Overdose Fatality Review
Annual Report
Cuyahoga County, 2020

March 19, 2021

This publication was supported by grant, 5-NU17CE925005-02-00, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

Contributors

The following individuals and organizations contributed to the development and publication of the Cuyahoga County Overdose Fatality Review Annual Report, 2020:

Cuyahoga County Board of Health
Environmental Public Health: Becky Karns, MPH, Program Manager – Overdose Data to Action

Cuyahoga County Medical Examiner's Office
Manreet Bhullar, MPH, Forensic Epidemiologist

Case Western Reserve University
The Begun Center for Violence Prevention Research and Education: Angela Kavadas, MPH, Geospatial Analyst, Research Associate

Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County
Michaele Smith, Opioid Use Disorder Specialist

Suggested citation
Cuyahoga County Overdose Fatality Review Annual Report, 2020 released March 2021.

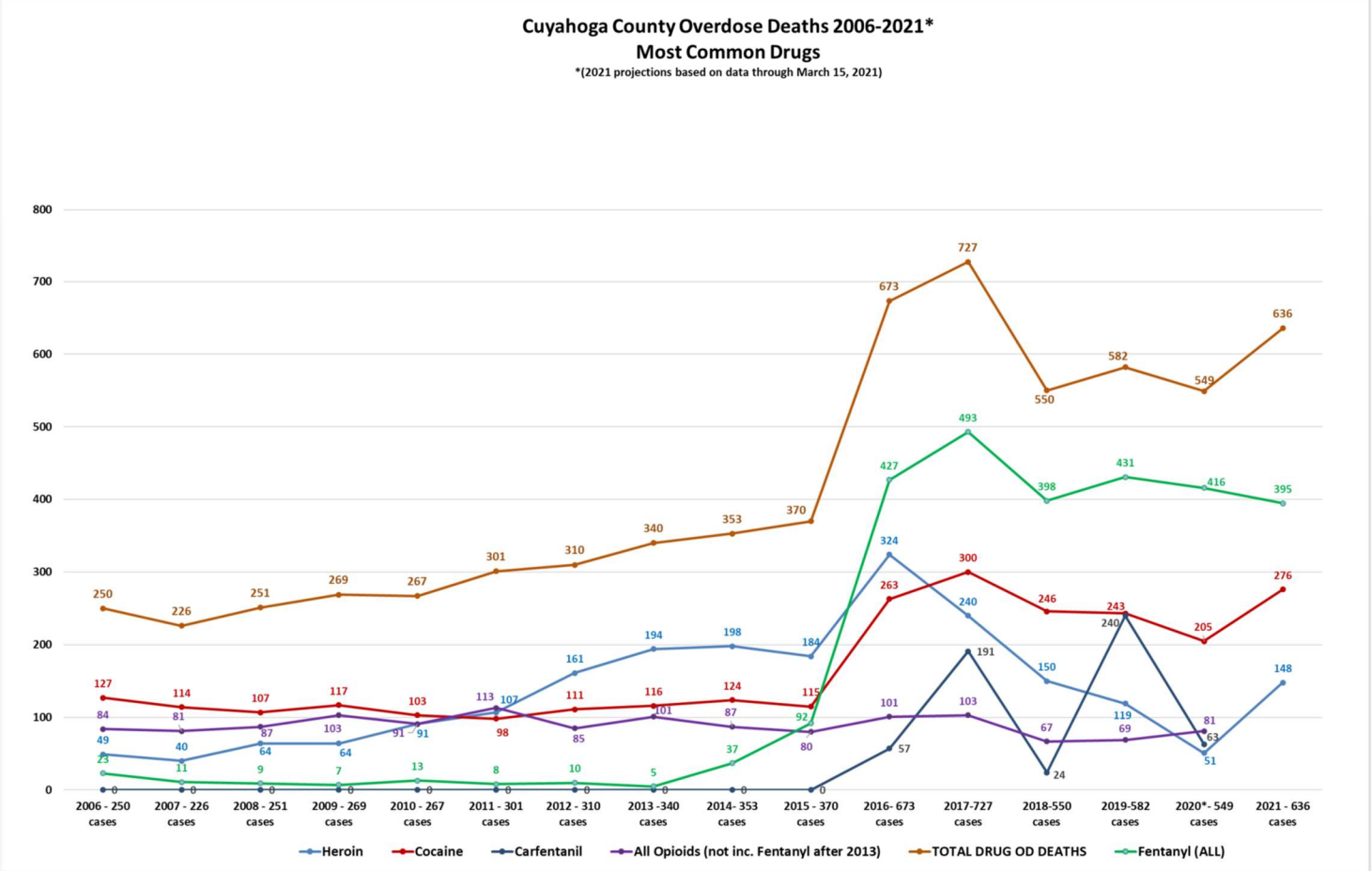
Table of Contents

Cuyahoga County Overdose Fatality Reviews

Background:
Cuyahoga County has been extremely impacted and continues to deal with increased drug related injuries and fatalities since 2007. According to the Cuyahoga County Medical Examiner (CCME), whose fatal drug overdose data are the most readily accessible and widely disseminated in the County, the incidence of drug overdose fatalities has escalated over the past decade, with a rapid increase experienced over the last five years (**Figure 1**). This epidemic has been driven by changing prescribing patterns, drug supplies, purity levels and use patterns. The abuse of three interrelated opioids has fueled this epidemic: (a) prescription opioid pain medication; (b) the illicit drug heroin; and (c) illicitly manufactured fentanyl, its analogs and other novel synthetic opioids used either alone or in combination with other drugs, such as heroin, cocaine and benzodiazepines (Gilson, 2018; MacDonald, 2019; OhioMHAS, 2018a, 2018b).

