

# Overdose Fatality Report (CCOFR) Cuyahoga County 2021 Annual Report

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## Cuyahoga County Overdose Fatality Review Workgroup<sup>1</sup>

Under the leadership of Dr. Thomas Gilson, the Cuyahoga County Overdose Fatality Review (CCOFR) is co-coordinated between the Cuyahoga County Medical Examiner's Office (CCMEO) and the Cuyahoga County Board of Health. Beginning in 2012, the CCOFR reviewed all fatal overdoses occurring in Cuyahoga County, Ohio. However, due to the increase in drug-overdose fatalities, a transition was made in 2019 to employ a selective overdose fatality review that examines exemplar cases.

The **purpose** of the Cuyahoga County Overdose Fatality Review (CCOFR) is to meet bimonthly to review decedent cases in order to identify missed intervention opportunities and create written recommendations that agencies will commit to implementing.

The **goal** is to use in-depth, data-driven case reviews of system touch points to facilitate the implementation of public health intervention and policy recommendations in order to reduce future fatalities while respecting and honoring the lives of the individuals involved in case reviews and strive to learn from those who lost their lives to overdose.

**Case Selection:** Cases are chosen for review based on information available to the CCMEC using autopsy and medico-legal death investigations. Consideration is given to reviewing emerging or reoccurring trends in fatalities noted at the CCMEC or by other agencies who are on the committee.

### **Trend/Data Analysis:**

Trends reviewed as a part of CCOFR are then compared to all overdose decedent populations to understand the scope.

### **Case Review Meeting:**

CCOFR aims to review 3 cases bimonthly. A presentation and timeline are created for each decedent that shows interaction points with different systems or major life events. Discussion is focused on possible intervention points and the development of recommendations.

Data sources typically include: Department of Child and Family Service records, Drug Addiction and Mental Health Service records, Ohio's Automated Rx Reporting System, law enforcement records, decedent medical history and next of kin interviews.



## CCOFR Representation

Representatives from participating agencies agree to the following expectations:

- Obtain case information from team leadership
- Query respective agency data systems, paper files, etc.
- Relay information to the team, either before or during the team meeting
- Attend meetings, share agency-specific protocols, provide input on potential prevention efforts
- Identify ways in which the representative can make changes in to their agency to better serve people at risk for overdose deaths
- Identify areas for improved coordination with other agencies
- Maintain confidentiality of the team’s proceedings
- Commit to implementing recommendations within the agency’s purview



Thirteen different agencies comprise the CCOFR, including law enforcement, local hospitals, mental health agencies, and public health.

Current representation for the CCOFR includes the following agencies:

- [Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County \(ADAMHSBCC\)](#)
- [Case Western Reserve University, Mandel School for Applied Social Sciences, Begun Center for Violence Prevention and Research Education \(CWRU\)](#)
- [Cleveland Division of Police Heroin Involved Death Investigation Team \(HIDI\)](#)
- [Cuyahoga County Board of Health \(CCBH\)](#)
- [Cuyahoga County Department of Child and Family Services \(DCFS\)](#)
- [Cuyahoga County Drug Court](#)
- [Cuyahoga County Medical Examiner’s Office \(CCMEO\)](#)
- [MetroHealth Medical Center, Office of Opioid Safety, Project DAWN \(MH\)](#)
- [Parma Detention Center](#)
- [St. Vincent Charity Medical Center \(SVCMC\)](#)
- [The Woodrow Project](#)
- [VA Northeast Ohio Health Care System \(VANEOMS\) and Louis Stokes Cleveland VA Medical Center](#)
- [Westshore Enforcement Bureau Task Force \(WEB\)](#)

## CCOFR Data Findings<sup>2</sup>

### Cuyahoga County Overdose Fatalities

In 2020, there were 553 overdose fatalities. In 2021 Cuyahoga County saw a 26% increase in drug overdose deaths (698 drug overdose deaths total). This number is a preliminary count as all deaths have not been ruled by the CCMEO. Deaths involving fentanyl remained high at 542 deaths.

