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Author(s):	**Daniel J. Flannery, Ph.D.**
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Final Research Overview Report

Project Title	Cuyahoga County, Ohio, Heroin and Crime Initiative: Informing the Investigation and Prosecution of Heroin-Related Overdose
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Project Director/ Principal Investigator	Daniel J. Flannery, PhD Dr. Semi J and Ruth Begun Professor Director, Begun Center for Violence Prevention Research and Education Jack, Joseph and Morton Mandel School of Applied Social Sciences Professor of Psychiatry and Pediatrics University Hospitals Cleveland Medical Center
Contact Information	
Address	10900 Euclid Avenue Cleveland, Ohio 44106-7164
Email	djf6@case.edu
Phone	216-368-0109
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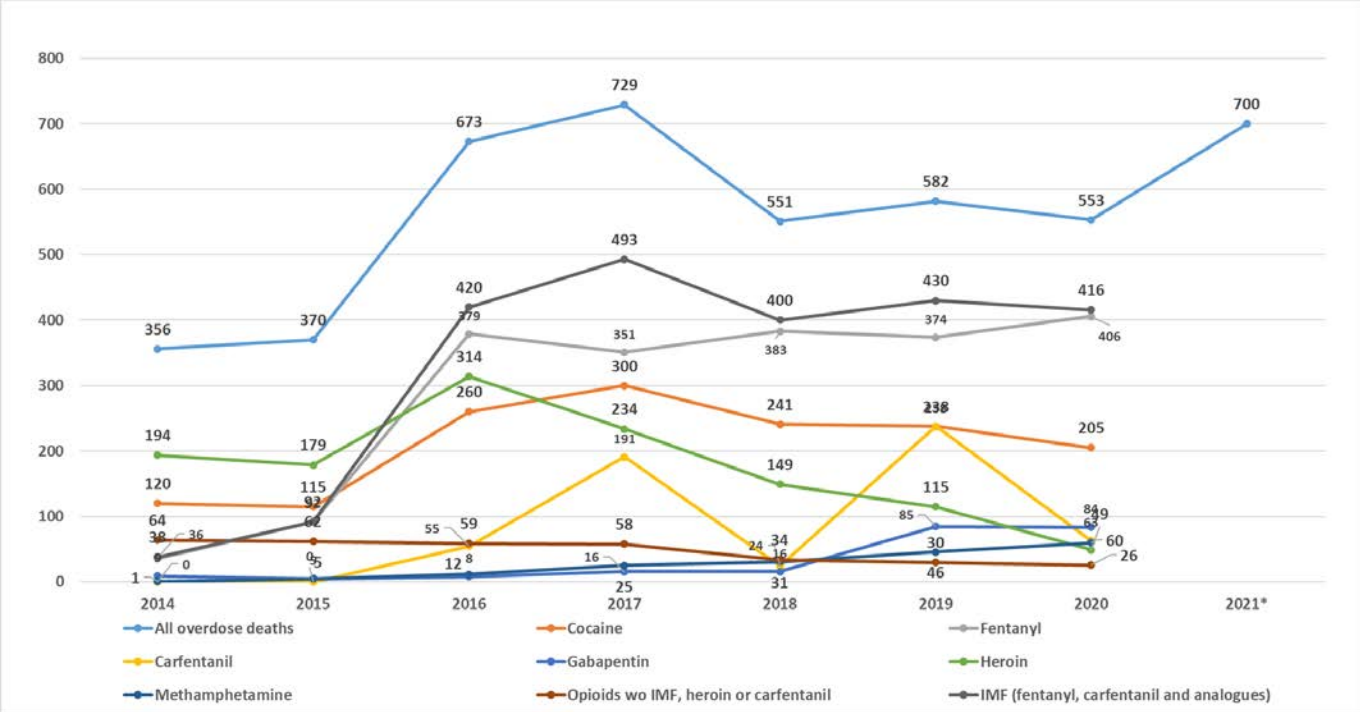
Background

Beginning In 2011, opioid-related deaths eclipsed any other reason for drug overdose death in Cuyahoga County, Ohio.[1] From 2015-2017, there was an increase in the abuse of diverted fentanyl (50-100 times more potent than morphine)[2], illicitly manufactured fentanyl and fentanyl analogs (with various potencies), including carfentanil (100 times more potent than fentanyl)[2] in the heroin market, which led to increasingly toxic drug mixtures and steep rises in fatal overdose rates.[3] Figure 1 illustrates the status of the overdose epidemic in Cuyahoga County from 2014 through 2021 (projected). Overdose rates remained high in 2019 at 37.4/100,000.[4] While deaths related to more traditionally prescribed opiates have decreased, the more lethal fentanyl, its illicitly manufactured analogs, and carfentanil continue to account for the majority of fatal overdoses.[5]

Figure 1. Cuyahoga County Overdose Fatalities: Cause of Death Drugs, 2014-2020



Note. Drug categories are not exclusive, i.e. one death may be due to more than one drug
**2021 total is estimated based on current numbers*
Source: Cuyahoga County Medical Examiner, 2021

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The Cuyahoga County Medical Examiner's Office responded to the developing opioid overdose crisis by establishing an overdose scene alert and processing protocol in collaboration with other stakeholders, resulting in the Heroin Involved Death Investigation (HIDI) protocol. With research funding from the National Institute of Justice, Case Western Reserve University (CWRU)'s Begun Center for Violence Prevention Research and Education (Begun Center), at the Jack, Joseph and Morton Mandel School of Applied Social Sciences, led an examination of the HIDI protocol in collaboration with the Cuyahoga County Medical Examiner Dr. Thomas Gilson, the Cleveland Division of Police, the US Attorney for the Northern District of Ohio, and the Cuyahoga County Prosecutor's Office.

Purpose

The purpose of the research initiative was to gather information from a variety of sources and methods to examine factors that inform investigations and contribute to indictments of major drug traffickers. The primary goals of the project were to:

1) Complete extended coding of local Medical Examiner decedent data—investigative reports and toxicology to identify demographic or geographic trends or patterns of overdose deaths, as well as paraphernalia and evidence present at death scenes that may be useful to prosecutions;
2) Examine the efficiency of how cases flow through the investigative and prosecutorial stages and how these could be improved;
3) Identify key variables that may contribute to the successful indictment of traffickers connected to fatal and nonfatal overdose cases; and
4) Evaluate the implementation and perceived effectiveness of the Cuyahoga County HIDI protocol.

Project Overview Summary

The Heroin Involved Death Investigation (HIDI) alert system and protocol was developed in 2013 by the Cuyahoga County (Ohio) Medical Examiner's Office (CCMEO) and Regional Forensic Science Laboratory in response to a substantial increase in opioid related overdose fatalities. The protocol

initiates and governs Heroin Early AlerT (HEAT) emails sent by the CCMEO (commonly and hereafter referred to as the HIDI alert). These alerts give notice that the CCMEO has learned of (a) an active, suspected opioid-overdose death scene presenting physical evidence of opioid misuse (e.g., syringes, straws, packaging) and evidence provided by family/friends or medical personnel of the victim's history of drug misuse; or (b) a suspected opioid-overdose death occurring at a hospital associated with what the alert identifies as "not an active scene." Alerts are provided to identified stakeholder professionals at the Cleveland Division of Police (CDP), Cuyahoga County Sheriff's Department (CCSD), and other county and federal agencies (e.g., DEA) investigating and prosecuting major drug traffickers (e.g., wholesale-level drug distributors who buy and sell large amounts of drugs for others to sell down the chain to end users). Alert recipients also include identified stakeholder professionals in the region's public health and hospital systems. The HIDI protocol governs chain of custody and laboratory testing submissions of items found on the body at the scene, assigning those functions to law enforcement, and guides sequence of laboratory testing submissions (e.g., touch DNA (hereafter DNA) prior to drug chemistry). It also informs law enforcement of the common elapsed times between laboratory testing submissions and findings for drug chemistry analysis (2 days), preliminary toxicology screen (7 days), and fully certified toxicology report (4 to 6 weeks), as well as cause of death ruling (14 days) and fully certified autopsy report and verdict (2 to 2.5 months). The HIDI protocol acknowledges that not all opioid-overdose deaths are apparent at active scenes and that not all alerts to a scene subsequently result in an opioid related death ruling.

The HIDI protocol is designed to support a ***safe, coordinated, and rapid*** response to an active scene by alerting investigators to potential dangers (e.g., lethal drugs) and facilitating the timely protection of the scene and collection of evidence. The protocol calls for the CCMEO to respond to such scenes with an investigator certified by the American Board of Medicolegal Death Investigators (ML investigator) whose sole jurisdiction is the victim's body and everything on it (e.g., syringe in arm,

packaging in pockets). Law enforcement agencies respond to such scenes with dedicated HIDI squad detectives (e.g., CDP, CCSD) or other law enforcement investigators (LE investigators) whose sole jurisdiction is everything at the scene excluding the victim's body and everything on it.

In best-case scenarios, a HIDI response will help to protect, photograph, and document an active scene, as well as improve the collection of evidence methodology necessary for successful prosecution (scene integrity), the goals of which in recent years have transitioned from indicting retail street-level offenders to indicting drug traffickers higher up the drug supply chain.[6] For example, it is critical that both ML and LE investigators arrive quickly, before potential witnesses at the scene clean up or disperse, allowing LE investigators to identify and interview those who may know of the victim's drug use and perhaps even have participated in or witnessed the drug exchange itself. If the victim's cell phone is found at the scene, LE investigators may find text exchanges, among the last of which are often with the retail street dealer of the drugs causing the fatality. In this situation, LE investigators posing as the victim often will send a text message from the victim's phone to that person requesting more drugs. The purpose is to obtain a response from the victim's retail street dealer to that communication so that LE investigators can make a controlled buy, making known the supplier's identity and collecting a potential sample of the lethal drug. Through subsequent chemical analysis and comparison, a match may be found between the drug sample and the drug that caused the death thus establishing the "but for causation" necessary for successful prosecution. As a senior county prosecutor put it, "If not for that opioid that person could have lived." The medical examiner's fully certified autopsy report and verdict complete the documentation of this "but for causation."

Other evidence obtained from an active scene can result in matches between the retail street dealer and DNA and fingerprint evidence found on forensic paraphernalia. Once the connection has been made between the victim and the offender, data from the latter's phone may identify other phone numbers and lead to cell phone tower mapping such as 1) phone toll analysis (analyzing phone records

of the dealer) or 2) cell phone exploitation through the extraction (digital forensics) of data on the suspects phone can lead to LE investigators moving up the supply chain by establishing additional ties through text messages, phone calls, messaging apps, etc. to move up the supply chain to identify the wholesale-level distributor of the lethal drug. This stage may also require obtaining a warrant to "ping" the coordinates of the suspected dealer's phone and to potentially establish physical proximity between the victim and dealer.

Once that person who provided or distributed the drug has been identified and apprehended, that person's phone most often contains data that can be linked both to others in the drug-supply network and those who have experienced an opioid-overdose death. Text communications may present evidence that the wholesale-level distributor knew that the drugs supplied were causing deaths. Phone numbers on the wholesale-level distributor's phone can identify witnesses who can be sought to testify and can provide leads to additional evidence obtained via the Internet including the Dark Web, wiretaps, bank, and other financial records, etc. These communications, witness statements, and financial records may amount only to circumstantial evidence, but the interconnections between and aggregation of this evidence can allow LE investigators to construct a *prima facie c*ase against a major drug trafficker that might even include a conspiracy charge.

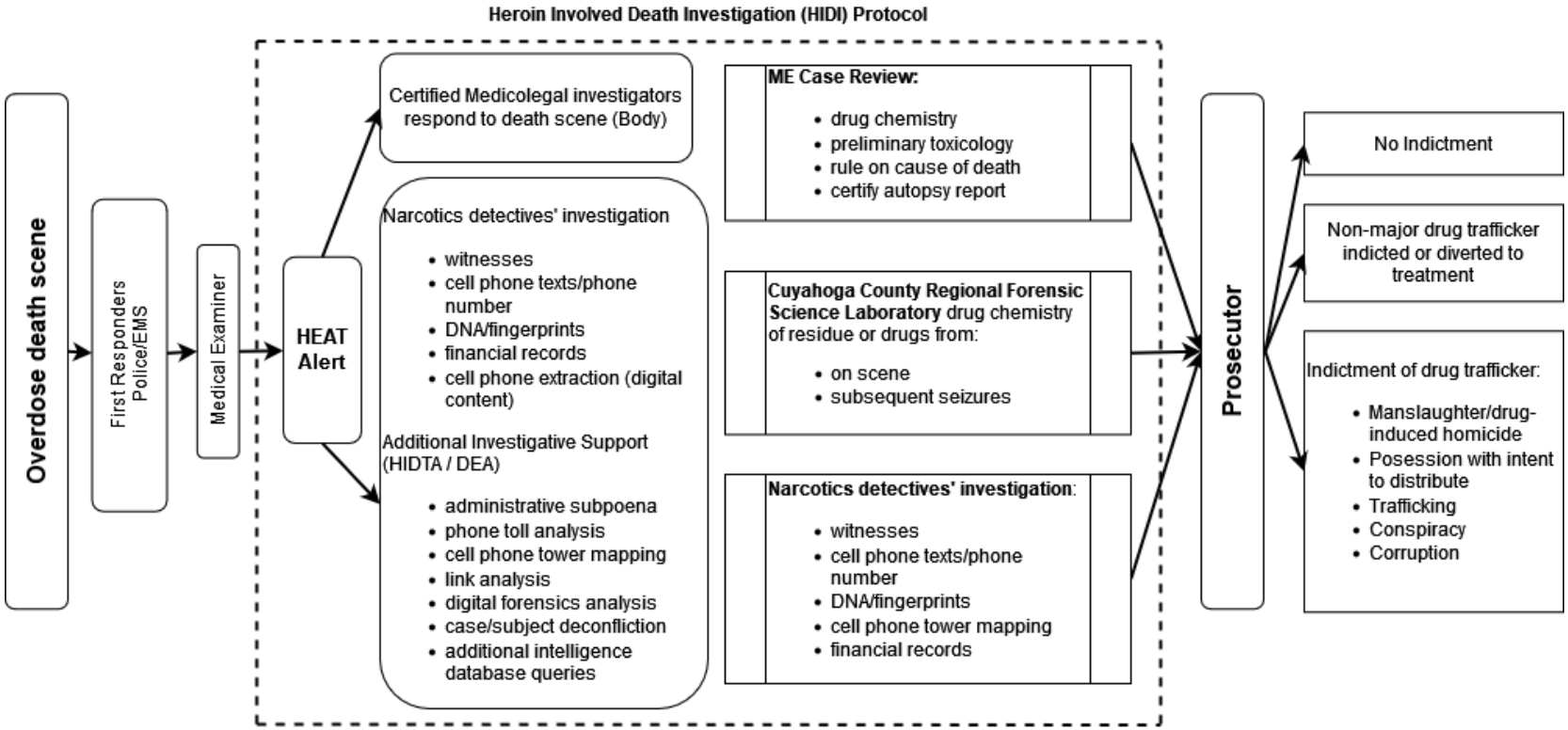
Once sufficient evidence has been secured to obtain an indictment, a criminal prosecution will begin in either the state or federal court system. Some counties do not have the law enforcement resources necessary to fully investigate a fatal opioid-overdose incident and will refer it to federal LE investigators. Cases also may be prosecuted in the federal courts when the quantity of drugs is large and/or the offender is high up the distribution chain. Unlike some states, Ohio has no specific drug homicide statute. Drug distributors up the chain are typically charged with Corrupting Another with Drugs, or Trafficking in Drugs (or both). Because these are felonies, they also can be charged with Involuntary Manslaughter under the Ohio Revised Code.[7] Federally individuals may be charged with

intent to distribute which has a penalty enhancement due to a death specification, a minimum prison sentence of 20 years up to life.