From 2007 to 2014, the rate of heroin-involved overdose deaths quintupled per 100,000 population from 3.1 to 15.5—far exceeding the 2014 national rate of 3.4 (Gilson, 2015; Rudd et al., 2015). Annual overdose deaths in the County skyrocketed from 370 in 2015 to 673 in 2016 attributed to the increasing availability of fentanyl (Gilson, 2021a). In 2017, the incidence of overdose deaths rose to 727, with the rate of drug overdose deaths per 100,000 population rising to 60.6 (46.4 opioid-related) (Gilson, 2018).

Figure 1



At least 549 victims have died from drug overdoses through December 2020 (preliminary while causes of deaths are finalized). This compares to 582 in 2019; 550 in 2018 and 727 in 2017 (Gilson, 2021a).

Additional changes in the County's drug supply in recent years involve the introduction of carfentanil with 191 deaths in 2017; 24 deaths in 2018; 220 deaths in 2019 and 63 deaths confirmed so far in 2020. Cocaine-fentanyl admixtures are also increasing fatalities. Preliminarily, there were 35 cocaine related deaths that occurred in December 2020 with as many as 25 being mixed with Fentanyl, Heroin or both (Gilson, 2021b).

Cuyahoga County conducts case review meetings as overdose deaths are considered to be preventable. Reviewing deaths allows for patterns of need to be identified and opportunities to connect within specific agencies and across systems to find intervention points. This is a best practice across the state and nation. The OFR process generates information about the decedent and his or her interactions with services and systems (e.g., law enforcement, hospitals, treatment/recovery, etc.). This information is used to craft recommendations to prevent future similar overdose deaths.

OFR Purpose:
The Cuyahoga County Overdose Fatality Review (OFR) meets at the Cuyahoga County Medical Examiner's Office to conduct case review meetings and create recommendations for interventions based on case details that agencies will commit to implementing. Due to COVID-19, these meetings were suspended in April and May 2020 and have been held virtually via Zoom since June 2020.