**TABLE 1**  
Fatal Overdoses\*

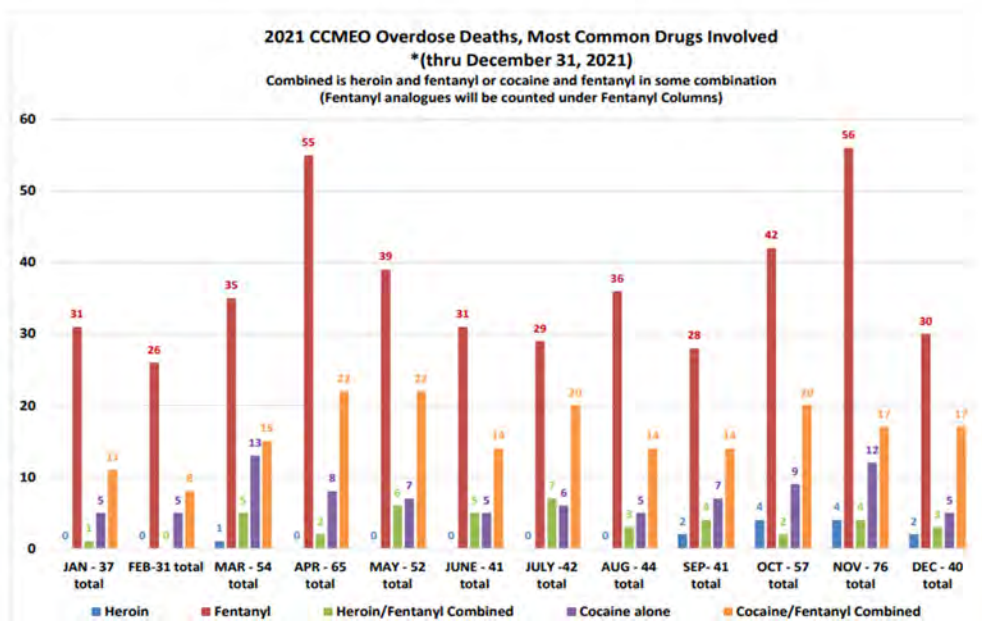
Type of death	Cases
Total unintentional drug overdose deaths	698
Total unintentional drug overdose deaths involving opioids	633
Total number of unintentional deaths reviewed	17
Total number of unintentional deaths involving opioids reviewed	17
Total number of unintentional deaths involving opioids not reviewed	616

\*2021 deaths are preliminary as of 3/11/22 <https://cuyahogacounty.us/medical-examiner/resources/overdose-statistics>

#### Most Common Drugs:

In 2021, deaths due to fentanyl remained high throughout the year, with most deaths occurring due to a combination of fentanyl and/or a fentanyl analog with other drugs

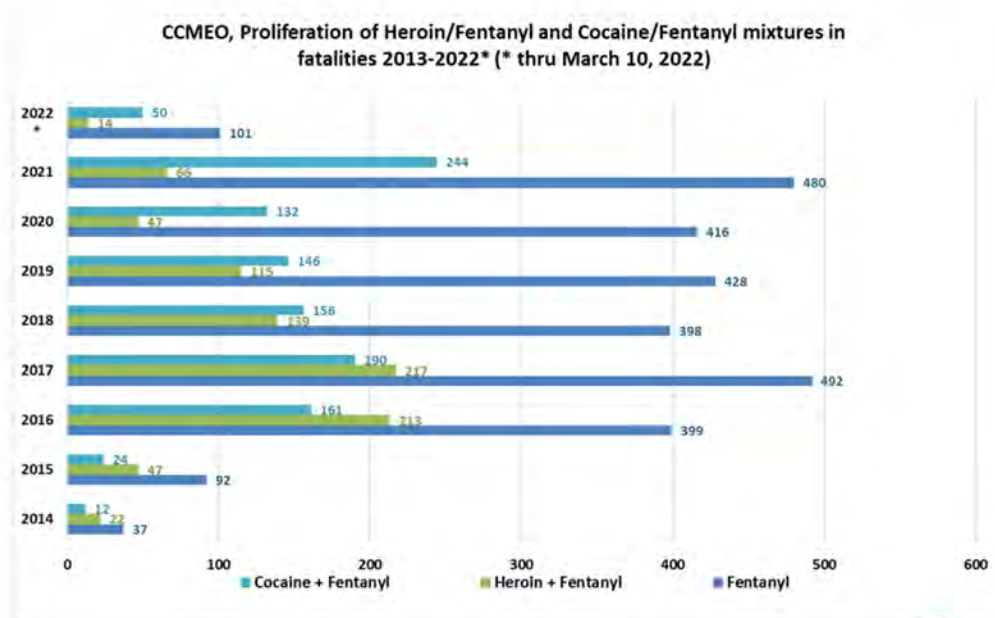
**CHART 1**



Source: Cuyahoga County Medical Examiner's Office revised 3-10-22



## CHART 2



Source: Cuyahoga County Medical Examiner's Office revised 3-10-22



<https://cuyahogacounty.us/medical-examiner/resources/overdose-statistics>

### Emerging Trends<sup>3</sup>

Recently, several synthetic opioid substances called benzimidazoles (or nitazene compounds) have started being trafficked and abused due to their opioid-like effects. As compared to morphine, these chemicals can be anywhere from 5 to 200 times more potent. These substances are often being produced from unregulated sources making it a health and safety risk for users.