Individuals across agencies lauded the effectiveness of the HIDI protocol in guiding the successful investigation and prosecution of drug traffickers. According to a CDP HIDI squad detective who participated in the stakeholder interviews discussed further below (see p. 28), "It's important to be there on the scene and start your investigation as soon as you find out about the death. The [HIDI] alert has been instrumental in our prosecutions." A senior county prosecutor remarked in a stakeholder interview, "The HIDI protocol has positively impacted successful prosecutions. Opioid overdose cases are hard to prosecute. Maybe 620 people die in any given year, but you can only take 10 or 11 cases because those are the ones with phone evidence."

Figure 2 illustrates the flow of a case from the overdose death scene to indictment. The flow illustrates the importance of the alert system and the complementary roles of the responding detective and ML investigator. It also highlights the core elements of an investigation that are important for decisions about prosecution of traffickers.

Figure 2. Opioid-related Overdose Death Case Flow in Cuyahoga County, Ohio



Approach

This investigation took three different approaches to examining the HIDI protocol and factors that contribute to investigation and successful prosecution of drug traffickers. First, a full- time forensic epidemiologist was embedded in the county Medical Examiner's office to conduct detailed coding and analysis of decedent toxicology and death scene characteristics. Because of dramatic increases and changes in the nature of fatal overdose (e.g. from heroin to fentanyl and its analogues to carfentanil) it was important to understand changes in toxicology and drug supply and what was occurring at OD death scenes to inform detectives, ML investigators and prosecutors for safety, but also for evidence important for investigations that contribute to prosecution of dealers. This includes establishing clarity of the "but for" cause of death drug, and being able to link a specific drug responsible for the death to a specific source or dealer. Second, case files at the county and federal levels of cases prosecuted for trafficking, especially those linked to deaths, were systematically reviewed to determine what evidence was deemed important for successful indictment. Third, detailed interviews and focus groups were conducted with key informants from local and federal law enforcement, intelligence analysts, public health, and local and federal prosecutors to learn about how and why the HIDI alert system and protocol may be helpful or important to both ML and LE investigators and prosecutions of drug traffickers. The project methodology, analyses and findings related to each of these three approaches is reported below. We conclude with research limitations and caveats and implications for criminal justice policy and practice.

Medical Examiner Overdose Decedent Case File data

Methods

Details of n= 3261 deaths from overdose from 2014 to 2019 were coded, including detailed toxicologies, medicolegal demographics and where available histories and death or incident scene information. Decedent data were analyzed in order to understand the people and populations affected

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by opioid use in Cuyahoga County, evaluate trends in cause of death toxicology, and to explore potential law enforcement and community responses that could help prevent fatal overdoses.

Medical examiner investigative files are stored in paper with electronic copies in text fields or pdf. In order to make analysis more accessible, death certificates, toxicology reports and elements of the investigative file were coded into a new REDCap database after transferring from a Microsoft Access database that had been started by a prior consulting epidemiologist. Variables were added in consultation with the Medical Examiner's office, based on data they regularly utilized and included data that is often requested from law enforcement or external researchers as well as on elements the CWRU team identified as important for the purposes of this project. Variables coded from review of the written (no scene photos reviewed) report and documents included cause of death (including other conditions), death certificate demographics, toxicology, history of medical treatment, mental health treatment, history of illicit drug use, and death scene information, such as naloxone administration, place of death (at scene or in hospital), responding agencies, paraphernalia present, and other evidence present on scene (see the coding manual in the Appendix C for coding details).

An MPH-level embedded epidemiologist funded through this grant, served as the primary master coder of cases and trained additional coders. Training began with paper files, but once agreement of 100% was achieved between a coder and the epidemiologist, all subsequent coding occurred electronically. Initial case review and agreement continued with a coder for at least one week with the epidemiologist checking for agreement. Coders then met weekly and discussed any differences or unusual case characteristics until agreement was reached. Over the course of the project period five (5) Master's and PhD level coders participated. Drugs involved in the Cause of Death were organized into drug class groups and then into combination groups. Data was analyzed using SPSS (v. 28) to examine general descriptive characteristics and toxicology in overdose deaths (see Tables 1 and 2).

Results

In the period from 2014 to 2019, there were 3261 overdose deaths in Cuyahoga County, Ohio. Of those, 2610 (80%) involved an opioid in the cause of death. Table 1 illustrates the types of drugs and drug combinations found in the county during this period. Of note is the near doubling of overdose fatalities from 370 in 2015 to 670 in 2016, mirroring the increase of opioid-related deaths in the same period. Table 1 shows the various types of opioids listed in the cause of death, showing spikes in carfentanil-related deaths in 2017 and 2019 and a precipitous rise in fentanyl and fentanyl analog-related deaths in 2016, which continues to fuel the high overdose rates in our county. Due to the lethality of carfentanil especially, but also of fentanyl and many of its analogs, Figure 1 illustrates how opioids other than fentanyl or carfentanil (i.e., prescription opioids) are no longer driving the high rates of overdoses death.

The majority of fatal overdoses (>50%) affected Cuyahoga County residents outside of Cleveland in 2014, 2015 and 2018, but this flipped in 2017 and 2019 to >50% with a Cleveland residence listed. These years are also years with spikes in carfentanil-related and fentanyl/fentanyl analog-related deaths. Overall, decedents were male (>65%), 45 or older (>50%), white (>74%), and had an education level of high school or higher (>80%). More than 79% (n=2558) of decedents were found to have a history of illicit drug use during the medicolegal investigation, and 249 (7.6%) were veterans (Table 2).

Table 1. Categories of drugs listed in the Cause of Death (n=3261)

	2014		2015		2016		2017		2018		2019		Total	
	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%
Overdose deaths involving opioids in cause of death	275	77%	287	78%	571	85%	571	78%	444	81%	462	79%	2610	80%
Overdose deaths without opioids in cause of death	81	23%	83	22%	102	15%	158	22%	107	19%	120	21%	651	20%
Deaths involving a single category of drugs														
Opioids only	83	23%	113	31%	200	30%	150	21%	140	25%	106	18%	792	24%
Stimulants only	37	10%	35	9%	46	7%	70	10%	55	10%	44	8%	287	9%
Benzodiazepines only	0	0%	3	1%	1	0%	1	0%	0	0%	0	0%	5	0%
Depressants only	1	0%	5	1%	4	1%	25	3%	2	0%	3	1%	40	1%
Other drugs only	15	4%	14	4%	11	2%	21	3%	16	3%	25	4%	102	3%
Deaths involving two or more categories of drugs														
Opioids and Stimulants	28	8%	37	10%	108	16%	123	17%	98	18%	76	13%	470	14%
Opioids and Benzodiazepines	19	5%	27	7%	33	5%	40	5%	22	4%	15	3%	156	5%
Opioids and Depressants	32	9%	30	8%	58	9%	54	7%	31	6%	43	7%	248	8%
Opioids and Other drugs	74	21%	39	11%	93	14%	128	18%	81	15%	146	25%	561	17%
Benzodiazepines and Depressants	0	0%	2	1%	3	0%	4	1%	2	0%	4	1%	15	0%
Stimulants and Benzodiazepines	0	0%	2	1%	0	0%	2	0%	2	0%	1	0%	7	0%
Stimulants and Depressants	12	3%	7	2%	22	3%	21	3%	14	3%	21	4%	97	3%
Opioids, Stimulants and Benzodiazepines	10	3%	9	2%	20	3%	14	2%	19	3%	13	2%	85	3%
Opioids, Stimulants and Depressants	16	4%	23	6%	42	6%	51	7%	42	8%	51	9%	225	7%
Opioids, Benzodiazepines and Depressants	8	2%	3	1%	10	1%	8	1%	4	1%	6	1%	39	1%
Opioids, Benzodiazepines, Stimulants and Depressants	3	1%	5	1%	6	1%	1	0%	4	1%	4	1%	23	1%
Benzodiazepines, Stimulants and Depressants	0	0%	0	0%	0	0%	2	0%	0	0%	0	0%	2	0%
All drug categories	2	1%	1	0%	1	0%	2	0%	3	1%	2	0%	11	0%
Other drugs mixed with Benzodiazepines and/or Stimulants and/or Depressants	16	4%	15	4%	15	2%	12	2%	16	3%	22	4%	96	3%
Total Fatal Overdoses	**356**	**100**	**370**	**100**	**673**	**100**	**729**	**100**	**551**	**100**	**582**	**100**	**3,261**	**100**

Note. These include all manners of overdose deaths, including suicide.

Table 2. Demographic Characteristics of Fatal Overdoses in Cuyahoga County, 2014-2019

	2014		2015		2016		2017		2018		2019		Total	
	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)	%
City of Residence														
Cleveland	160	44.9	160	43.2	303	45	384	52.7	246	44.6	311	53.4	1564	48
Outside of Cleveland	196	55.1	210	56.8	370	55	345	47.3	305	55.4	271	46.6	1697	52
Gender														
Female	101	28.4	108	29.2	195	29	224	30.7	181	32.8	180	30.9	989	30.3
Male	255	71.6	262	70.8	478	71	505	69.3	370	67.2	402	69.1	2272	69.7
Age														
24 and under	27	7.6	28	7.6	58	8.6	46	6.3	26	4.7	26	4.5	211	6.5
25 - 34	63	17.7	93	25.1	146	21.7	134	18.4	130	23.6	117	20.1	683	20.9
35 - 44	74	20.8	78	21.1	146	21.7	147	20.2	121	22	120	20.6	686	21
45 - 55	101	28.4	73	19.7	164	24.4	194	26.6	108	19.6	108	18.6	748	22.9
55+	91	25.6	98	26.5	159	23.6	208	28.5	166	30.1	211	36.3	933	28.6
Race														
Native American	0	0	0	0	1	0.1	0	0	1	0	1	0	3	0.1
Asian	3	0.8	2	0.5	2	0.3	5	0.7	1	0.2	2	0.3	15	0.5
Black	85	23.9	91	24.6	129	19.2	196	26.9	137	24.9	185	31.8	823	25.2
White	268	75.3	277	74.9	541	80.4	528	72.4	412	74.8	394	67.7	2420	74.2
Education Level														
Unknown	17	4.8	20	5.4	21	3.1	30	4.1	16	2.9	16	7.9	150	4.6
Less than High School	85	23.9	84	22.7	120	17.8	160	21.9	121	22	106	18.2	676	20.7
High School Diploma/GED	165	46.3	166	44.9	372	55.3	382	52.4	292	53	299	51.4	1676	51.4
Above High School	89	25	100	27	160	23.8	157	21.5	122	22.1	131	22.5	759	23.3
Veteran (yes)	19	5.4	27	7.3	55	8.3	63	8.6	31	5.6	53	9.1	248	7.6
Were others present? (yes)	224	62.9	184	51.5	364	55.1	390	54.1	332	60.5	293	50.8	1787	55.5
Paraphernalia Present (yes)	181	50.8	227	61.4	433	65.6	429	58.9	386	70.2	354	60.8	2010	61.9
History of Illicit Drug Use (yes)	249	69.9	276	74.6	549	85.4	585	80.4	423	77	476	82.1	2558	79.3
History of IV Drug Use (yes)	98	27.5	124	33.5	292	45.7	254	34.9	177	32.2	154	26.6	1099	34.1
History of Detox or Rehab (yes)	80	22.5	50	13.5	170	25.3	155	21.3	128	23.3	144	24.9	727	22.3

Discussion

It is important to understand decedent data and toxicologies to establish a clear "but for" cause of death and to try to establish the link between decedent, substance noted as cause of death, and the potential source of that drug. It is also important to understand the changing nature of drug overdose death to inform officer safety, investigation, and interdiction strategy. These high numbers of overdose fatalities are only a portion of the drug overdoses in Cuyahoga County during this period, as indicated by an average of 1074 emergency room visits per quarter during the last 6 quarters reported by the Cuyahoga County Board of Health.[8] Emergency room cases only represent those cases where victims agree to be transported, and are still only a portion of cases where first responders are dispatched to scenes of overdoses. Cleveland EMS alone responded to an estimated 1,271 suspected overdose/poisoning incidents per quarter during the same period (CDP, October 2021). Because data on nonfatal overdoses are limited and often HIPAA-protected, we do not currently know how representative victims of fatal overdoses are of all overdoses, or if they are measurably different in some ways, however careful review of their histories may help us understand where possible prevention and harm reduction strategies may reduce overdose fatalities. Additionally, the coding of the circumstances, toxicologies and evidence could assist LE investigators to identify drug types, distribution geographies and evidence tying major drug traffickers to several suppliers and to several fatal overdoses. As an example, the US Attorney's Office, Northern District of Ohio has used this information by requesting data from CCMEO for all deaths in a certain time-period where paraphernalia or other evidence indicated presence of a certain color pill or certain packaging that helped in the investigation of cases before them.