Current OFR Membership:

- Cuyahoga County Board of Health (CCBH)
- Cuyahoga County Medical Examiner's Office (CCMEO)
- Cleveland Department of Public Health (CDPH)
- Department of Child and Family Services (DCFS)
- Case Western Reserve University, Begun Center (CWRU)
- Cuyahoga County Drug Court
- Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County
- MetroHealth Medical Center
- Westshore Enforcement Bureau Task Force
- Cleveland Division of Police, Heroin Involved Death Investigation (HIDI)
- St. Vincent Charity Medical Center

OFR Process:
The MEO's office looks at trends seen in fatal overdoses and selects exemplar cases that could help to understand a particular trend. Case names are shared with relevant committee members and each member reviews their agency records and provides case information back to the Medical Examiner's Office. The data is combined into a presentation format with standard elements (cause of death, substances involved, prescription use report, etc.). A timeline is then created to reflect where a person interacted with different systems or had major life events. The OFR case review meeting is then held with all committee members in order to go through each case in an organized, systematic way.

Recommendations are then crafted from the reviewed cases ranging from system level opportunities to communication improvements between agencies.

OFR Progress:
Between September 2019 through November 2020, the OFR held 12 meetings and conducted 20 case reviews. Each meeting consisted of reviewing confidentiality agreements, conducting case reviews, creating recommendations and discussing case review definitions for the next meeting.

OFR Findings:
Of the 20 cases reviewed, it was found that:

- Mean age: 41.5 years old
- Most worked in manual labor/construction industries and food/service industries
- All reviewed cases had a history of illicit drug use
- 95% had paraphernalia on scene
- 95% of decedents were using alone
- 90% had law enforcement contact
- 80% had a previous overdose or OD-related ER visit
- 75% were male
- 70% were white
- 70% had a medical diagnosis/medical visit history
- 65% of decedents were single
- 60% had a history of IV drug use
- 60% had previously attended a detox or rehab program
- 55% had others present in the area (but not in same room/location)
- 50% had a high school diploma/GED
- 40% had a period of abstinence
- 40% had mental health history
- 15% were veterans

Family/Next of Kin Interviews

To prevent future overdose deaths, the Overdose Fatality Review (OFR) Committee identified the need to supplement ME and criminal justice records with additional information. Interviews with Next of Kin (NOK) and loved ones of individuals who died of an overdose were initiated in September of 2020 to learn more about the individuals' lives, evaluate the needs of those with substance use disorder, and identify gaps in resources and services in the community. NOK interviewees were identified through the CCMEO through the OFR meetings. Contact information was provided to the ADAMHS' Opioid Use Disorder (OUD) Specialist for follow-up requests for interviews.

Process:

The OUD Specialist attempts to contact individuals identified by the CCMEO's office as NOK or loved one to request an interview. Interviews are typically conducted over the phone and last approximately one hour. A list of interview questions created by the New York City Medical Examiner's Office were used as a template and refined during mock interviews to include open-ended questions that reduce interruptions when interviewees were telling their story. A consent form is signed and a description of the purpose is read to the interviewee prior to starting the interview questions. After each interview is completed, a gift card and thank you letter was mailed to the interviewee.

Interview Questions (as of 9/2020):

1. Tell me about [Decedent's name]
2. Do you know what they were using? (Ever OD before?)
3. Does anyone else in their family have issues with substance use?
4. If so, is that person an Overdose risk? (Provide free Narcan info)
5. IOP Treatment/Detox history? Length of stay?
6. History of MAT? Subx/Nalrex/Methadone
7. Did they have health insurance? What type?
8. Age and type of first drug use?
9. History of any physical, Mental trauma?
   If yes, did they receive any treatment? Type?
10. Where did they grow up? How many siblings? What was childhood like?
11. Education History?
12. What kind of work did they do? Were they employed when they died?
13. History of medical problems, surgery? (medications)
14. History of mental health problems? (medications)
15. Any children? (ages)
    If yes, do they have any issues with substance abuse?
16. Were they in a relationship at time of death?
17. Any history of homelessness?
18. Any history of jail/incarceration? Open Court Cases
19. Were they ever tested for COVID-19 or exhibit symptoms?
20. What local resources were you or your loved one aware of?
    a. Faith Based community?
    b. Signs, Posters?
    c. Peer support?
    d. Hospitals?
21. How do you view the police/criminal justice/legal system?
22. Was there a trigger for the OD/What was happening prior to their death?