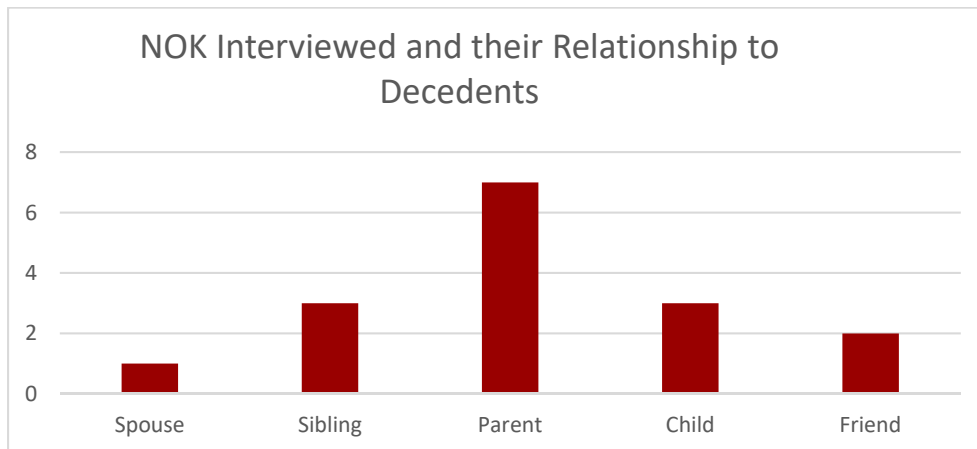
In 2021 (preliminary as of 4/5/22), there were 49 cases involving benzimidazole-opioids compared to 2 cases in 2020. These 49 cases included: 1 overdose death involving etodesnitazene, 28 involving isotonitazene, and 20 involving metonitazene. In a majority of the cases involving nitazene compounds, fentanyl was also present.

## Next of Kin Interviews<sup>4</sup>

The Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHSBCC) is providing support and assistance to the Cuyahoga County Medical Examiner's Office (CCMEO) in overdose fatality reviews. The OUD Specialist at the ADAMHSBCC receives the names of the decedent's next-of-kin (NOK) and, when possible conducts interviews prior to the CCOFR for those consenting to be interviewed. The OUD Specialist presents information about the decedent to the family during the review.

During a one-year time period (9/1/20-8/31/21), 79 individuals were approached for interviews, 20 consented, and 16 were completed; a success rate just over 20%. All interviews were conducted by phone and participants received a \$40.00 gift card. The majority of NOK interviewed were mothers of the decedents.

**CHART 3**



## Interview Themes

Decedents' NOK were asked a series of questions by the OUD Specialist and their responses to the questions revealed a number of common themes. Interview questions probed the decedents' substance use history (including treatment), level of education, childhood experiences, education, mental health and medical histories, relationships at time of death, justice system involvement, and history of homelessness. All of the information provided by the decedents' NOK, is to the best of their knowledge. For some decedents, multiple family members were interviewed.

### Theme 1: Prior Involvement with the Criminal Justice System

- Eight decedents were incarcerated at some point in their life.
- One decedent had multiple arrests as a juvenile.
- One decedent failed a drug test while on parole and feared going back to jail during COVID-19, this occurred shortly before the fatal overdose.

## Theme 2: Relationships and Adverse Childhood Experiences(ACES)

- Multiple decedents were abused as children, including one who was shot by his father, and others witnessed partner violence growing up.
- Two decedents were adopted. At least four decedents had a familial history of substance use, mainly alcoholism. One was encouraged by their mother to sell drugs.
- While some decedents lacked a support system, others had a strong support system.
- Many decedents had children of their own, including several who were estranged from their children or did not meet their children until later in life. One decedent was unable to have children, another became pregnant for the first time as a teenager, and still others placed their children up for adoption.
- One decedent was described as a “functional addict” whose partner died of an overdose shortly before the decedent.
- Two decedents were homeless.



## Theme 3: Education

- Five decedents did not complete high school and two graduated from high school.
- Two decedents earned GEDs later in life.
- Two decedents had college degrees.

## Theme 4: Substance Use and Recovery History

- The majority of the decedents had multiple attempts at recovery and approximately half of them experienced a nonfatal overdose prior to death.
- Three decedents were prescribed opiates for pain or post-surgery, including chronic knee pain and a back injury.
- At least four decedents were prescribed medication assisted treatment (MAT) and two of them were selling Suboxone.
- Decedents began using opioids at different stages of their lives, some as early as high school. One decedent had no history of opioid use prior to overdose.
- Multiple decedents' drug of choice was cocaine/crack cocaine.
- Many NOK expressed concerns around the treatment and recovery the decedents received. One decedent received no recovery assistance while incarcerated. For some decedents treatment agencies made no efforts to engage the family in their loved ones' recovery. Many NOK felt rehabilitation services were not long enough, and one decedent had a difficult time finding local treatment services.