Death or overdose scene investigations can produce valuable evidence when first responders are able to secure the scene quickly. However, when victims are transported, cell phones or other evidence may accompany them to the hospitals or family/friends may take it. Additionally, with the rise in overdose cases, law enforcement scene investigator units do not have the personnel or resources to go to each scene that was not a death, as indicated in the interview/focus group findings below [p 24]. This often makes it more difficult to establish a clear link between a fatal or nonfatal overdose and a particular source of drugs.

In addition to providing more easily analyzable data around scene evidence, further analyses can help identify changing trends around populations affected, and mixtures occurring that can help medical and public health efforts to prevent overdose deaths through types and targeting of harm reduction efforts. For example, Figure 3 shows the number of opioid fatalities vs. all overdose fatalities, and the percentage of opioid deaths that involve fentanyl or fentanyl analogs. Figure 4 illustrates how fatalities that involve cocaine without opioids have remained steady, but those with cocaine mixed with fentanyl and fentanyl analogs have been rising. Figure 5 highlights the rise in overdose fatalities in the Black community in Cuyahoga County. Further analyses planned for upcoming manuscripts will help further identify population effects of this epidemic.

Figure 3: Opioid-Involved fatalities and the presence of fentanyl and carfentanil in Cuyahoga County, 2014-2019

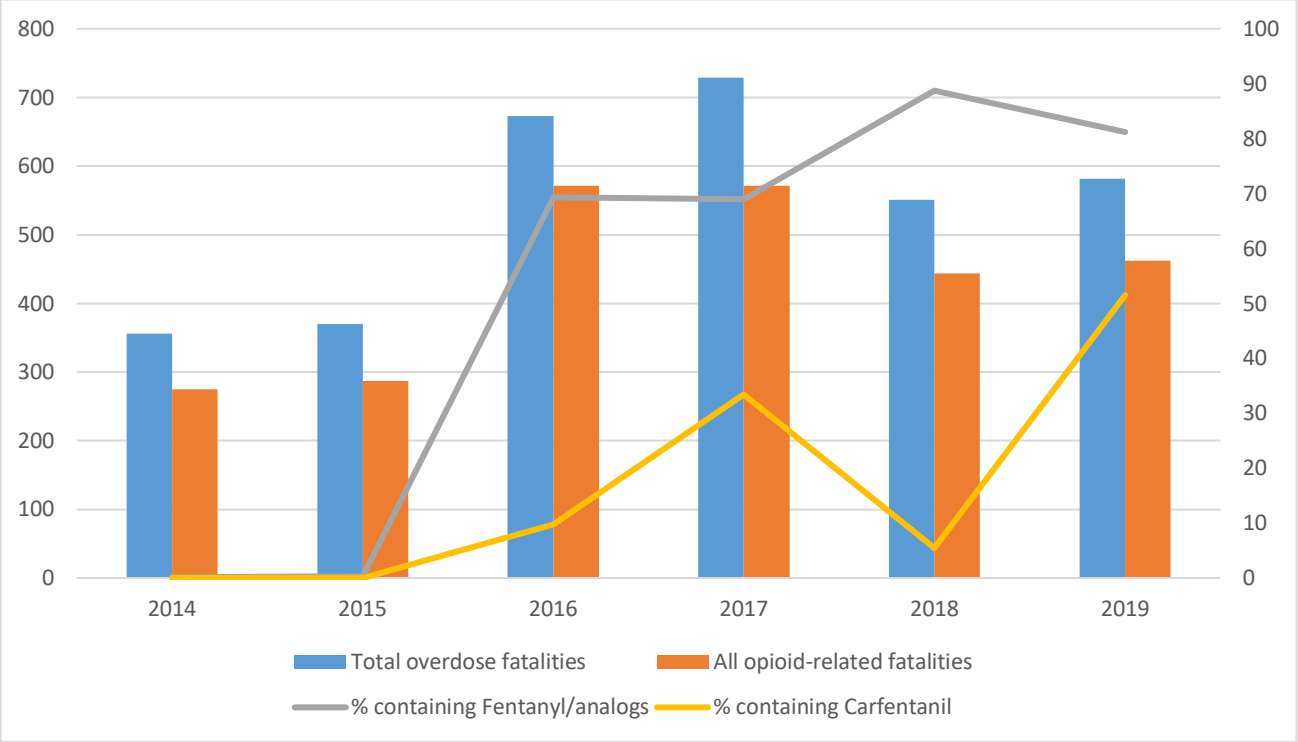


Figure 4. Cocaine mixtures with Fentanyl/Fentanyl analogs

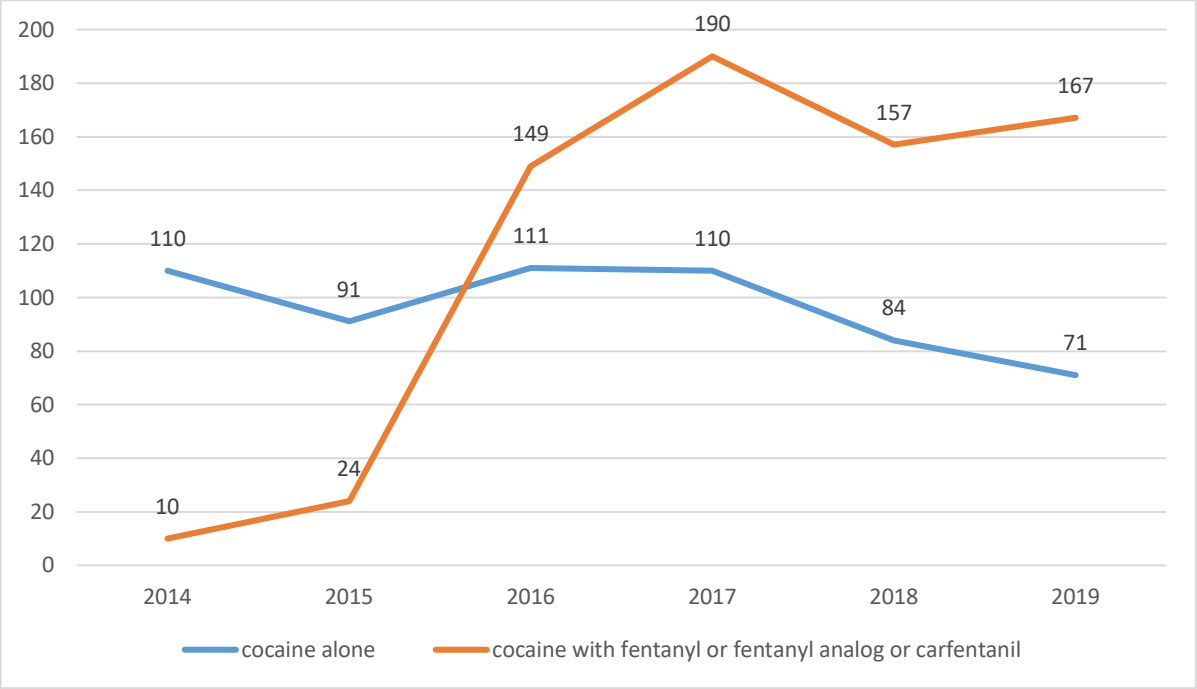
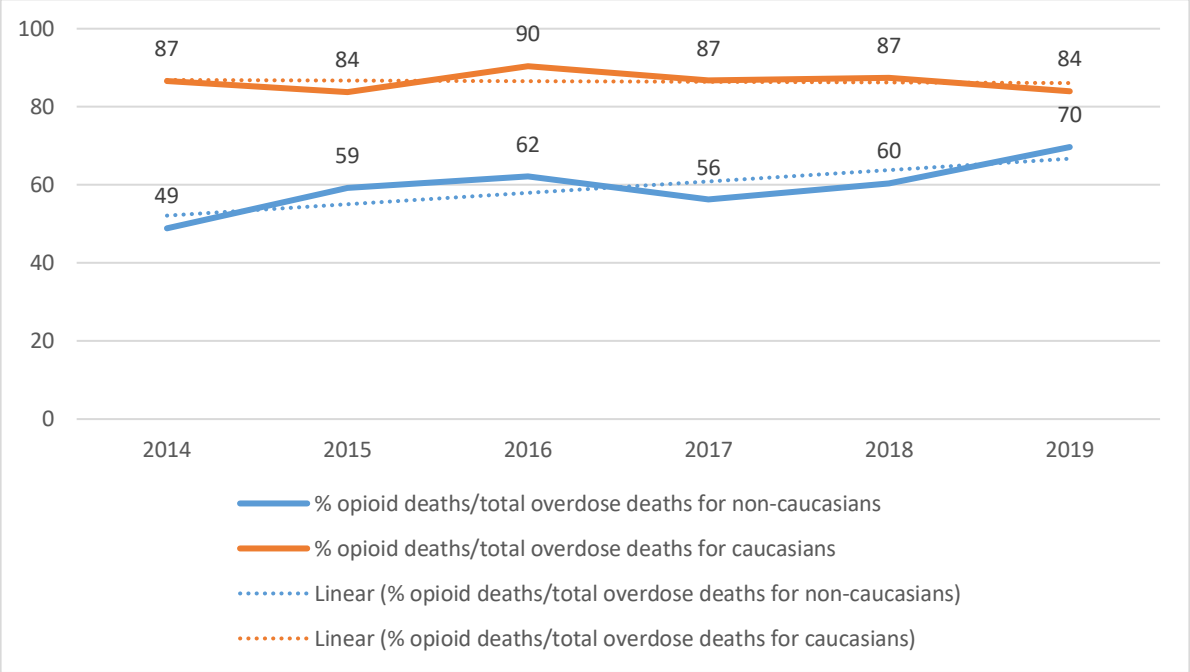


Figure 5. Race and Opioid-Related Death Rates in Cuyahoga County, 2014-2019



Review of Local and Federal Prosecutor Case File Data

To combat the overdose crisis, both state and federal prosecutors have recently increased "drug- induced homicide" prosecutions against defendants.[9] Drug-induced homicide refers to a criminal offense where the illegal manufacture, sale, distribution, or delivery of a controlled substance that results in death serves as the basis for a charge of murder or manslaughter. Currently 20 states have specific drug-induced homicide statutes and many other states who do not have such statutes will charge a defendant with the offense of drug delivery resulting in the death under involuntary or voluntary manslaughter, felony-murder or depraved heart laws.[10] In addition to state law, a federal law passed in 1986 as part of the Controlled Substances Act provides an enhanced penalty of 20 years to life for a defendant found guilty of dispensing a controlled substance that results in death or serious bodily injury.[11] Although many of these laws have been in existence for some time, often stemming from the war on drugs in the 1980s and 90s, they were not frequently used. In the past several years police and prosecutors have utilized these laws as a means to respond to the opioid crisis.[9] Prosecuting drug dealers under these statutes allow for enhanced sentencing options, including mandatory minimum sentences if found guilty, as prosecution for homicide carries higher sentencing than prosecutions for possession or distribution of illegal controlled substances. Increased attention to prosecution is also heightened by the escalating rates of fentanyl-related overdose deaths.[10]

Federal manslaughter cases are prosecuted pursuant to the Controlled Substances Act, 21 USC Section 841(a) which states that "it shall be unlawful for any person to knowingly or intentionally manufacture, distribute, or dispense or possess with intent to manufacture, distribute, or dispense a controlled substance." In 1986 Congress enacted the Anti-Drug Abuse Act which increased the penalties, including if a death occurred. This penalty enhancement imposes a mandatory sentence on a defendant who unlawfully distributes a Schedule I or II drug, to a period of not less than 20 years or more than life if death or serious bodily injury occurs.[12]

In contrast, the State of Ohio code provisions permit prosecution of dealers for overdoses resulting in death pursuant to an involuntary manslaughter charge. Section 2903.04 of the Ohio Revised Code, Involuntary Manslaughter, provides that "no person shall cause the death of another or the unlawful termination of another's pregnancy as the proximate result of the offender's committing or attempting to commit a felony." Two felony statutes are utilized with respect to dealers, ORC Section 2925.02, corrupting another with drugs[13] and ORC Section 2925.03, trafficking in drugs.[14]

Prosecution under both federal and state laws can be difficult because in most instances there is not just one drug in the decedent's system at the time of death. Merely arguing that the drug substantially contributed to the cause of death in order to warrant the federal penalty enhancement for death was found not to be sufficient by the U.S. Supreme Court in *Burrage vs. United States* (2014). The Supreme Court held that "where the drug distributed by the defendant is not an independently sufficient cause of the decedent's death or serious bodily injury, a defendant cannot be liable under the penalty enhancement provision of 21USCSection 841(b)(1)(C) unless such use is a "but for" cause of the death or injury."[15]

Methods

Cases selected for in-depth review included 43 federal cases prosecuted by the US Attorney's Office for the Northern District of Ohio within Cuyahoga County (n=12) and neighboring counties (n=31) for the period of 2012 through 2019. Federal cases were selected if the defendant was charged with the federal death penalty enhancement. Cases selected from state prosecutions in Cuyahoga County included all cases where the defendant was indicted for involuntary manslaughter either based on corrupting another with drugs or trafficking in drugs from the period of 2013 through 2018 (n=78). The identification of court cases for review were determined by the Office of the Northern District of Ohio United States Attorney and the Office of the Cuyahoga County Prosecutor. For both federal and state cases, the number of cases include codefendant/companion cases only if the defendants were charged with the drug-induced homicide statutes. Data for the analysis was limited to public documents

available online from the state and federal clerk of court websites. To gather information from the case files researchers reviewed available documents to identify any information that described or referenced evidence collected in the investigation that was intended by the prosecution to be used at trial. A narrative of the evidence intended for use was created for each case. Although for most cases information detailing the evidence relied upon by the prosecution for the underlying charges was not available, in some cases information could be summarized from the public documents available for review. Useful documents included the indictment or complaint, motions to suppress or motions *in limine,* and partial transcripts filed for purposes of appeal from pretrial, trial, or sentencing hearings. Documents available for review varied case by case and depended on what had been imaged and uploaded to the docket for each case. For example, in earlier cases prosecuted at the county level, prosecutor responses to discovery requests were available for review. These filings provided some insight into the evidence the prosecution had available and intended to introduce at trial. In subsequent years, copies of these responses were no longer made available on the online docket system. This is likely because the responses often included the prosecution's witness list with names and addresses.