23. Suggestions for prevention efforts/ways to prevent future deaths of this nature
24. Other Information

Analysis:
NOK interviews started to take place in year 2 of the OD2A grant (September of 2020). At of the end of December 2020, two interviews were completed by the OUD Specialist.

Common experiences were identified between the two cases:

- Experienced some form of childhood trauma: divorce, lack of father relationship
- Received GEDs
- Experienced economic hardship as adults
- Received assistance (e.g. Medicaid)
- Experienced periods of homelessness
- Had long-term romantic relationships and used substances with partners
- Were parents
- Experienced multiple non-fatal overdoses prior
- Had been incarcerated multiple times for various reasons
- History of treatment for substance use disorder (SUD), often as required by the courts
- Some barriers to treatment included feeling stigmatized, cultural issues, unable to find treatment after an overdose

NOK Suggestions to Prevent Future Fatalities

- Create programs for children of parents with SUDs to reduce future risk
- Ensure drug court is open to everyone with SUD

Emerging Trends

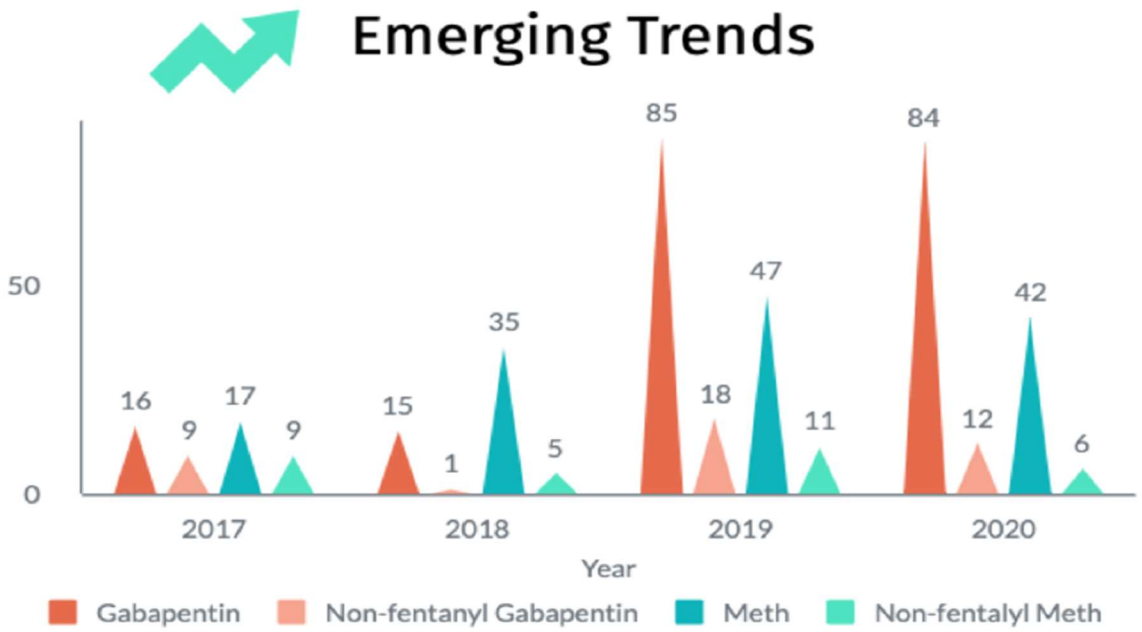
New drugs, combinations and different ways of using substances can change rapidly. The resulting health effects can lead to both non-fatal and fatal overdoses. Another component of the OFR work is to attempt to identify emerging patterns and trends that could lead to increased overdoses. These trends are shared with OD2A stakeholders and community partners on a quarterly basis for awareness and response. There were two new trends of concern identified by the OFR in 2020: Gabapentin use and hotel/motel fatalities.