## Theme 5: Physical and Mental Health

- Three decedents were diagnosed with bipolar disorder, two with ADHD, three experienced symptoms of depression and anxiety, and for some, mental health issues went undiagnosed.
- Several decedents had prescriptions for lithium, Prozac, and Ritalin.
- One decedent was a military veteran diagnosed with PTSD.
- Three decedents were either diagnosed with suicidal ideation and/or attempted suicide. One had a hospital admission for a psychotic episode.
- Other health issues included cigarette smoking, high blood pressure, diabetes, and asthma.
- COVID-19 had a negative impact for many decedents' health and recovery and one decedent was hospitalized for COVID-19.





## Ohio Automated Prescription Reporting System (OARRS)<sup>5</sup>

OARRS data is often reviewed during the CCOFR to understand a particular decedents' prescription history and to obtain their OARRS overdose risk score. Surveillance is also conducted on the total prescriptions for Cuyahoga County and typically reported on the Cuyahoga County Overdose Data Dashboard. There has been a 5.5% decrease in opioid doses prescribed from Q1 and Q4 2021. Prescriptions of gabapentin also decreased by 7.5% in 2021.

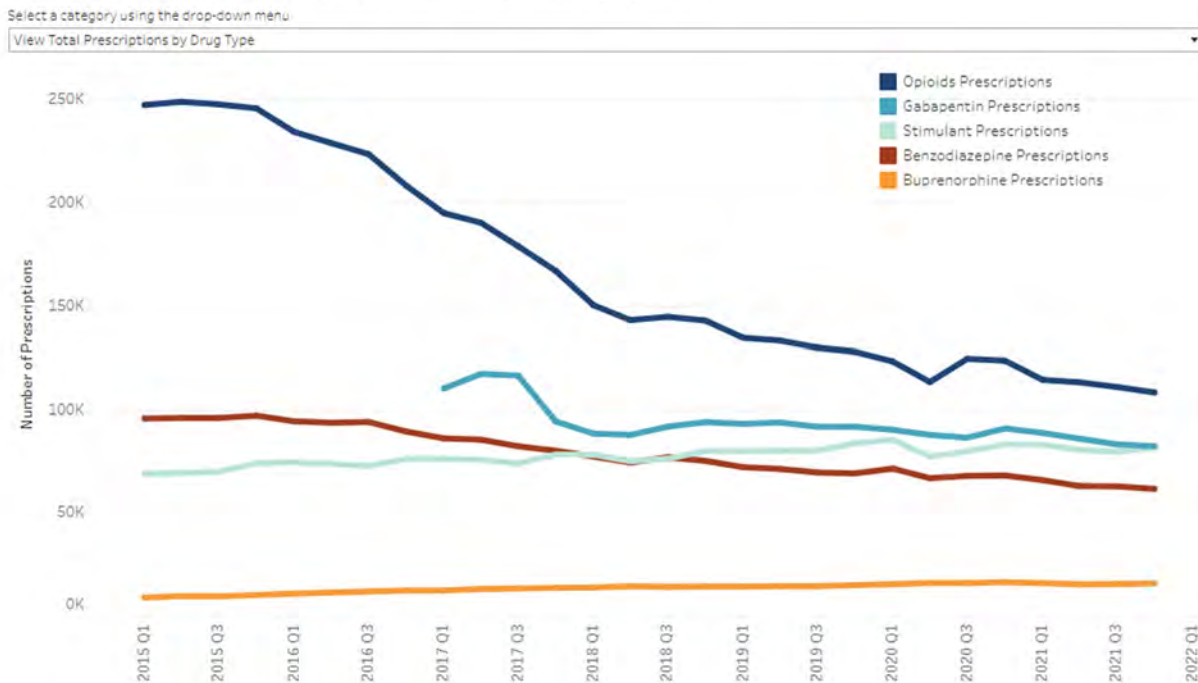
**TABLE 2**

Total Prescriptions by Drug Type (2021)	Q1	Q2	Q3	Q4
Opioids	114,260	113,040	110,810	108,150
Benzodiazepines	65,590	62,720	62,580	61,360
Stimulants	82,800	80,200	79,430	81,240
Buprenorphine	15,630	15,040	15,170	15,480
Gabapentin	88,490	85,750	82,970	82,060