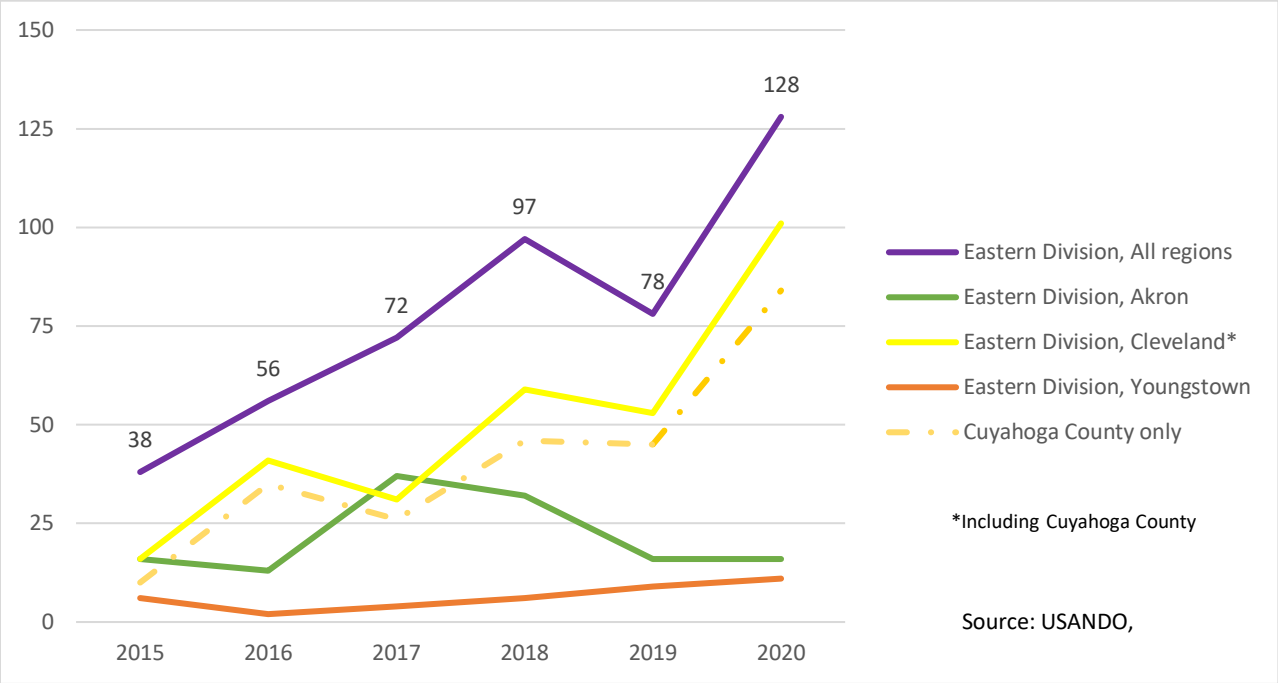
Because a systematic review could not be conducted for all of the cases this analysis became more qualitative, highlighting case examples where information was available. While the information gleaned from the public records did not identify all evidence available at time of prosecution, it was helpful to illuminate a general summary of evidence that was collected and relied upon by the prosecution since it was referenced in the pleadings. For those cases that were unsuccessful at the county level, no information was available to identify the reason for the dismissal or acquittal. Case examples therefore are predicated upon cases where the defendant either pled or was found guilty by trial.

Results

Indictments for violations in Title 21, Sections 841, 843 and 846 in the Eastern Division of the USAO-NDOH (map in Appendix A) totaled 469 cases from 2015-2020. Of those, 301 (64%) were in the

Cleveland Region. Cuyahoga County cases comprised 246 (82%) of the indictments in the Cleveland Region. While cases remained steady from 2017-2020 in the Akron and Youngstown Regions, those in the Cleveland Region rose, with Cuyahoga County driving much of that increase. Overall, the Eastern region saw an increase of 78% in drug trafficking indictments, but the Cleveland Region saw an increase of 226%. (see Figure 6).

Figure 6. US Attorney Office, Northern District of Ohio Eastern Division, Number of Indictments for Violations of USC 21: 841, 843 and/or 846 (n=469), by Year.



As seen in Table 3, in the majority of cases the defendant pled to all or some of the charges in the indictment or complaint. Of the federal cases with a death specification provided for review, none were unsuccessful. For those at the county level there were seven cases where the indictment/complaint was either dismissed or terminated and one not guilty verdict. For those cases dismissed or terminated, the reason for the action was unknown. The most common and severe disposition was incarceration in prison, although a few defendants at the county level received a jail sentence. Sentences for federal prosecutions averaged 14.22 years per defendant (n=33, min = 1.33 yrs.

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and max = 60.00 yrs.), although one defendant received a life sentence which was not included in the analysis. Disposition for nine cases were still pending and had not reached disposition at the time of the review. In contrast sentences imposed for state level prosecutions averaged 4.62 years (n=51, min = 0.33 yrs. and max = 19.00 yrs.). State prosecutions also included 15 cases where community control sanction was the disposition, 1 case imposed only a fine and 1 case had an intervention in lieu of conviction.

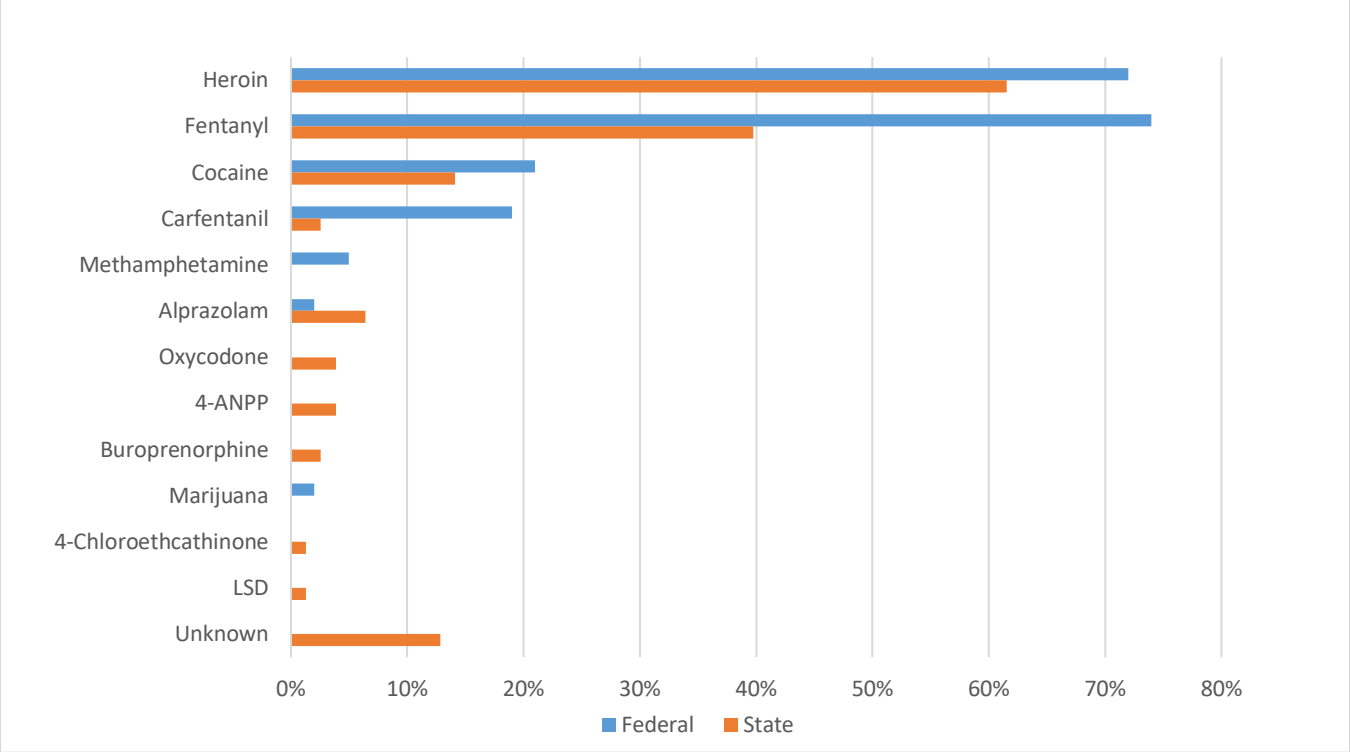
Table 3. Drug-Induced Homicide Cases Filed Each Year by Disposition

	2012	2013	2014	2015	2016	2017	2018	2019	Total
Federal Cases	**1**	**0**	**2**	**5**	**11**	**16**	**5**	**4**	**43**
Guilty Verdict	0	0	0	1	0	1	0	1	3
Pled Guilty/No Contest	1	0	2	3	8	13	2	3	32
Guilty Verdict & Pled	0	0	0	0	1	0	0	0	1
Case Pending	0	0	0	0	2	2	3	0	7
State Cases	*****	**4**	**22**	**12**	**19**	**13**	**9**	*****	**78**
Guilty Verdict	N/A	0	0	1	2	0	1	N/A	4
Pled Guilty/No Contest	N/A	4	20	7	15	9	8	N/A	63
Guilty Verdict & Pled	N/A	0	0	0	0	0	0	N/A	0
Case Pending	N/A	0	0	0	0	0	0	N/A	0
Not Guilty/ Dismissed/Diversion	N/A	0	1	4	1	3	0	N/A	9
Death of Defendant	N/A	0	0	0	1	0	0	N/A	1
Unknown	N/A	0	1	0	0	0	0	N/A	1

***Case information not collected for this year.**

Most prosecutions, both at state and county level, involved heroin or fentanyl/fentanyl analogs or a combination of the two. In recent years there were a few federal cases involving carfentanil. Figure 7 illustrates the various controlled substances associated with state and federal cases. In many cases the decedent is found to have had multiple drugs in his or her system at the time of death; i.e., mixed-drug intoxication which increases the complexity of determining a clear “but for cause” of death by drug necessary for prosecution. Consistent with information from prosecution case reviews, our coding of ME decedent data (n=2035) found that 62% of decedents had 2 or more drugs listed in the cause of death.

Figure 7. Type and Percentage of Controlled Substances Associated with State and Federal Cases



Note. **A defendant could be charged with more than one type of controlled substance in a criminal court case.**

Discussion

Case Examples

Although the case file review was limited to whether or not public documents had been imaged highlighting evidence intended to be used by the prosecution, one finding that was consistent was the importance of collecting evidence at the death scene and collecting it immediately upon examination or discovery of the body. This finding is in line with why the HIDI alert and protocol was established – to preserve the scene as soon as possible. While cell phone evidence remains very helpful, useful information can also be collected by interviewing witnesses at the scene. These individuals may know the decedent's dealers or gave the decedent the drugs. Drug paraphernalia collected at the death scene is also very useful if it contains DNA or fingerprints of the defendant. Some defendants use special packaging, which helps to establish a link between the defendant and decedent. In some instances law enforcement are also able to obtain evidence through drug buys using the decedents' phone

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immediately after their death before the defendant is aware of their passing. Law enforcement will pretend to be the decedent and arrange for another drug purchase.

The case examples (Appendix B) highlight evidentiary patterns uncovered from the case file reviews. While not indicative of every case reviewed, these examples illustrate evidence that formed the basis of the indictment. For some cases, the evidence established the chain of events leading to the decedent's death, and in other cases the evidence established the defendant's culpability for the death (i.e., he or she knew that the drugs sold could cause an overdose death). Because information is limited in each case, it is generally unknown whether the defendant would be classified as a low-level dealer, middleman or major drug trafficker. However, it appears that for most cases where evidence was available from the records provided, the prosecutions involved actions against the dealers who directly sold the drugs to the decedent. The referenced narratives illustrate case examples (federal and state) for the elements deemed important for investigations and prosecutions (key evidence):

Cell Phones. Cell phones are a common way to connect the decedent to the defendant, especially tracking calls and text messages between the two parties near or around the time of death. Technology also provides the ability to triangulate the position of the decedent and the defendant near the time a suspected drug purchase occurred prior to the death. The evidence suggests that suppliers are now getting wise and using cell phones obtained in the name of others or fictitious persons (see Case examples A through D in Appendix B.).

Drug Paraphernalia Left at Death Scene. Drug paraphernalia obtained at the death scene can provide crucial evidence linking the decedent to the defendant especially if the packaging is unique. Using a search warrant, law enforcement personnel can then attempt to obtain identical packaging on the defendant or at the defendant's residence. (Case examples E and F)

DNA of the Defendant. DNA found on drug paraphernalia at the death scene belonging to the defendant can also be used to link the defendant to the decedent. DNA evidence has become more

important as users and dealers become more sophisticated in their packaging, cell phone use, and methods to purchase and exchange drugs. (Case examples G to I).