Gabapentin:

Gabapentin is prescribed as a nerve pain/anticonvulsant medication but has many off-label uses such as pain management and anxiety treatment. The Cuyahoga County ME's Office noticed gabapentin reported among the substances involved in an increasing number of fatal overdoses. A retrospective look at gabapentin-involved overdose fatalities indicates deaths are trending upwards (**Figure 2**). According to studies in needle/syringe exchange programs, gabapentin works to extend the high of fentanyl without the extreme high and low, and may keep users from experiencing withdrawal.

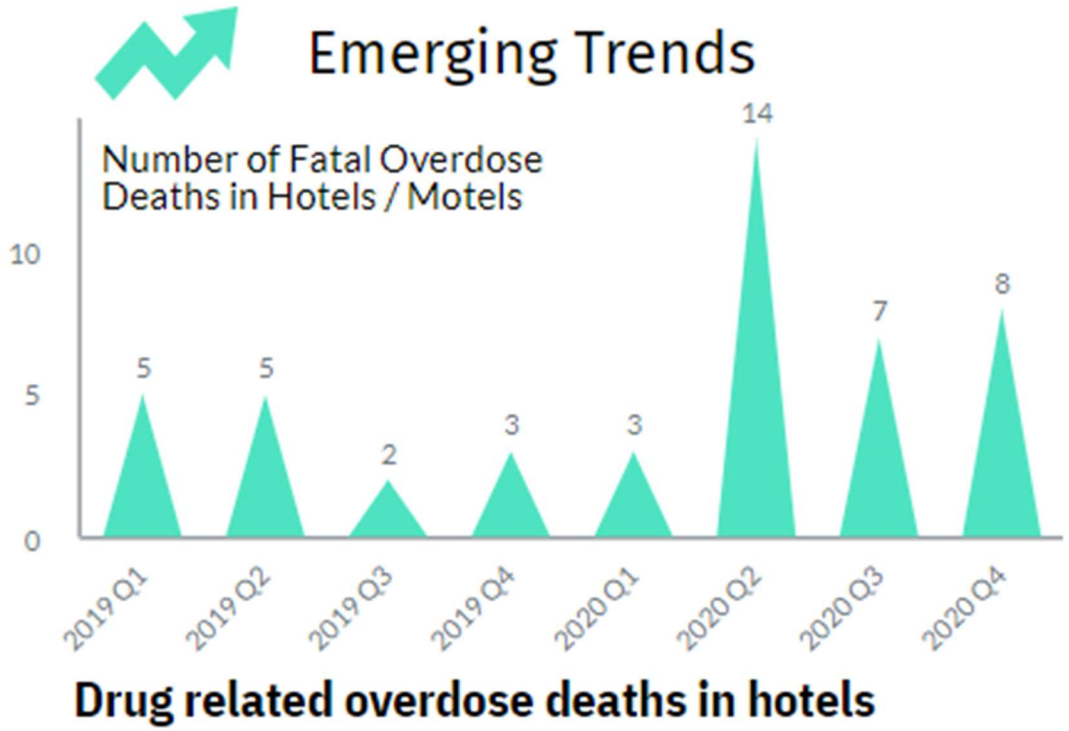
A potential intervention may be a partnership with hospital systems and the Ohio Automated Rx Reporting System (OARRS) to develop a way to notify and train providers on potential misuse of prescription medications and associated detrimental effects that may not be traditionally thought of or may have additional reactions when combined with illicit drugs.