**CHART 4**

### Prescription Drug Monitoring

View prescription drug data for Cuyahoga County by: 1) Total Prescriptions, 2) Total Patients Prescribed a Drug Type, or 3) Total Doses of a Drug Type (Opioids, Benzodiazepine, \*Gabapentin, Buprenorphine and Stimulants). \*Gabapentin reporting began in 2017



For a more detailed inquiry of data from the Ohio Automated Rx Reporting System (OARRS), please visit the PDMP Interactive Data Tool where you can review prescription drug data by county and zip code: <https://www.ohiopmp.gov/stats.aspx>

<sup>6</sup><https://www.ccbh.net/overdose-data-dashboard/>

## Drug-Related Emergency Department Visits<sup>7</sup>

Access to nonfatal overdose data is a necessity to better understand the true burden of drug-related overdoses in Cuyahoga County. EpiCenter data is used to better understand nonfatal drug injuries by tracking and classifying Emergency Department (ED) visits due to drug-related injuries (including opioids, heroin and stimulants). Annually, these visits account for approximately 30% of all ED visits due to drugs.

**TABLE 3**

ED visits by month (2021)	Number of ED visits due to drugs (n)	Number of ED visits due to specific drug* (n)	Percentage of ED visits due to specific drugs per month (%)
January	316	109	8.4
February	334	102	7.9
March	383	131	10.2
April	336	112	8.7
May	409	123	9.5
June	322	96	7.4
July	376	120	9.3
August	383	105	8.1
September	356	93	7.2
October	356	111	8.6
November	309	96	7.4
December	308	92	7.7
<b>Total</b>	<b>4188</b>	<b>1290</b>	<b>30.8</b>

\*Specific Drug – opioid, heroin and/or stimulant classifier

Adults aged 25-49 years of age accounted for the majority of the ED visits related to drugs in 2021.

**Table 4**

ED visits by age group (2021)	Number of ED visits due to drugs by age (n)	Percentage of ED visits due to drugs by age (%)	Number of ED visits due to specific drug* by age (n)	% of ED visits due to specific drugs by age (%)
Under 12 years	197	4.7	<5	*
12-17 years	234	5.6	<5	*
18-24 years	492	11.7	111	8.6
25-34 years	1051	25.1	410	31.8
35-49 years	1097	26.2	429	33.0
50-64 years	699	16.7	219	17.0
65 years and over	418	10.0	108	8.4

\*Specific Drug – opioid, heroin and/or stimulant classifier

Males were seen in the ED at twice the rates of females for all drug-related visits in 2021.

Table 5

ED visits by gender (2021)	Number of ED visits due to drugs by gender (n)	Percentage of ED visits due to drugs by gender (%)	Number of ED visits due to specific drug* by gender (n)	% of ED visits due to specific drugs by gender (%)
Male	2369	56.6	896	69.5
Female	2814	43.3	393	30.5
Unknown	5	0.1	1	0
Total	4188	100	1290	100

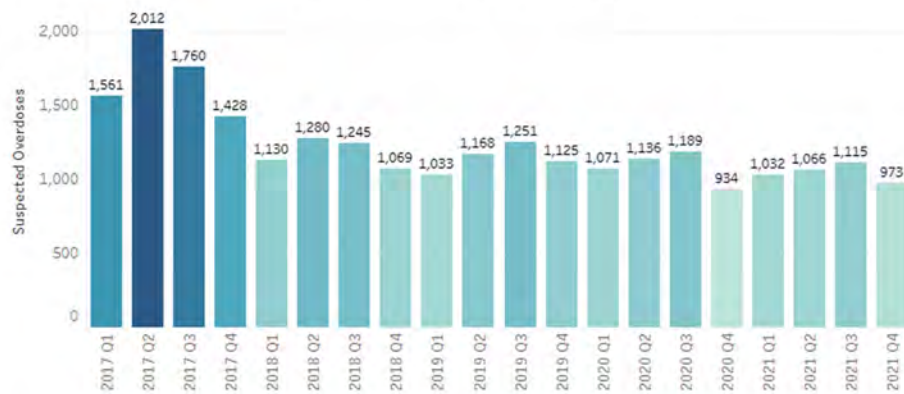
\*Specific Drug – opioid, heroin and/or stimulant classifier