Eyewitness Identification and Testimony. Early response to a death scene allows for the collection of evidence from witnesses who were with the decedent at or near the time of overdose and subsequent death. Questioning of these witnesses can provide valuable evidence for prosecutors. (Case examples J and K).

Testimony of Confidential Informants or Undercover Officers. Establishing the culpability of the defendant can also be obtained from drug deals arranged between the defendant and confidential informants. Usually this is done after the decedent's death and law enforcement seeks to build additional evidence against the defendant, such as using the decedent's cell phone to arrange another drug buy. During these additional drug buys, LE investigators may obtain packaging used for drugs sold by the defendant identical to the packaging recovered at the death scene. (Example L)

Wiretap Recordings and Video Surveillance from Task Force. In addition to cell phone evidence, law enforcement personnel also were able to obtain evidence from wiretaps or video surveillance that linked the decedent to the defendant. Sometimes this evidence had already been collected at the time of the decedent's death. (Example M).

Defendant Admission of Guilt (see Case examples N and O); and

Testimony of Co-Defendants (see Case example P).

Stakeholders focus group and interview data

The purpose of conducting interviews and focus groups with key informants was to describe and assess the structure and function of the Cuyahoga County Heroin Involved Drug Investigations (HIDI) network. In addition to the Alert system, HIDI is referred to as a protocol, a means by which medical examiners and law enforcement work together for the collection and preservation of forensic evidence in heroin-involved death incidents and opioid overdoses (see Project Overview Summary, pp. 5-9).

The HIDI protocol is designed to support a ***safe, coordinated, and rapid*** response to an active scene by alerting both medicolegal and law enforcement investigators to potential dangers (e.g., lethal drugs) and facilitating the timely protection of the scene and collection of evidence. The HIDI protocol acknowledges that not all opioid-overdose deaths are apparent at active scenes and that not all alerts to a scene subsequently result in an opioid-related death ruling. The protocol calls for the CCMEO to respond to such scenes with a ML investigator certified by the American Board of Medicolegal Death Investigators whose sole jurisdiction is the victim's body and everything on it (e.g., syringe in arm, packaging in pockets). Law enforcement agencies respond to such scenes with dedicated HIDI squad detectives (e.g., CDP, CCSD) or other LE investigators whose sole jurisdiction is everything at the scene excluding the victim's body and everything on it.

Drawing on the expertise of an experienced county medical examiner, forensic laboratory, and law enforcement professionals, over the years the HIDI protocol has fostered the development of greater interagency collaboration. Broadly defined, interagency collaborations are "mutually beneficial and well-defined relationships entered into by two or more organizations to achieve common goals."[16] Additional defining characteristics of interagency collaborations have included (a) developing and agreeing to a set of common goals and directions, (b) sharing responsibility for obtaining those goals, and (c) working together at all levels of an organization to achieve those goals.[17] As its interagency collaboration has strengthened and opioid-crisis awareness has grown in the broader community, the HIDI network of professionals receiving alerts has expanded from 56 in April 2018 to 97 in September 2021, including professionals from treatment and recovery communities, emergency medical services (EMS), hospital systems, public health, and public park services.

Below, the qualitative findings of the protocol's analysis based on HIDI ML and LE investigators and other network members' verbal reports on their roles, responsibilities, and experiences is briefly documented. Research and evaluation derived from multiple disciplines informs this approach to

assessing HIDI implementation and effect.[18] The value of the HIDI alert, HIDI interagency collaboration, and other processes involving the HIDI network is demonstrated herein by the ways in which HIDI network members described in interviews and focus groups (a) the barriers and facilitators influencing the HIDI protocol implementation within and between organizations, and (b) the ways in which HIDI supports prosecution of major traffickers via preservation of the scene and the collection of evidence that might otherwise be overlooked, and (c) how criminal law and those who enforce it use their discretion to support the engagement of persons misusing opioids with treatment.

Methods

The researchers conducted interviews and focus groups with those associated with the development of the HIDI protocol and/or impacted by the HIDI interagency network between April 2018 and September 2021. A total of 54 individuals were interviewed or participated in a focus group for this study. Initially the researchers identified a convenience sample of 25 eligible participants who held senior professional positions within their organizations and interacted with the flow of evidence or had information at some point from opioid overdose to prosecution and were willing to participate. Subsequently the researchers used snowball sampling to identify additional similar participants. These included medicolegal investigators, a forensic epidemiologist, the CCMEO administrator; a Cleveland Division of Police HIDI squad commander and a HIDI detective; county prosecutors; federal prosecutors; and the US Attorney's Office for the Northern District of Ohio Heroin and Opioid Task Force members, including those from the treatment and recovery communities, EMS, hospital systems, and public health. Two surviving parents, one of whose prescient actions precipitated federal indictments of major traffickers, were also interviewed. All participants were invited to participate in person or over email. The focus group interview guide was iteratively developed over the course of several weeks by members of the research team. All interview and focus group participants were provided a hardcopy of the IRB-approved informed consent document to review prior to or while the interviewer read the informed consent and before any substantive questioning. All interview and focus group participants provided

verbal informed consent and none refused. The interviews and focus groups usually lasted from 30 to 60 minutes. All the focus groups were audio recorded and all but three of the interviews were recorded. Three interviews were not recorded at the request of three participants (two criminal justice and one law enforcement professional). The interviewers took extensive notes during the three interviews that were not audio recorded. Interview prompts encouraged wide-range responses allowing interviewees freedom to report, describe and discuss their thinking about investigations leading to the prosecution of major traffickers.[23] Between April 2018 and February 2020, all interviews (n=15) and focus groups (n=3) were conducted in-person, and three interviews were conducted via telephone. Between March 2020 and September 2021 all interviews (n=5) and focus groups (n=2) were conducted via telephone. Recorded interviews were transcribed verbatim and transcript accuracy was checked against the recordings. Transcripts were not returned to participants for comment. Participants were asked not to reveal proper names during the interviews and any names and other identifying information on the recordings were removed from the transcripts. Interviews produced a data set of approximately 40,000 words.

Data Analysis

The focus groups and interviews provided opportunities to explore "rich points" or experiences, behaviors, observations and opinions of the participants that were offered in participants' own words and were outside the authors' knowledge.[19,20] The data analyzed are actors' own words collected in open-ended successive free-list interviews describing their investigation procedures and collaboration among county, city, and federal law enforcement agencies.[21,22] Qualitative content analysis and thematic analysis revealed broader semantic categories, including themes and sub-themes identified by the qualitative researchers using systematic text condensation to derive key themes.[24] Both qualitative researchers, working independently agreed on the general findings and crosschecked their respective interpretations. Direct quotes from the focus groups and interviews are provided below and best

illustrate one or more themes repeated in the narrative. The direct quotes may contain minor edits made by the evaluator, such as deletions marked by ellipses and points of clarification appearing in brackets. The authors followed the consolidated criteria for reporting qualitative research (COREQ).[25]

Select Qualitative Focus Group and Interview Data Findings

The participants in this study described barriers to and facilitators of the successful implementation of the HIDI protocol, as well as its impact on the successful prosecution of drug traffickers. "The protocol is fine," as far as a HIDI detective was concerned, but

> it's people following the protocol. Protocol needs to be followed. We're the narcotics guys, let us do our thing. Some of the uniformed bosses will say, "I don't think it's an overdose, it's another emergency or something."

A group of seven medicolegal investigators reported several other concerns that have surfaced over the years that expose gaps not so much in the HIDI alert itself but in surrounding processes. One involves EMS transport of persons who appear to have experienced a nonfatal overdose who then die after they arrive at the hospital. By the time HIDI detectives learn of the death, the crime scene often has been disturbed. This is one reason HIDI alerts began to go out after a person experienced a nonfatal overdose, but much of the time there are too many to which law enforcement can respond. One medicolegal investigator mentioned that on occasion, if EMS has responded to a suspected fatal opioid overdose they will call police but not the medical examiner. In these cases, a HIDI alert may be delayed or not sent at all. "Hospitals need protocol with HIDI, but they don't [have one]," asserted a medicolegal investigator. "Well, maybe if it is a death and there is a syringe in their pocket," the investigator continued. "They sometimes call [Cleveland Division of Police]. But [it's] up to individual doctors and nurses."

Medicolegal investigators and the HIDI detective highlighted two key conditions facilitating HIDI implementation. One was the strong leadership provided by the Cuyahoga County Medical Examiner. It was the medical examiner who highlighted the value of such an interagency collaboration for the

clarification for investigators and prosecutors of "*but for"* cause of death when multiple drugs appeared in decedents' toxicology reports and to provide up-to-date toxicological information and increase awareness of evolving drug trends. This promotes safer incident-site investigations and the collection of similarly evolving drug paraphernalia and packaging. A second facilitator was the variety of assignments around drug interdiction that Cleveland Division of Police narcotics detectives completed and, as a HIDI detective explained, "We started noticing the overdoses and we were kind of, 'Hey, this is something we should start looking into,' and [HIDI] just kind of took off from there."

At its inception HIDI was designed in part to engage narcotics detectives' rapid response to fatal drug-overdose scenes. But today HIDI also benefits other HIDI network investigators, even if they do not respond to every scene. "I don't go to every scene; my people don't go to every scene," described a federal investigator. He continued,

> But we are very keen to look at an uptick. We're looking at trends. And we're looking at concentrated areas of overdoses, either geographically or in time, because then we may have a bigger issue that maybe one batch of drugs is killing people, particularly. At that time, it becomes just critical to get a particular dealer or particular batch off the street. But the alert itself? I think it does help.

Other investigatory processes around HIDI have evolved as the chemical composition of illicit opioids and other drugs change, drug misuse practices transform, drug-distribution channels vary, and community awareness grows, precipitating two key changes associated with HIDI. First, HIDI network members have learned how important responding to and investigating nonfatal overdose incidents are to investigating fatal ones. As a HIDI detective recounted,

> Originally, we were responding to just fatal overdoses. November 2014 is when we first started seeing fentanyl hit the streets. So, when fentanyl hit, we started going to all overdoses, both fatal and nonfatal overdoses. We didn't know fentanyl was going to do what it did. Obviously on fatal overdoses we try to link the dose [...] to the dealer and then we hold that dealer accountable with involuntary manslaughter. The nonfatals [...] we want to find out where they got drugs. [...]. We try to see if that's one person, so obviously we go after the dealer so that we can prevent someone from dying.

Second, HIDI network LE investigators also have ascertained that this is a crisis law-enforcement agencies cannot solve on their own. A HIDI detective reported, "You're not going to arrest your way out of it." HIDI network LE investigators said they were learning they can be key nodes in the overdose-response network that supports engaging persons misusing drugs with treatment. "In 2017 [...] we started what's called LEADS, and that's Law Enforcement Assisted Detox [...]," a HIDI detective explained.

> We can talk to someone [who experienced a nonfatal overdose] at the hospital. If they want treatment, we can get them in [...] as soon as they get discharged [...]. We'll have a police car there and basically drive [the person] right to detox and get them in a treatment center."

City, county, and federal investigators and prosecutors interviewed for this study all asserted that HIDI has contributed to improved evidence collection via the timelier crime-scene protection afforded incident sites and a greater understanding of what evidence to collect. A senior county prosecutor explained, "The HIDI protocol has positively impacted successful prosecutions." The interagency collaboration works to assist in recognizing an opioid-overdose scene because as one medicolegal investigator explained, "Maybe patrol missed [the opioid clue] or EMS missed it, and we see it then we send the alert." Interagency collaboration also often occurs on-scene. "There's usually one detective with us," noted another medicolegal investigator,

> paying attention to the body and another [detective] exploring the scene and talking to the family. The detectives are interviewing the family/friends/others criminally and we interview them for cause and manner [of death].

Additionally, more law enforcement jurisdictions are learning about the HIDI protocol and implementing some of its practices. "The last few years, the HIDIs have been pretty solid," acknowledged one federal investigator.

> And I think [awareness of the HIDI protocol has] been getting out to more and more [police departments], as well, that aren't necessarily fielding HIDI teams, but they are arriving on scene, pretty much not disturbing the scene, as much as possible, and then

> preserving phones, packaging, paper drugs, straws, you name it, everything they're looking at that scene.

In sum, assessment of interview themes and text analyses revealed agents' organizational worldview toward the processes comprising HIDI investigations. Dominant HIDI themes were: (1) Multi-agency collaboration, cooperation and communication are the foundation of HIDI investigations; (2) HIDI is most successful when it results in federal prosecution of drug traffickers; and (3) HIDI has contributed to a shift in culture regarding how law enforcement responds to fatal and nonfatal overdose victims, often providing positive pro-social support of opioid users and their families, encouraging users to seek treatment rather than arrest.

Research Limitations and Caveats

Expansion of years of ME coding

Our original submission stated we would code ME data from 2014-2016. Delays in access to prosecution cases, as well as a no-cost extension allowed us to complete coding and entry of data through 2019. Limitations in medical examiner data include the secondary nature of family or witness reports of medical and behavioral health histories and the circumstances of the overdose.

Prosecution cases reviewed

Our proposed plan was to code 40 "successful" and 40 "unsuccessful" cases. However, it became clear that the definition of "unsuccessful" cases was problematic. Prosecutors at both the County and Federal level will not prosecute cases that are not very strong, and thus the number of "unsuccessful" cases are proportionally few. For a period of time, we considered defining "unsuccessful" as cases that were not prosecuted at the federal level, but that also was not a good definition, as Cuyahoga County also successfully prosecuted cases. COVID-19 access restrictions limited prosecution case evaluation to publicly available files.

