per 100,000 residents
 - "The increase in cocaine overdose death from 2015 to 2018 was mirrored by a corresponding increase in the rate of overdose deaths involving both cocaine and fentanyl. During this time period, we also saw a substantial increase in the rate of overdose deaths involving cocaine and fentanyl, without heroin. Cocaine overdose deaths involving fentanyl but no heroin, are a proxy for deaths where fentanyl might have been present in the cocaine product."
- Maine: Cocaine found in 1 in 3 fentanyl and heroin deaths in 2019
 "Cocaine is involved in 29% of all 2019 drug deaths; 80% combined with one or more nonpharmaceutical opioids, and 17% combined with at least one pharmaceutical opioid. Cocaine is a co-intoxicant in 34% of fentanyl deaths and 36% of heroin deaths."
- Philadelphia: Opioids and stimulants found together in nearly half of overdose deaths in 2019
 - "In 2019, opioids were detected in 84% of overdose decedents and stimulants were detected in 62% of overdose decedents. Both opioids and stimulants (e.g. cocaine, methamphetamine) were detected in 48% of overdose deaths."
- San Francisco: Increases in overdose deaths driven by fentanyl in 2019
 "San Francisco is experiencing a dramatic increase in drug overdose deaths across opioids and stimulant drugs, all driven by fentanyl." Increases were reported for the third year in a row (2017-2019) in both methamphetamine and cocaine deaths in combination with any opioid and with fentanyl specifically.
- Denver Metro: Polysubstance-related deaths continue to be the norm in 2019 "Polysubstance-related deaths continue to be the norm in Denver County, with 54% of deaths [in 2019] involving 3 or more drugs and 18% of deaths involving 5 or more drugs."

Increases in Methamphetamine-Related Overdose Deaths Reported in 7 Sites

All 4 western sites reported increases in methamphetamine-related deaths in 2019. Three other sites also reported increases in methamphetamine-related deaths in 2019: Southeastern Florida, Maine, and Philadelphia. The Philadelphia SCE began reporting on the increasing presence of methamphetamine in overdose deaths in her 2019 report. This year, she reported that stimulants such as cocaine and methamphetamine were detected in 50% of overdose deaths; both stimulants and opioids were detected in nearly half (48%). In contrast, the SCE for the Atlanta Metro area, who has been reporting increases in methamphetamine -related deaths for several years, is now reporting a decrease. He reports that the number of decedents with methamphetamine on board increased steadily from 108 in 2012 to 614 in 2018 and then decreased to 552 in 2019. Two sites, Wayne County and New York City, did not mention methamphetamine in their annual reports as an emerging or changing drug problem.

King County: Methamphetamine involved deaths continue rapid increase

"Methamphetamine-involved deaths continued a rapid increase first evident in 2012." from less than 50 in 2012 to 201 in 2019.

San Francisco: Methamphetamine-related morbidity and mortality continue to increase "Methamphetamine-related

"Methamphetamine-related morbidity and mortality continue

Cocaine and Methamphetamine Admissions to Drug Treatment Programs, 2019

Recent trends in admissions to drug treatment programs with cocaine and methamphetamine as the primary substance are similar to those discussed in overdose deaths. Higher percentages of admissions with cocaine as a primary substance are found in the east (with the exception of Maine) and higher percentages of admissions with methamphetamine as the primary substance are found in the west.

Four sites east of the Mississippi - New York City, Philadelphia, Southeastern Florida, and Wayne County - had 10% or more of admissions with cocaine as a primary substance while the four western sites reported less than 6%. In contrast, four of the five western sites (data was unavailable for Texas) reported 14% or more of admissions with methamphetamine as a primary substance in 2019 while the five eastern sites for which data was available reported 3% or fewer. The percentage of admissions for both cocaine and methamphetamine remained relatively stable between 2018 and 2019 for all sites reporting data (9 of 12 sites). No site reported a change of more than 2%.

Percentage of Admissions with Cocaine and Methamphetamine Cited as Primary Substance, 2019

	Cocaine	Methamphetamine
Maine	4.8%	2.7%
New York City	11.5	1.5
Philadelphia	11.8	1.4*
Atlanta Metro	unavail	unavail
Southeastern Florida	12.3	1.1
Wayne County	14.9	0.5
Chicago Metro	unavail	unavail
Denver Metro	3.7	16.1
Texas	unavail	unavail
King County	3.2	14.2
San Francisco	5.7	16.3
Los Angeles County	4.0	35.2

^{*}Includes amphetamine and methamphetamine

to increase. Although ED visits, hospitalizations, and deaths have been increasing steadily for 10+ years, the rates of increase are faster in recent years."

- Los Angeles County: Lowest methamphetamine prices in HIDTA reporting history "Methamphetamine continues to be a major problem in Los Angeles County," with 40.3% of medical examiner toxicology cases testing positive for methamphetamine, an increase from 2018.
- Denver Metro: Methamphetamine deaths increasing

"Deaths with methamphetamine on board . . . are increasing." Methamphetamine was present in 41% of deaths in 2019 and 42% in 2018, compared to less than 20% in 2010. A recent presentation by the Denver Department of Public Health and Environment reported the methamphetamine was found in 45% of all overdose deaths as of July 17, a slight increase from 41% in 2019 (July 2020).