CHART 6

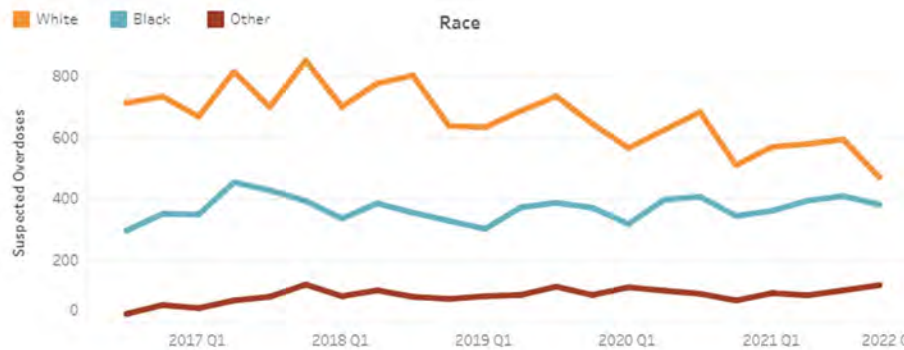
### Emergency Department Visits

CLICK on a Quarter to Filter the Entire Page.

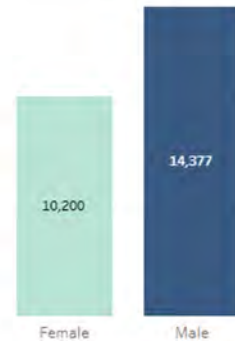
All Suspected Drug Overdoses (including opioids) for Cuyahoga County Emergency Departments



#### Age Groups



#### Gender



<sup>6</sup> <https://www.ccbh.net/overdose-data-dashboard/>



## Recommendations of the Cuyahoga County Overdose Fatality Review Committee<sup>1</sup>

January – December 2021

The recommendations of the CCOFR committee are based upon case reviews of fatal overdose deaths in Cuyahoga County. The recommendations are not meant to be exhaustive nor do they encompass all efforts that are being done in Cuyahoga County for the prevention and intervention of overdose-related deaths.

Highlights of some stakeholder activities are provided as they relate to OFR recommendations. These highlights do not include all activities being done in our community towards reducing both non-fatal and fatal overdoses. Activities conducted by stakeholders may include various types and sources of funding.

### Goal 1: Harm Reduction

Target audience: Medication-assisted treatment (MAT) providers; Office of Re-Entry; Dept. of Children and Family Service (DCFS); domestic violence shelters; homeless shelters; business sector (food service, hotel/motel, trades industry, retail), etc.

#### *Objective 1.1 Increase knowledge and awareness of harm reduction efforts*

Activity 1.1.1: Support outreach/grassroots efforts for making fentanyl test strip (FTS) and naloxone available within local communities and targeted hot spots

Activity 1.1.2: Advocate training for DCFS staff regarding naloxone distribution to families in need

Activity 1.1.3: Advocate naloxone training for kinship families through Project DAWN

#### *Objective 1.2 Increase availability of harm reduction tools (naloxone, fentanyl test strips, syringes, naloxbox, etc.)*

Activity 1.2.1: Support access to fentanyl test strips to encourage testing drug supplies for fentanyl and fentanyl analogs

Activity 1.2.2: Support wide-scale distribution of harm reduction materials

#### *Objective 1.3 Support the Implementation of the Naloxbox program in Cuyahoga County*

Activity 1.3.1: Advocate for installation of naloxboxes in various locations (e.g. Project DAWN service entities)

Activity 1.3.2: Support facilitation of training on the use of the naloxboxes

Highlight of 2021: In 2021, Alcohol Drug Addiction and Mental Health Services Board of Cuyahoga County (ADAMHSCC) provided community outreach and grassroots efforts to distribute fentanyl test strips. ADAMHSCC also worked with MetroHealth's Project DAWN program to determine and install over 40 naloxboxes throughout various locations in Cuyahoga County.

#### Highlight of 2022:

- A small workgroup is developing a media campaign around harm reduction and trying to reduce stigma related to harm reduction and increase awareness of drug supply toxicity and dangers of using alone.
- A workgroup comprised of representation from MetroHealth, The Centers, and CCBH collaborated to create an overview of harm reduction for communities and presented the information at city managers and mayors meeting in Feb. 2022. The document is posted on the CCBH data dashboard page. <https://www.ccbh.net/overdose-data-dashboard/>

#### **Goal 2: Medical Prevention and Treatment**

Target audience: Qualified practitioners including physicians, Nurse Practitioners (NPs), Physician Assistants (PAs), Clinical Nurse Specialists (CNSs), Certified Registered Nurse Anesthetists (CRNAs) and Certified Nurse-Midwives (CNMs)

*Objective 2.1 Increase the number of Medication-Assisted Treatment (MAT) providers*

Activity 2.1.1: Promote access to DATA 2000 waiver

*Objective 2.2 Support education and training of medical providers on the illicit use of prescription medications*

Activity 2.2.1 Focus education efforts on the illicit use of prescription medications

Activity 2.2.2 Focus education efforts on appropriate prescribing with chronic pain and co-occurring SUD or co-occurring mental health diagnosis

Highlight of 2021: The CCMEO conducted a gabapentin information session at the Northeast Ohio Hospital Consortium and Case Western Reserve University's Physician Assistant program. CCMEO also presented gabapentin information at the National Association of Medical Examiners Annual Meeting in October 2021.