Additionally, the design of the study did not necessarily address prosecutions of major drug traffickers, as those cases may be associated with more than just one death, and hinges more on the organization, quantities and use of storage and distribution chains, whereas prosecution of a fatal drug-related homicide hinges more on tying one supplier to the fatality, resulting in the prosecution of an individual dealer rather than the major trafficker. However, these individual cases and the evidence collected for each can be combined to access the larger organization, if applicable, through better analyzability and linking of evidence and cross-agency data sharing. Further analysis of these larger cases is warranted to explore this.

Qualitative Design Changes

Due to the onset of the COVID-19 pandemic in March 2020, all subsequent interviews and focus groups occurred virtually either over the telephone or videoconference rather than in-person as originally preferred. Additionally, the original interview/focus group research design called for interviewing 35 individuals in Year 1 and re-interviewing the same individuals in Year 2. This plan changed when (a) follow-up interviews became impossible when some professionals departed from the original position in which they were interviewed, and (b) HIDI network professionals' availability to participate in research was severely restricted by the onset of the COVID-19 pandemic beginning in March 2020 and the regional civil unrest of summer 2020. Instead of interviewing 35 participants twice, the researchers broadened the number of HIDI network interviews/focus groups to include 54 participants, with only the HIDI detective and several medicolegal investigators participating twice.

Generalizability

The urban nature of Cuyahoga County imposes limitations on the generalizability of some of the qualitative findings to rural and tribal areas. The HIDI model also has been implemented in a county with a large urban center that accounted for the majority of fatal OD cases and a county with a Medical Examiner who controlled the drug testing lab and possessed testing equipment that permitted

sophisticated analyses of synthetic compounds. All of these resources may not be available to coroners in rural counties.

Implications for Criminal Justice Practice and Policy

The following suggestions include those surfaced that from stakeholders during interviews and focus groups, as well as those developed by the research team after full consideration of the data collected over the course of the research project.

1. HIDI would benefit from implementing an Alert Office. HIDI was not designed to coordinate senders and receivers' alerts. The HIDI network also did not have a central node staffed to manage incoming information and redirect it to specific agencies. An Alert Office staff would follow up on each alert by tracking investigation progress across agencies. Tracking data flow would ensure that prosecutors possess accurate and convincing evidence necessary for prosecution. An Alert Office could also act as a repository for opioid overdose criminal case outcomes. The Alert Office might be staffed by detectives on collateral duty and HIDI retirees. Alert Office experienced staff would be useful in training new HIDI detectives. They could have the authority to contact state and federal correctional facilities for information on soon-to-be released and released inmates returning to the local community with drug trafficking convictions. The Alert Office can also be a valuable community resource wherein staff might provide risk and needs assessment information to schools and provide information on local experts willing to collaborate on drug harm-reduction programs or provide information to nonfatal victims and families on treatment programs.
2. Law enforcement agencies experiencing high rates of overdose deaths should implement a HIDI specific protocol for how to respond to fatal and nonfatal OD scenes to ensure "scene integrity", ensure officer, investigator and first responder safety, and establish standardized procedures for the

collection of valuable drug, digital and forensic evidence critical for investigation and prosecution, particularly information necessary to link decedent to drug cause of death and to source of the drug.

3. All criminal justice professionals should be educated on the nature of drug misuse and addiction. One policy transition that occurred during the course of this study and surfaced in the stakeholder and focus group data (see Transcripts 8, 9, and 28) was the shift from a law enforcement position of arrest of user to attempts to link users to treatment, at least in OD cases where no other criminal act was committed (e.g., child abuse/ neglect, injury caused by a car accident, etc.). Law enforcement has come to realize that they cannot arrest their way out of the opioid overdose epidemic. General Police Orders (GPOs) that clarify when to arrest vs. when to refer to treatment would be beneficial. Response to fatal ODs is critical to prosecution of major traffickers, but response to nonfatal ODs can also provide valuable information for drug trends, investigations and prosecutions.
4. This study illustrated the value of embedding a forensic epidemiologist in a Medical Examiner office so that drug trends (e.g., the emergence of carfentanil), decedent toxicologies and medicolegal investigative data could inform law enforcement interdiction, investigation, and prosecution. Access and sharing of near real time information in the context of a collaborative public health approach is essential to addressing fatal and nonfatal OD incidents. Historically medical examiner data is viewed primarily as demographic data on death certificates, and the cause and manner of death. The coding efforts from this initiative allowed the ME to build a prototype database for death investigation coding that can be used to look for patterns of similar packaging or toxicologies across scenes, pointing LE investigators toward possible linking of evidence across cases that could assist in building major drug trafficking cases. ME offices can thus evolve to become important contributors of expansive information available at death scenes and through medicolegal investigations (paraphernalia and interviews with family/friends) that can inform investigations, practice and policy. In Cuyahoga County the ME also houses and supervises the Regional Forensic Sciences

Laboratory so there is ready access to drug chemistries and drug seizure data to track source and volume. The success of this initiative also illustrates the potential for the embedded epidemiologist role to be expanded beyond overdoses to include other areas of death including homicides, suicides, and firearm violence which has implications for criminal justice policy and practice in these areas.

5. This project demonstrated the importance of collaboration and information sharing to successful indictment. Prosecutors should work closely with detectives, medicolegal investigators and task forces. Local and federal law enforcement response where communication, collaboration and information sharing drive the response can be effective especially in non-urban communities where resources may limit the ability to implement independent HIDI teams.
6. The HIDI Alert system helped ensure quick response to fatal OD scenes. The timing of response to fatal and nonfatal OD incidents (alerts, physical response, collection of evidence, complex toxicology) was identified as essential to clarifying COD, and ability to link fatality to a specific drug and to the source of the drug.
7. The pharmacology of synthetic opioids is constantly changing, as demonstrated by the increasing number of synthetically produced opioids found in decedent toxicology. Law enforcement interviews and evidence gathered demonstrated that drug dealers change their methods of distribution and packaging. Drug users change how they communicate with dealers. Law enforcement must be aware of these changes and modify how they gather information and connect drugs to users, identify the drug responsible as cause of death, and connect the drug to a dealer. Cell phone data is still critical, but more so for geo-coding locations than linking cell phone owners to communications. Drug packaging has given way to touch DNA analyses on product and packaging.
8. Tracking and analysis of shared information among police, prosecutors, EMS, and Medical Examiners to identify trends and patterns (of fatal and nonfatal incidents and drug source) is significant for identifying traffickers and prosecution. Dealers and distributors of drugs regularly change their

method, and defense attorneys seek ways to undermine chain of evidence and proximate cause. To successfully prosecute major drug traffickers and "move up the chain" ongoing information sharing and analysis from all partners and at all levels/stages of prosecution is necessary.

9. Through this initiative an exemplar database was created for extended coding of Medical Examiner data which is already being utilized as the basis for other overdose and fatality data, and provides the framework for data and information flow between the ME and law enforcement, public health, treatment providers, as well as evidence important for successful prosecution of traffickers.

Completed Dissemination

Presentations

1. Savadelis A. *Opioid Overdose Fatalities in Cuyahoga County: Who is Using Opioid and Cocaine Mixtures or Carfentanil?* Capstone defense, MPH: Public Health Innovations Conference Spring 2020, April 16, 2020. Department of Population and Quantitative Health Sciences, Case Western Reserve University, Cleveland, OH.
2. Bhullar M, Gilson T, Flannery DJ, and Fulton S. *Informing public health and prevention efforts through a medical examiner's office: The Opioid Epidemic and Forensic Epidemiology*. American Public Health Assoc. Conference (Virtual), Session 61538, October 27, 2020.
3. Gilson T, Bhullar M, Flannery DJ, and Fulton S. *Carfentanil, the driver of opioid related fatalities in Cuyahoga County: Forensic Epidemiological Surveillance*. American Public Health Assoc. Conference (Virtual), Session 4081.0, October 24-28, 2020.
4. Bhullar M, Fulton S, Flannery DJ, and Gilson T. *The Opioid Overdose Crisis in Cuyahoga County, Ohio and Its Effect on Stimulant (Cocaine) Users*. Rx Summit virtual meeting, poster available during summit, April 5-8, 2021.
5. Flannery, D. & McMaster, R. *Drug intelligence and response strategies for interdiction, investigation, and overdose prevention* (panel). International Association of Chiefs of Police. (Virtual), September 11-14, 2021.

Publications

1. Flannery DJ, Gilson T, Bhullar M and Noriega I. *Research in Brief: Carfentanil - A 4th wave of fatal overdose.* Police Chief Magazine, August 10, 2020. https://www.policechiefmagazine.org/rib-carfentanil-fourth-wave-fatal-overdoses/?ref=f0577666e90dcbffe304ff6867daa47b
2. Frazier, L., Nolt, K., Bhullar, M., et al. (accepted, under revision).: An Equitable Response to the Ongoing Opioid Crisis. *Updated Policy Statement,* American Public Health Association.
3. Bhullar, M. K., Gilson, T (2020, May). Letter to Editor: The Contribution of Prescribed and Illicit Opioids to Fatal Overdoses in Massachusetts, 2013 – 2015. *Public Health Reports*, SAGE Journals. Volume 135. Issue 4

Forthcoming Dissemination Plans

1. Gilson, T., Bhullar, M., Flannery, D., & Noriega, I. (in preparation). *Fatal drug overdose spikes in Cuyahoga County: Understanding carfentanil trends in decedent overdoses and local drug seizures from 2016-2020.* This paper will outline fatal overdose trends in Cuyahoga County from 2016-2020. It will focus on the impact of Carfentanil in drug seizures and toxicology samples of fatal overdose deaths to highlight the lethality of Carfentanil in the region.
2. *Overdose fatalities in Cuyahoga County 2014-2019: Toxicology and demographic trends form 2014-2019.* This manuscript will explore characteristics of victims of fatal overdoses, death investigation findings and relationships to changes in toxicology during this period.
3. In the peer-review article currently under construction tentatively titled, *Ameliorating the Effects of the Opioid Epidemic: Federal prosecutorial discretion attempts to fill the void*, an exploration of the role played in combating the opioid crisis by those enforcing criminal law. The efforts of the US Attorney's Office of the Northern District of Ohio over the last eight years will be used as a case study, basing much of our analysis on interviews and focus groups with federal and county prosecutors; law enforcement, health system and forensic personnel; and data and intelligence analysts conducted between April 2018 and September 2021.
4. Gilson, T. P., Bhullar, M., & Deo, V. (in preparation). *Gabapentin-Involved Overdose Death Trends in Cuyahoga County.*
5. Bhullar, M., Fulton, S., Gilson, T. P., & Flannery, D. (in preparation). *Strengthening the Epidemiological Infrastructure in a Medical Examiner's Office to Inform Public Health Practice and Policy: The Essential Role of an Embedded Epidemiologist in Cuyahoga County, Ohio.* This manuscript will explore the role of an embedded epidemiologist in a Medical Examiner's Office, and how applying epidemiologic concepts to primary source data can impact public health/criminal justice practice and policy.
6. Fleisher, M. et al. Analysis of key words in context (KWIC) data that occur and reoccur in cultural or cognitive domains. Cognitive domains are discerned, for example, when prosecutors' KWIC are different than those of HIDI detectives.[26] Also co-word analysis has been shown to identify linkages and the strength of social ties among subjects in field research.[27] Analysis of semantic networks can also show how information flows among partners and how ideas cluster and become useful to investigations and prosecutions.

Data sets generated

- Cuyahoga overdose deaths 2014-2019
- Cuyahoga drug prosecution review
- Collection of focus group/interview transcripts regarding the HIDI protocol and surrounding drug overdose epidemic in Cuyahoga County, Ohio.

References

1. Gilson T, Herby C, Naso-Kaspar C. The Cuyahoga County Heroin Epidemic. *Academic Forensic Pathology*. 2014;4(1):109-113. doi:10.23907/2013.018

2. National Center for Biotechnology Information. PubChem Compound Summary for CID 62156, Carfentanil. Accessed December 14, 2021. https://pubchem.ncbi.nlm.nih.gov/compound/Carfentanil

3. Gilson TP, Shannon H, Freiburger J. The Evolution of the Opiate/Opioid Crisis in Cuyahoga County. *Acad Forensic Pathol*. 2017;7(1):41-49. doi:10.23907/2017.005

4. Ohio Department of Health. 2019 Ohio Drug Overdose Data: General Findings. Accessed October 8, 2021. https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/violence-injury-prevention-program/media/2019+ohio+drug+overdose+report

5. Deo VS, Gilson TP, Kaspar C, Singer ME. The fentanyl phase of the opioid epidemic in Cuyahoga County, Ohio, United States. *J Forensic Sci*. 2021;66(3):926-933. doi:10.1111/1556-4029.14665

6. Department of Justice, Executive Office for the United States Attorneys. Addressing the Heroin and Opioid Crisis. *United States Attorneys' Bulletin*. 2016;64(5):1-91.

7. Awadallah SS. Homicide & other Charges: Overdose Deaths. Presented at: May 9, 2018.

8. Cuyahoga County Board of Health. Overdose Surveillance Quarterly bulletin, 2021 Q1. Accessed October 11, 2021. https://www.ccbh.net/overdose-data-dashboard/

9. Kreit A. The Opioid Crisis and the Drug War at a Crossroads. *Ohio State Law Journal*. 2019;80(4):887-906.

10. Drug Policy Alliance. An Overdose Death Is Not Murder: Why Drug-Induced Homicide Laws Are Counterproductive and Inhumane. Accessed October 11, 2021. https://drugpolicy.org/resource/DIH

11. *Anti-Drug Abuse Act*. Vol 100 Stat.3207.; 1986.