Figure 2



Hotel/motel fatalities:
Cuyahoga County typically sees approximately 14 overdoses per year occurring at hotels/motels. In Quarter 2 of 2020 there were 14 fatalities alone, doubling the yearly average with a total of 32 for the entire year. This significant increase may have occurred due to the COVID-19 Stay at Home order being lifted (in May 2020), along with hotels/motels offering rooms at discounted prices to entice clients. A few hotels/motels with increased fatalities were identified and education on harm reduction, including naloxone information was provided to hotel management by the ProjectDAWN staff and law enforcement with the support of the CCMEO. Developing outreach and continuing to connect with hotels and motels is recommended.

Figure 3



Recommendations

Recommendations resulting from the OFR case reviews are organized into goals and objectives.

Goal 1: Harm Reduction

Objective 1.1 Increase access to fentanyl test strips (FTS) and naloxone

Target: Medication assisted treatment (MAT) providers; Office of Re-Entry; Dept. of Children and Family Service; Domestic Violence Shelters; Homeless Shelters

Objective 1.2 Support recommendations for federal funding to allow for harm reduction purchases (naloxone, fentanyl test strips, syringes, etc.)

Objective 1.3. Implement a Naloxbox program in Cuyahoga County

Goal 2: Medical Prevention/Treatment

Objective 2.1. Refer all overdose incidents in hospitals to peer support programs, Assist hospital EDs with adopting peer support programs

Objective 2.2 Increase number of Medication Assisted Treatment (MAT) providers by supporting access to obtaining a DATA 2000 wavier

Target: Support family physicians obtaining the wavier to further increase access to MAT

Objective 2.3 Enhance SUD treatment for incarcerated populations

Objective 2.4 Educate medical providers on illicit use of prescription medications

Goal 3: Increasing Quick Response Team (QRT) Outreach/Capacity

Objective 3.1. Create connections for law enforcement, fire departments, EMS to provide linkages to QRT

Target: Engage with hospitals to identify high-risk patients (e.g. leaving against medical advice previous overdose-related ED visits)

Goal 4: Education

Objective 4.1 Increase eligibility for drug court participation

Target: Provide educational training to local public defenders, lawyers, etc. regarding opportunities for drug court referrals specifically related to racial equity and inclusion

Target: Understand utilization of the Ohio Board of Pharmacy OARRS risk score by drug court

Objective 4.2 Implement substance abuse education

Target: Mandatory 72- hour DUI education trainings to address the progression of addiction, and polysubstance abuse to participants

Target: Bereavement interventions for youth and young adults in utilizing healthy coping mechanisms after exposures to traumatic experiences

Target: Business community including food and other service industries, retail, building trades industries. Provide education regarding financial impacts of drug use on properties, increased risk of SUD among employees and implement methods to provide drug-free workplace criteria

Target: Create partnerships with Ohio Workers Compensation

Objective 4.3 Use innovative communication to increase public awareness regarding existing and emerging substances

Target: Fentanyl adulterating all drug supplies; Gabapentin increase in prescribing, illicit use

Goal 5: Building System Capacities

Objective 5.1 Build a timely communication system to provide notification of non-fatal overdose events

Target: EMS; law enforcement; drug court (including pre-arraignment); parole officers, treatment centers

Objective 5.2 Ensure uniform practices and policies upon release from incarceration at both private and public facilities regarding resources, naloxone/ fentanyl test strips distribution

Target: Office of Re-entry; MetroHealth EXam Program

Goal 6: Community Outreach

Objective 6.1 Provide outreach to community agencies regarding relapse and recovery plan review, wrap around services identification and support group meeting accessibility

Target: Sober living facilities; detoxification centers; rehabilitation centers

Objective 6.2 Continue to provide outreach/education and support partnerships with Project DAWN to the business sector to increase staff access to naloxone (e.g. on site naloxone kits)

Target: Hotels/motels; food service industry

Objective 6.3 Engage with community agencies to provide harm reduction materials, treatment location information and other substance use resources