#### **Goal 3: Linkage to Care**

Target audience: Hospitals, peer support programs, diversion center, quick response teams (QRT); law enforcement, fire departments, EMS, specialty court dockets

*Objective 3.1 Advocate for increased availability for peer support programs to provide outreach to high-risk populations (e.g. previous nonfatal overdose, diagnosed with SUD, or at risk for substance use disorder)*

Activity 3.1.1: Encourage hospital emergency departments to adopt 24/7 peer support programs

Activity 3.1.2: Encourage specialty court dockets to adopt peer support programs

*Objective 3.2 Encourage collaborations among first responders and treatment providers to improve linkages to treatment for individuals experiencing a nonfatal overdose*

Activity 3.2.1: Support utilization of quick response teams (QRT) outreach/capacity

Activity 3.2.2: Support utilization of the Cuyahoga County Diversion Center

*Objective 3.3 Support linkage to MAT and recovery housing/sober living appropriate to a person's needs*

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## Highlights of 2021:

- A local Quick Response Teams (QRT) was able to connect 60 individuals (out of 225) who experienced a non-fatal overdose with treatment using law enforcement incident reports.
- Project SOAR (Supporting Opioid Addiction Recovery) has expanded to all Cleveland Clinic Emergency Departments through a partnership with Thrive to provide 24/7 access to peer support services. This collaboration was supported by ADMAHSCC utilizing Opioid Settlement Funding for Cuyahoga County.

## Goal 4: Education

Target: General public, local public defenders, judges, lawyers, OVI intervention programs, youth bereavement programs, Ohio Workers Compensation, the business sector (food service, hotel/motel, trades industry, retail), etc.

### *Objective 4.1 Advocate for increased eligibility for drug court*

Activity 4.1.1: Support continuing education for public defenders, lawyers, and judges on individuals appropriate for drug court

### *Objective 4.2 Support the enhancement of substance use education and prevention initiatives including the progression of addiction, polysubstance use, addressing adverse childhood experiences*

Activity 4.2.1: Increase understanding among the business sector (food service, hotel/motel, trades industry, retail) on the impact substance use can have on employees, patrons and property; promote the implementation of Ohio's BWC drug-free safety program

Activity 4.2.2: Promote bereavement interventions for youth and young adults in utilizing healthy coping mechanisms after exposure to traumatic experiences

### *Objective 4.3 Promote appropriate and targeted communication efforts to increase public awareness regarding existing and emerging substances*

Activity 4.3.1: Support media and awareness campaigns on emerging trends (e.g. fentanyl adulterating all drug supplies; gabapentin increase in prescribing, illicit use, etc.)

## Goal 5: Building System Capacities

Target audience: EMS; law enforcement; specialty court dockets (including pre-arraignment); parole officers, treatment centers; Office of Re-entry; MetroHealth EXam Program, Cuyahoga County Corrections Center, municipality jails, Grafton Correctional institution, Cuyahoga County Juvenile Detention Center

### *Objective 5.1 Enhance SUD treatment for incarcerated populations*

### *Objective 5.2 Promote timely communication systems to notify appropriate agencies of non-fatal overdose events*

### *Objective 5.3 Advocate for uniform practices and policies for providing individuals upon release from incarceration at both private and public facilities with treatment resources and harm reduction materials*

## Goal 6: Community Outreach

Target audience: Sober living facilities (certified and non-certified); detoxification centers; rehabilitation centers, shelters

*Objective 6.1 Promote outreach to community agencies regarding the importance of relapse and recovery plan review, wrap-around services, and accessibility for support group meetings*

*Objective 6.2 Support community outreach to vulnerable populations (including homeless populations)*

Activity 6.2.1 Provide resources and information in applicable locations

## Goal 7: Surveillance and Dissemination

Target audience: OFR, OFR Stakeholder Meeting, local meetings (HOTF, CCOTF); Ohio Injury Prevention Partnership

*Objective 7.1 Routinely disseminate trends reviewed from the OFR along with supporting data*

*Objective 7.2 Convene quarterly stakeholder meetings to review recommendations and call for action*

*Objective 7.3 Enhance the case review process by identifying new/relevant OFR review participants and data sources (e.g. hospital partners, peer supporters, law enforcement partners/data)*

Activity 7.3.1 Support data sharing between Veterans Affairs and the CCMEQ

Highlight of 2021: The CCOFR participated in a mentor site visit with Ocean County OFR that was facilitated by the Institute for Intergovernmental Research (IIR). The CCOFR was able to observe Ocean County's process and speak with a behavioral health treatment provider to better understand data sharing. Ocean County also observed a CCOFR meeting and provided feedback for improvement.