12. *21 U.S.C., Section 841(a)(1), (b)(1)(A)-(C), 2012 Ed.*

13. *ORC Section 2925.02, corrupting another with drugs, states in pertinent part, that no person shall knowingly administer or furnish to another or induce or cause another to use a controlled substance, and thereby cause serious physical harm to the other person or cause the other person to become drug dependent.*

14. *ORC Section 2925.03, trafficking in drugs, states in pertinent part, that no person shall knowingly do any of the following (1) sell or offer to sell a controlled substance or a controlled substance analog or (2) prepare for shipment, ship, transport, deliver, prepare for distribution, or distribute a controlled substance or a controlled substance analog, when the offender knows or has reasonable cause to believe that the controlled substance or controlled substance analog is intended for sale or resale by the offender or another person.*

15. *Burrage v. United States*. 82 USLW 4076(134 S.Ct. 881 2014).

16. Mattessich PW, Murray-Close M, Monsey BR. *Collaboration: What Makes It Work, 2nd Edition: A Review of Research Literature on Factors Influencing Successful Collaboration*. Amherst H. Wilder Foundation; 2001.

17. Bruner C. *Thinking Collaboratively: Ten Questions and Answers To Help Policy Makers Improve Children's Services*. Education and Human Services Consortium; 1991.

18. Lee V, Kennedy A, Rogers A. Implementing and managing self-management skills training within primary care organisations: a national survey of the expert patients programme within its pilot phase. *Implementation Science*. 2006;1(1):6. doi:10.1186/1748-5908-1-6

19. Agar MH. *The Professional Stranger : An Informal Introduction to Ethnography*. Academic Press; 1980.

20. Flynn KC, Hoffer LD. Transitioning illicit drug preferences and emerging user identities in Ohio: The proliferation of methamphetamine use among African Americans. *J Ethn Subst Abuse*. 2019;18(1):67-88. doi:10.1080/15332640.2017.1325809

21. Bernard HR, Wutich A, Ryan G. *Analyzing Qualitative Data: Systematic Approaches*. Sage; 2016.

22. Ryan GW, Nolan JM, Yoder PS. Successive Free Listing: Using Multiple Free Lists to Generate Explanatory Models. *Field Methods*. 2000;12(2):83-107. doi:10.1177/1525822X0001200201

23. Jiménez TR, Orozco M. Prompts, Not Questions: Four Techniques for Crafting Better Interview Protocols. *Qualitative Sociology*. Published online June 5, 2021. doi:10.1007/s11133-021-09483-2

24. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scand J Public Health*. 2012;40(8):795-805. doi:10.1177/1403494812465030

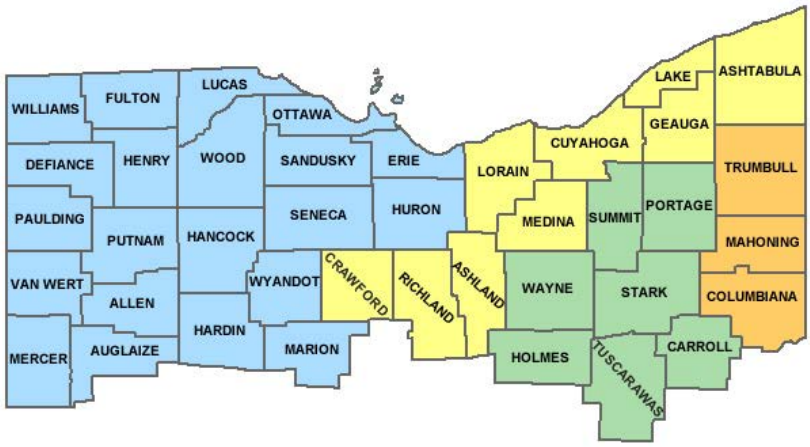
25. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349-357. doi:10.1093/intqhc/mzm042

26. Ericsson KA, Simon HA. Protocol analysis. A companion to cognitive science. Published online 1998. Accessed October 14, 2021. http://digitalcollections.library.cmu.edu/awweb/awarchive?type=file&item=39233

27. He Q. Knowledge Discovery Through Co-Word Analysis. *Library Trends*. 1999;28(1):133-159.

Appendix A: US Attorney, Northern District of Ohio

Figure 8. Counties in the US Attorney's Office, Northern District of Ohio (USAO-NDOH)



The US Attorney's Office, Northern District of Ohio (USAO-NDOH) is made up of two Divisions, Eastern and Western (colored blue in Figure 8). The Eastern Division is divided into 3 regions, namely the Akron Region (including Carroll, Holmes, Portage, Stark, Summit, Tuscarawas and Wayne Counties), the Cleveland Region (including Ashland, Ashtabula, Crawford, Cuyahoga, Geauga, Lake, Lorain, Medina and Richland Counties), and the Youngstown Region (including Columbiana, Mahoning and Trumbull Counties). Cuyahoga County, as indicated, is part of the Eastern Division, Cleveland Region. Trends for indictments for each region of the Eastern Division 2015-220 are illustrated in Figure 6 (report page 20).

Appendix B: State and Federal Case Examples

Federal Case example A (cell phones):

Police dispatched to house where the decedent was found unresponsive in the basement of her parent's house. The decedent's sister said the decedent was a recovering heroin addict. The sister had been at the house and saw her sister (the decedent) there with the defendant. The defendant's car was parked in the driveway. The car was owned by the defendant's mother. The decedent's sister stated that when the decedent would purchase heroin, she would purchase it from the defendant. Law enforcement retrieved text messages between the decedent and defendant on the day of the decedent's death regarding the purchase of drugs. A search of the defendant's girlfriend's house, where the defendant lived, also yielded large amounts of cash, drugs, drug paraphernalia and other items.

Federal Case example B (cell phones):

During the investigation of a death scene, drug paraphernalia including a baggie with suspected heroin residue was uncovered as well as cell phones belonging to the decedent and his girlfriend. Decedent's girlfriend told law enforcement there were calls between decedent and defendant prior to decedent's death regarding the purchase heroin from defendant. A search warrant executed for the decedent's phone showed records of calls to defendant. The defendant sold heroin to the decedent the day before the decedent overdosed. Another witness informed law enforcement that she had provided the defendant's number to the decedent for the purpose of purchasing heroin. This witness' boyfriend also purchased heroin from the defendant at a time close to the decedent's death and suffered a nonfatal overdose. The witness permitted law enforcement to retrieve data from her cell phone including SMS messages and call records from the defendant, including giving the decedent the number of defendants for the purpose of purchasing drugs. These messages were consistent with conversations between a drug dealer and drug user. There was also a text message from decedent to the witness asking for help.

The witness identified the defendant from a line-up. After reviewing cell phone evidence and witness statements, law enforcement conducted a controlled purchase of 1/2 gram of heroin from the defendant for $80.

Federal Case Example C (cell phones):

Defendant received Alprazolam (Xanax) and furanyl fentanyl in the mail and distributed them. Law enforcement retrieved texts messages between the defendant and the decedent about the fentanyl the decedent bought. The decedent was one of the first individuals to whom the defendant gave the drugs, as the two were friends. The defendant wanted the decedent to cut and re-rock the drugs, as well as to help the defendant find customers and distribute the drugs. The defendant warned the decedent that the drugs were uncut and very strong. The defendant told the decedent to only to take a little as the drug was very powerful and they could overdose. There is also a notation in the case file indicating that the defendant texted friends saying he was surprised by the decedent's death and wanted to change his number to avoid being attached to the decedent's death.

State Case Example D (cell phones):

Law enforcement responded to a suspected heroin overdose death. When processing the crime scene, law enforcement found plastic baggies and other items associated with drug consumption. The decedent's daughter told law enforcement that the decedent had bought drugs from the defendant. Law enforcement also received an anonymous call where the caller stated that that the defendant sold drugs to the decedent on the day he overdosed. The caller provided a cell phone number of the defendant. A retrieval of the call records for the phone showed a text message from decedent to the defendant "can I get 20, I have cash." During the investigation, law enforcement watched the defendant's house. An individual who had purchased drugs from the defendant turned confidential informant, and subsequently made drug buys from the defendant. Law enforcement then obtained a

search warrant and searched the defendant's premises. The defendant was found with drugs on his person and in his car. The case also involved another defendant, and when defendants were arrested, they made several statements that were damaging.

Federal Case example E (drug paraphernalia left at death scene):

Law enforcement investigators were investigating the sale of "blue drop heroin," a combination of heroin and fentanyl. During this time, there were five overdose deaths due to this drug mixture and 22 nonfatal overdoses. Law enforcement believed the blue dye was a branding for the drug to signify its potency (due to fentanyl). In this case, the defendant sold the drugs to another individual who sold them to the decedent. A review of the defendant's cell phone showed that the defendant knew of the deaths from this "blue drop heroin" because he visited the local newspaper, which ran stories on the number of overdoses and deaths associated with the "blue drop heroin." However, the defendant continued to sell the drug mixture even after the death of the decedent.

State Case example F (drug paraphernalia left at death scene):

The decedent was living with his mother who found him unresponsive in the basement. Paramedics arrived and confirmed he was deceased. Law enforcement and the HIDI team were called. Evidence collected at the death scene included a cell phone, razor blade with residue and unfolded square of paper with residue. The razor blade and square of paper tested positive for heroin. Later that same day, the decedent's brother found the decedent's wallet in the decedent's bedroom, and inside were folded up packets similar to a page from a magazine. The brother called law enforcement who came and retrieved the evidence. The packets tested positive for heroin, and one of the packets had the DNA of the defendant on it. These packets were identical to the packet law enforcement recovered at the death scene. During investigation of the decedent's phone, police observed 54 telephone calls between the

decedent and the defendant in month of the decedent's death. The last phone call was the day before the decedent died.

Federal Case Example G (DNA):

Law enforcement retrieved a series of calls and text messages between the defendant and the decedent wherein the defendant arranged to sell a quantity of heroin to the decedent. The defendant sold .2 grams of heroin to the decedent. The drugs recovered near the decedent's body tested positive for heroin. The packaging for the drugs was tested and the defendant's DNA was found on the outside paper that contained the heroin.

Federal Case Example H (DNA):

The Cleveland HIDI team responded to a drug overdose. A bag of suspected cocaine that was on a dresser at the death scene was recovered and tested. The bag contained heroin, cocaine and fentanyl. DNA retrieved from the packaging belonged to the defendant. Cell phone evidence was also crucial in this case. A search of the decedent's phone records show phone calls to the phone of defendant's girlfriend. Law enforcement also retrieved surveillance footage from a casino showing the defendant meeting with the decedent prior to his death. Law enforcement also identified a second phone that defendant used to call the decedent. Additional evidence included a video of the decedent approaching a minivan and getting something from someone in the van. The decedent's and defendant's girlfriend's phones were found to be together by using cell phone geospatial mapping during the time of the transaction and the owner of the van was also the owner of the second phone.

State Case Example I (DNA):

The death of the decedent occurred at a hotel. The Cleveland HIDI team responded to the scene. The decedent's cell phone had a text message regarding the buying and using of drugs from a specific

number prior to the decedent's death, six calls in total. Law enforcement developed a suspect profile based on DNA extracted from drug packaging evidence at the scene. A confidential drug buy was arranged with the defendant using this cell phone number. During the drug buy, the envelope in which the heroin was packaged was identical to the packaging recovered from the decedent's hotel room. DNA obtained from the drug buy matched the DNA extracted from drug packaging taken from the death scene. Cell phone mapping of the decedent's phone traced him to the defendant's apartment the day before the decedent's body was discovered. A second confidential drug buy was set up by law enforcement and the defendant was arrested. An search warrant was issued for the defendant's residence and law enforcement seized $2,140, heroin, a cell phone, packaging materials and vehicles.

Federal Case Example J (Eyewitness identification and testimony):

Police responded to motel room where decedent was lying on the bed with dried blood on his face. No cell phone or drug paraphernalia was at the scene. The decedent's cell phone records were subpoenaed. The cell phone had been turned off, and there was no activity the day of the decedent's death. Law enforcement uncovered the name of the female who had contacted decedent the day of his death. By talking with witnesses, law enforcement learned that the female purchased drugs from defendant and shared them with decedent at a hotel room. The female had been paid in money and drugs to have sex with the decedent. Cell phone records retrieved showed the female had called her dealer and ordered $100 worth of heroin. The female stated that the decedent gave her the money to pay the dealer. Bank records show $200 was removed from the decedent's checking and savings account on Christmas night. The decedent was snorting heroin and had mixed the heroin with alcohol and Viagra. While in the hotel room with the female, the decedent had become unresponsive, and the female panicked and fled. The female left the motel room and took the decedent's phone because her phone had a dead battery. Cell phone records show the female had contacted her boyfriend to pick her up. Witnesses included the female, her boyfriend, and his friend. The female had gotten in a fight earlier with her boyfriend because

she left to go get high with the decedent. The female's boyfriend told law enforcement that during the call to him, she was upset and hysterical saying "my God I think he is dead, but I think he was still breathing when I left." The boyfriend encouraged the female to call for help but she refused. She had told him it had happened before to her, and she would go to prison. The boyfriend had then thrown the decedent's cell phone into a snowbank, which was later uncovered by law enforcement. The female also called the dealer from the decedent's phone after she was picked up by her boyfriend.

Federal Case Example K (Eyewitness identification and testimony):

The decedent had just gotten out of rehab and injected fentanyl, which was much more powerful than the heroin she was used to. The decedent's friend also injected the drug and overdosed but was given naloxone by the responding officers and survived. The friend would testify about buying drugs from the defendant and overdosing. Law enforcement also located another witness who was available to testify that they saw the decedent purchase drugs from the defendant. A third witness was also available to testify to buying drugs from the defendant. The prosecution also had cell phone evidence between the parties.