- Maine: Increase in methamphetamine-related arrests and deaths "The stimulants cocaine and methamphetamine (crystal) continue to rise among MDEA arrests and deaths, most of which have co-intoxicant nonpharmaceutical opioids, primarily fentanyl." Cocaine deaths increased 22% from 2018 to 2019 and methamphetamine deaths increased 81%.
- Southeastern Florida: Methamphetamine-related deaths increasing sharply "Methamphetamine deaths are projected to increase again for 2019, with the highest number of deaths reported in the central part of Florida and the Northwestern Panhandle." The number of methamphetamine-related deaths increased in Southeastern Florida by 139% from 2015 to 2017 (from 33 to 79). The number of deaths decreased slightly to 74 in 2018 but is projected, based on preliminary data, to increase to more than 100 in 2019.
- Atlanta Metro: Methamphetamine use stable or decreasing "Multiple methamphetamine data indicators suggest a stable, if not slightly decreased, use of the drug.."
- Chicago Metro: Ice (methamphetamine) identified as a new drug in some areas
 Preliminary ethnographic findings from the ETHIC study indicate that "ice
 methamphetamine of low cost and high quality has replaced locally produced
 methamphetamine and is said to be generating a new wave of users spanning a broad range
 of demographic characteristics."

Fentanyl Remains the Most Lethal Drug in Many NDEWS Sites

In 2019, reports from NDEWS sites about increases in fentanyl-related overdose deaths were received from all regions of the United States. The eastern sites, which have historically reported high levels of opioid use, continued to report increases in fentanyl-involved drug overdose deaths. Western sites just starting to report on fentanyl-involved deaths in 2018 all reported noticeable increases in 2019.

 Maine: Fentanyl continues as the main driver of fatal overdoses in 2019 and early 2020 "Non-pharmaceutical fentanyl continues as the main driver of fatal overdoses, while both heroin and pharmaceutical opioid deaths decline slowly." Fentanyl deaths increased 7% in 2019.

 New York City: Fentanyl is the most common drug involved in drug overdose deaths in 2018

"For the second year in a row, fentanyl was the most common substance involved in drug overdose deaths, present in 60% of overdose deaths in 2018."

- Philadelphia: Fentanyl-involved deaths increased in 2019 after stabilizing in 2018 The number of deaths involving fentanyl increased sharply from 2013 to 2017, remained about the same in 2018, and increased again from 2018 to 2019.
- Atlanta Metro: Fentanyl-positive deaths reach all-time high in 2019 "Statewide deaths with heroin on board are at a 4 year low, while the prevalence of fentanyl on-board deaths is at an all-time high (n= 300)."
- Southeastern Florida: Fentanyl-positive deaths increased in first half 2019
 Fentanyl occurrences among deceased persons in southeastern Florida increased from 567
 in the first half of 2018 to 712 in the first half of 2019, almost reaching earlier peaks set in 2016 and 2017.
- Chicago Metro: Fentanyl-involved opioid deaths increased in 2019

 "Fentanyl or its analogues were present in the majority of opioid-related overdoses, which rose again in 2019 and appear to be rising in 2020." Ethnographic findings indicate that "fentanyl is recognized by people who use heroin as being locally present and deadly."
- **Denver Metro: Fentanyl/analogues contributed to 1 in 4 drug-related deaths in 2019.** "Fentanyl/fentanyl analogue-related fatalities have increased in Denver, contributing to 25% of drug-related deaths in 2019 compared to only 8% in 2018." A recent presentation by the Denver Department of Public Health and Environment shows that the percentage continued to increase in 2020 to 34% (July 2020).
- King County: Fentanyl third most commonly detected substance in drug overdose deaths

"Fentanyl is now the third most commonly detected substance [after methamphetamine and heroin] with 112 [of 426] involved deaths in 2019, a rapid increase since 2016."

• San Francisco: Fentanyl involved in approximately two-thirds of drug overdose deaths.

Fentanyl deaths increased from 21% of the 104 drug overdose deaths in 2016 to 68% of the more than 237 in 2019."

• Los Angeles: Sharp increase in fentanyl-related deaths in 2019

"Narcotic analgesics (including fentanyl) were identified in 28.0% of cases (n=893), an

increase over 21.5% in 2018. This increase was due primarily to increases in fentanyl, which was positive in 16.4% of cases (n=522) in 2019, an increase over 9.8% in 2018."

Minorities Are Becoming Increasingly Impacted by Drug Overdoses in Some Areas

Four SCEs reported increases in drug use or drug overdose deaths among minority populations.

- Atlanta Metro: Methamphetamine spreading to African American community in 2019 "Methamphetamine is no longer confined to Atlanta's white population and continues to spread into the local African American and Hispanic communities."
- New York City: High rates of drug poisoning deaths among Latino and African Americans in 2018

"In 2018, Latino/a New Yorkers had the highest rate of overdose death (24.8 per 100,000 residents); the rate increased 5% from 23.7 per 100,000 residents in 2017." The rate of drug poisoning deaths among African Americans decreased from 2017 to 2018, "Black New Yorkers between the ages of 55 and 84 had the highest rate of unintentional drug overdose deaths in 2018, at 40.9 per 100,000 residents."

 Philadelphia: Increase in drug overdose deaths among Hispanic and African Americans in 2019

"While the rate of overdose deaths decreased by 3% among white, non-Hispanic individuals from 2018 to 2019, the rate increased among black non-Hispanic and Hispanic individuals by 14% and 24%, respectively."

 Wayne County: Continued increase in drug overdose deaths among African Americans in 2019

The "number of [drug overdose deaths among] African Americans increased by 4.0% over 2018 (they also increased from 2017 to 2018)." In comparison, the number drug overdose deaths among White, Latinos, and Arab Americans decreased in 2019.

Limitations

The terminology used for drug-related/drug-caused deaths varies slightly from site to site. The data for some sites is labeled as preliminary and may change slightly. Lack of information about a particular drug or drug trend in a site does not indicate that the drug is not available or the trend not apparent. Rather it means that the SCE did not include it in his/her 2020 annual report as one of the most important to summarize for their site. See individual reports for 2020 and prior years for details.

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