## CCOFR Stakeholder Meetings

The CCOFR holds quarterly stakeholder meetings with additional interested partners in order to present relevant trends and recommendations that agencies can utilize in their respective line of work. The CCOFR meeting typically draws attendance from over 40 agencies. Meetings consist of reviewing cases at a de-identified aggregate level; reviewing current trends or areas of concern; reviewing recommendations; and asking for assistance in smaller workgroups to implement recommendations.

## Next Steps

The CCOFR continues to monitor membership to ensure richer representation from various agencies. New members are either invited to a particular meeting or be asked to become a permanent member of the review committee (as appropriate). The CCOFR plans to review ORC and OAC guidance in 2022 and create by-laws and structure documents.

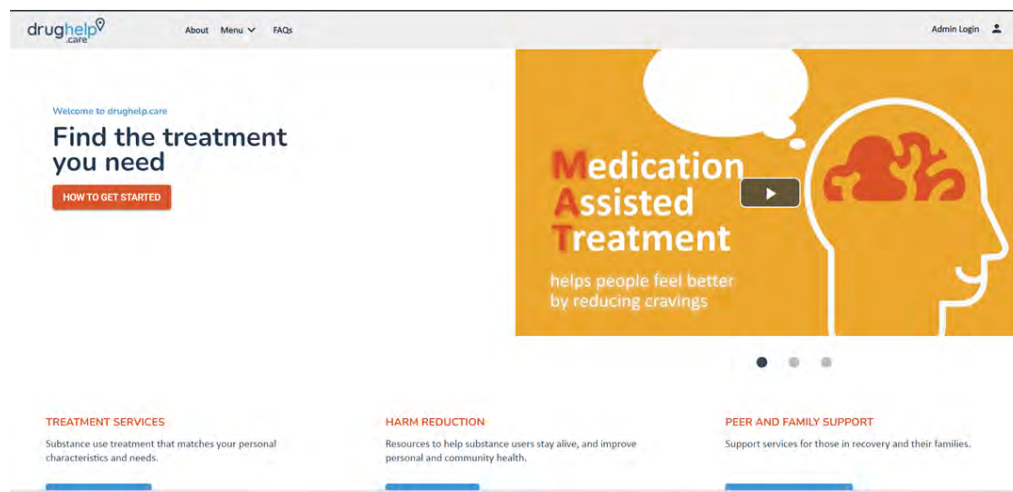
In 2021, the CCOFR received a “Promising Practice” award for its overdose fatality review work from the Ohio Department of Health’s Ohio Injury Prevention Partnership’s Overdose Prevention Network.



## Resources

A comprehensive treatment and harm reduction website was created by Cleveland State University. This website contains real-time data on treatment centers with open beds, harm reduction resource locations, and locations to obtain peer and family support.

<https://drughelp.care/auth/home>



## Data Sources

1. Cuyahoga County Board of Health. Overdose Fatality Review.  
<https://www.ccbh.net/overdose-fatality-review/>
2. Cuyahoga County Medical Examiner's Office. Heroin/Fentanyl/Cocaine Related Deaths in Cuyahoga County. January-February 2022 Update. Obtained on 3/11/22 at  
<https://cuyahogacounty.us/medical-examiner/resources/overdose-statistics>
3. Drug Enforcement Agency. Diversion Control Division. Drug and Chemical Evaluation Section. Benzimidazole-Opioids. June 2021  
[https://www.deadiversion.usdoj.gov/drug\\_chem\\_info/benzimidazole-opioids.pdf](https://www.deadiversion.usdoj.gov/drug_chem_info/benzimidazole-opioids.pdf)
4. Case Western Reserve University. Begun Center for Violence Prevention Research and Education. Cuyahoga County Overdose Data to Action Initiative (OD2A). Year Two Comprehensive Evaluation Report.
5. Ohio Department of Health. Ohio Automated Prescription Reporting System (OARRS).  
<https://www.ohiopmp.gov/stats.aspx> (3/11/2022)
6. Cuyahoga County Board of Health. Overdose Data Dashboard.  
<https://www.ccbh.net/overdose-data-dashboard/>
7. Cuyahoga County Board of Health using EpiCenter, a web-based surveillance tool administered through the Ohio Department of Health. Data Notes: Data pulled using EpiCenter Classifiers: Suspected Drug Overdose, suspected overdose involving any opioid, suspected overdose involving heroin

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