Target: Medication assisted treatment (MAT) providers; Office of Re-Entry; Dept. of Children and Family Service; Domestic Violence Shelters; Homeless Shelters (e.g. create pocket guide/web app for utilization)

Goal 7: Surveillance and Dissemination

Objective 7.1 Routinely disseminate information from the OFR

Target: Local Meetings (HOTF, CCOTF); State partner meetings (OIPP)

Objective 7.2 Hold a quarterly stakeholder meeting to review recommendations and call for action

Objective 7.3 Work to find and incorporate sources of data (e.g. drug testing companies)

Successes

During 2020, stakeholders involved with the OFR were able to make important connections and offer new trainings including:

- The Cuyahoga County Department of Children and Family Services worked with Project DAWN to provide information to families on how to access naloxone kits.

- The Cuyahoga County Medical Examiner's Office worked with Project DAWN to provide outreach to a few hotels/motels experiencing high numbers of fatal and non-fatal overdoses to provide ProjectDAWN education and naloxone kits.

- The Cuyahoga County Medical Examiner's Office made a recommendation to local police chiefs that staff be trained in the Drug Endangered Children education series through the National Alliance for Drug Endangered Children. This training is designed to help law enforcement officers develop an awareness of the impact of using a multidisciplinary approach to meet the needs of impacted children.

- The Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County acquired funding through the Ohio Department of Health and coordinated an education series with two trainings, "Opioid overdoses are on the rise; African Americans in drug court are not" and "Equity and Inclusion Toolkit for Adult Drug Court Best Practice Standards." These trainings were offered to attorneys, judges and others involved in the drug court process to inform them about bias in referrals to drug court and solutions to create a more equitable process.

Next Steps

An OFR Stakeholder group was developed in January of 2021 (93 people registered to participate). This group was invited to learn about the OFR case review process, understand the aggregate level data, and review recommendations. Workgroups are in the process of being formed by each OFR goal in order to move recommendations forward to implementation.

The OUD specialist at the ADAMHS Board continues to conduct family interview with next of kin.

The OFR case review team continues to meet to review two to three exemplar cases and identify missed intervention opportunities and trends.

References

Gilson, T. P. (2015). *CCME Data Brief—April 2015.* Cleveland, OH: Cuyahoga County Medical Examiner's Office.

Gilson, T. P. (2018). *Preliminary drug deaths report*. Cleveland, OH: Cuyahoga County Medical Examiner's Office.

Gilson, T. P. (2019). *Heroin/fentanyl/cocaine related deaths in Cuyahoga County—2019 February update.* Cleveland, OH: Cuyahoga County Medical Examiner's Office.

Gilson, T. P. (2021a). *Heroin/fentanyl/cocaine related deaths in Cuyahoga County—2020 December Update (January 21, 2021*). Cleveland, OH: Cuyahoga County Medical Examiner's Office.

Gilson, T. P. (2021b). *Heroin/fentanyl/cocaine related deaths in Cuyahoga County—2021 February Update (March 15, 2021*). Cleveland, OH: Cuyahoga County Medical Examiner's Office.

MacDonald, E. (2019). Why cocaine is setting off alarm bells for federal and state drug enforcers in Northeast Ohio. *Cleveland.com.* Retrieved from https://www.cleveland.com

Ohio Department of Mental Health and Addiction Services (OhioMHAS) (2018a). Ohio substance abuse monitoring network: Drug abuse trends in the Cleveland region: June 2017-January 2018. Columbus, OH: State of Ohio.

Ohio Department of Mental Health and Addiction Services (OhioMHAS) (2018b). Ohio substance abuse monitoring network: Increase in fentanyl-cut drugs: March 2018. Columbus, OH: State of Ohio.

Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, R. M. (2015). Increases in drug and opioid overdose deaths—United States, 2000-2014. *Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report,* 64(50), 1378-1382. Retrieved from https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?s_cid=mm6450a3_w