Federal Case Example L (testimony of CI/ Undercover officers):

Law Enforcement received a call of a male overdosing. Law enforcement found the decedent lying on his back in his bedroom. The decedent was given naloxone and transported to hospital. The decedent never regained consciousness and later died. The decedent was living at a Sober Living House. When cleaning the decedent's room after the death, the family found a folded dollar bill with suspected heroin on the nightstand. Law enforcement came and seized the evidence. Law enforcement found a cell phone underneath the sheets of the bed. Drugs found at the death scene were confirmed to be heroin and fentanyl. Text messages on the decedent's phone were with an individual identified as "Dopeman" regarding the purchase of drugs right before the decedent died. The content of the text messages

indicated that “Dopeman” met with the decedent and sold him heroin. Law enforcement officers pretended to be the decedent and texted “Dopeman” to see if he would sell more drugs. “Dopeman” agreed to sell more drugs to the undercover officer; i.e., "the purple good shit." Law enforcement confirmed “Dopeman” was the defendant and arrested at him at a Burger King, where the drug buy was to take place. The defendant was in possession of the phone “Dopeman” was using. The defendant was also in possession of a bag containing purple powder and six papers also containing purple powder, which was later confirmed to be heroin and fentanyl. Cell phone geospatial records also found the decedent and defendant to be in close proximity to each other at the time decedent was purchasing drugs from “Dopeman.”

Federal Case Example M (wiretap):

The decedent came to a house that the defendant and others were using ("crib"). While there, the decedent overdosed on drugs. In phone conversations from the defendant and others that were taped as part of a wiretap, it was noted that the decedent was dead in the house, and the defendant and the others were trying to dispose of the body and evidence. The decedent's car was photographed at the house the defendant was using. The defendant was heard on the wiretap indicating he cleaned things up and had to drive east to Youngstown (where the decedent lived). A search for exigent circumstances after listening to wiretap was obtained as law enforcement believed a deceased female was in the house (crib). Evidence obtained during the search included a photograph of a shirt believed to be the decedent’s and spot checks of vehicles parked near house from previous surveillance. Cell phones of individuals in the house were seized as well. There was also a 911 call due to an unresponsive female in a vehicle that was pulled into the driveway of the decedent’s home. The decedent was wedged into the front and rear seats of the vehicle and was cold to the touch. The decedent was without a shirt on. EMS were told by the decedent's friend that the two were driving around when the friend noticed the

decedent not breathing in the back seat. The friend then pulled into driveway and went inside to house to get help. The decedent's husband indicated that the decedent had a drug problem.

Federal Case Example N (defendant admission of guilt):

The decedent's company found decedent in his work truck in a parking lot unresponsive. The company believed decedent had abandoned the truck. When company went to retrieve the vehicle, they found the decedent unresponsive in the cab and called 911. During an interview with decedent's ex-girlfriend, she said she has had the same dealer since moving back to Akron in 2012. The defendant was identified as the dealer. The decedent had been using heroin with the girlfriend, and she introduced him to the defendant. The girlfriend stated that the decedent didn't know any other dealers. They would meet dealer at a Family Dollar or at a house. During conversations with law enforcement the defendant indicated he sells fentanyl to support himself and his children. He purchased 150 grams of fentanyl online from a company in China. He paid 1000 Bitcoin ($900) and received it by FedEx. The defendant added powdered sugar as a cutting agent and food coloring to make it pink so it wouldn't be confused with his cocaine supply. The defendant admitted to selling fentanyl to the decedent and confirmed that he was introduced to him by the decedent's girlfriend. The defendant told law enforcement that the last time he sold fentanyl to the decedent was about a month ago in the Family Dollar parking lot. Law enforcement retrieved text messages between the decedent and defendant, including a narcotics transaction after which there were no other outgoing calls or text from the decedent's phone number. The decedent's cell phone had another number also linked to the defendant. A search of the decedent's truck included a paper bindle wrapper. Chemistry results for the drugs were negative, but the packaging had the decedent's DNA on it.

State case example O (defendant admission of guilt):

Law enforcement responded to an unresponsive male in a hotel bathroom. A co-defendant was performing CPR, and the defendant stood outside the room when officers arrived. Law enforcement noticed a small baggie with brownish/tan substance on the table. Law enforcement questioned the defendants about the location of a syringe. Law enforcement told the defendant if she admitted to where she moved the syringe, she would not be charged with tampering with evidence. The defendant admitted to moving it to the trash. The co-defendant completed a statement to police and was then Mirandized. The defendant told law enforcement she did not see the decedent use heroin in her presence. The defendant completed a written statement for law enforcement; however, law enforcement did not believe defendant. Defendant also told officers that her supplier had provided her and the decedent with drugs the day of the decedent's overdose.

State Case Example P (testimony of co-defendants):

The defendant was charged with another individual who provided information which was taped (audio and visual) at the police station. The co-defendant found the individual dead in his bed and called 911. At time of death, syringes were found at the apartment of the decedent and tested for DNA and fingerprints. The decedent was found in the co-defendant's apartment. Law enforcement obtained statements given by the co-defendant to police (audio/visual recording). The defendant participated in drug use in the presence of the decedent prior to her death.

Appendix C: Medical Examiner Coding

Cuyahoga County, Ohio, Heroin and Crime Initiative (HCI) Coding Process

1) Click on “Add/Edit Records”
2) Click on “Enter a new or existing Case Number from CCMEO”
3) Enter CCMEO case number, it should appear in pre-populated list. If it does not, alert Manreet and do not code.
4) From the list of “Data Collection Instrument,” click on the red dot under “Status” beside “CCMEO_data,” and make sure everything is filled out, then change “Form Status” from incomplete to complete
5) Then click the blue “Save & Exit Form” button
6) Click on the red dot under “status” beside “CCMEO Extracted Data”

Coding Toxicology Reports

Toxicology Reports – what to include in "drugs present, but not related to Cause of Death (COD)

(Include drugs present in CCMEO toxicology report that are not in COD drugs, common adulterants of drugs, but **DO NOT** include metabolites of drugs in COD)

Heroin – metabolites
- 6-acetylmorphine (6AM)
- Morphine
- Codeine

*If there is more codeine than morphine, then there is a different source for the codeine than just heroin breakdown/metabolite (e.g. cough syrup)

Cocaine – metabolites
- Benzoylecgonine
- Anhydroecgonine methyl ester
- Cocaethylene
- Ecogonine ethyl ester
- Ecogonine methyl ester
- Norcocaine

Cocaine – adulterant (include)
- Levamisole

Fentanyl – metabolites
- Norfentanyl
- Norsufentanil
- Norcarfentanil

Fentanyl – analogs (include)
- Fentanyl
- Sufentanil
- Carfentanil
- Alfentanil
- Lofentanil
- 3-methyl fentanyl
- Methoxyacetyl fentanyl
- Cyclopropyl fentanyl
- Butyryl fentanyl
- Acetyl fentanyl…etc.

Tramadol – no metabolites

Hydrocodone – metabolites
- Dihydrocodeine
- Hydromorphone

Trazadone – metabolites
- M-chlorophenylpiperazine
- O-desmethyltramadol

Doxepin – metabolites
- Cis-doxepin
- Trans-doxepin

Alprazolam – metabolites
- 4-hyroxyalprazolam
- Alpha-hydroxyalprazolam
- Brinzophenone

Nicotine – metabolite
- Cotinine

*usually present in smokers, so include both nicotine and cotinine

Lamotrigine – metabolites
- LTG – glucuronide

Loperamide – metabolites
- desmethyllloperamide

Methamphetamine – metabolites
- amphetamine

Amitriptyline – metabolites
- nortriptyline

Clonazepam – metabolites
- 7-aminoclonazepam

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Oxycodone – metabolites
- Oxymorphone
- Noroxycodone

Citalopram – metabolites
- Norcitalopram

Dextromethorphan – metabolites
- Dexprophan

Sertraline – metabolities
- Norsertraline

Other Important Information about Toxicology Reports and/or Drug Names:

Amphetamine ELSA – it is a screening tool, sometimes tripped due to decomposition of the body, not the presence of amphetamine. If NMS does not have a positive fining, Amphetamine is not present

GC/MS – Gas Chromatography/Mass Spectrometry

Spice – street name for synthetic cannabinoids which are designer drugs that are chemically different from the chemicals in cannabis but are sold with claims that they give the effects of cannabis

Wet – street name for liquid PCP which can be applied to marijuana cigarettes and then smoked

Instructions for Chart Review NIJ report variables

Question on updated database form	Instructions for completing PAPER FORM - 2015 forward	Places to look in chart.	Rationale for asking	Changes in 2015	Instructions for entering data into computer - 2015 forward	Variable name in the table named tbl Abstracted Cases. (Variable name) in parentheses then followed by coding scheme.	Updates for NIJ	notes/questions
CASE	Do not enter, autofill	Imported			INYYYY-NNNNN - CCMEO Case number, imported			
NameLast	Do not enter, autofill	Imported						
Name First	Do not enter, autofill	Imported						
Name Generational	Do not enter, autofill	Imported						
Cause of Death	Do not enter, autofill	Imported						
Accidental	Refer to Cause of death					(Accidental) 1;"Accidental"; 2;"Suicide";3;" Manner undetermined" ;4;"homicide"		
COD_Reason	Refer to Cause of death					(cod_reason); Choose from drop-down	will need to append as new reasons are identified	
Other_CODinfo	Refer to Cause of death					(other_codinfo) if other checked, explain		
COD_DueTo	Refer to Cause of death					(cod_duedo) Due to COD reason	will need to append as new	

							reasons are identified	
Other_DueTo	Refer to Cause of death					(Other_DueTo) if other checked, explain		
COD_OthCond	Refer to Cause of death					(COD_OthCond) choose all listed in Cause of Death under "Other condition"	will need to append as new other conditions are identified	
COD_Drugs	Refer to Cause of death					(COD_Drugs), choose all drugs involved	will need to append as new drugs are identified	
COD_OthDrugName	name of drug related to COD that Is not listed in COD_Drugs	Toxicology report				(COD_OthDrug Name) short text, please spell carefully		

OtherDrugspresent_NR		**present in toxicology report, but not in Cause of Death**				**(OtherDrugspresent_NR) check dropdown choices**	**1. Heroin - 6-Acetylmorphine - codiene - morphine *If there is more codiene than morphine than there is a different source for the codiene (cough syrup etc) not heroin breakdown/metabolite only** **2. Fentanyl - just fentanyl** **3. Tramadol - just tramadol** **4. Hydrocodone - dihydrocodeine -hydromorphone** **5. Amphetamine ELISA - screening tool, sometimes tripped due to decomposition of the body, not the presence of amphetamine. If NMS does not have a positive finding, Amphetamine is not present. 6. Trazodone: -m-chlorophenylpiperazine, -o-**	

							desmethyltramadol 7. Doxepin: cis-doxepin, trans-doxepin	
OtherDrugspresent_NR_other						**(OtherDrugspresent_NR_ther) If checked, explain other**		

Education	Circle appropriate response. **None** = 8th grade or less; **some HS** = 9-12, no graduation; **HS**=HS Grad; **some college**=associate's degree, did not graduate from college, etc.; **college grad**=graduated from college; **post grad**=any degree obtained after college degree; **?**=unknown.	Death Certificate.	Description of affected population.	PRIOR to 2015, NONE = any education less than HS graduation. Starting with the second trimester of 2015, education was changed so that NONE=8th grade or less and some HS was added as a choice. In 2015 and 2016, the charts were reviewed by trimester in this order: 1st trimester 2015, 1st trimester 2016; 2nd trimester 2015, 2nd trimester 2016; then third. The first trimesters of 2015 and 2016 were coded using the old code. Starting with the second trimester of 2015 and 2016, the new codes were used.	**Use Drop down box to select**. **None** = 8th grade or less; **some HS** = 9-12, no graduation; **HS**=HS Grad; **some college**=associate's degree, did not graduate from college, etc.; **college grad**=graduated from college; **post grad**=any degree obtained after college degree; **?**=unknown.	**(Educ Level)** None, some HS, HS, some college, college grad, post grad, Unknown	The latest choices remain the same, but are coded into the following codes for the dropdown: 0= no highschool 1 =some highschool 2== highschool 3 some college 4= associate degree 5= college 6 =post college -7 =unknown	
Veteran?	Check "Yes" or "No"	Death Certificate.	Description of affected population.		Use drop box to select Y or N.	**(Veteran)** Y=1; N=0.	0=no 1=yes;-7="unknown"	
If the deceased was female, was she pregnant when she passed away?	Yes/No/Unknown	Autopsy Report	Description of affected population/point of possible intervention			(**Pregnant)**	0;"No";1;"Yes";-7;"Unknown";-11;"Not applicable (Male)"	

Hospital Case:	Put a check or X in box if CASE DIED IN HOSPITAL.	The first sheet in file with summary infor will list place of death as a hospital, there may be hospital records in chart, and scene investigation will most likely be NO.	Indicator that case was seen at hospital. Used for tracking alerts. When ME interacts with law enforcement, hospital cases are not usually "caught." Thus, when comparing the alert list with list of cases, you would not necessarily expect a hospital case to show up in the list of alerts.		Enter "Y" in field if case is a hospital case.	**(Hospital Case)** Y=1; N=0.	Please note that there still may be a scene, added unknown in the unlikely possibility that this is not recorded: 0=no 1=yes;- 7="unknown"	Should this be forced yes or no - is there any scenario where this would be unknown?
No Scene:	Put a check or X in box if there was not a scene investigation.	The "pink sheet" will contain this information. Look down toward the lower third of the page.			Enter "Y" in field if there is no scene.	**(No Scene) Y=1; N=0.**	0=no 1=yes;- 7="unknown"	Should this be forced yes or no - is there any scenario where this swould be unknown?

Using drugs with others	Check "Yes" if there is <u>any</u> evidence in file that **others were present AND using ILLICIT drugs at the location where case took or injected drugs (injury location).** Alcohol is not an illicit drug.	ME's scene investigation, police reports, EMS	1. To evaluate effect of "amnesty law" and 2. to determine whether someone WHO WAS CAPABLE was present who could have administered naloxone. In theory, prior to amnesty law one would not expect that other illicit drug users would "hang around the scene", and after law enactment, other illicit users may be more likely to be present if they are actively trying to save case's life.		Use drop box to select Y or N.	**(DrugsOthers)** Y=1; N=0.	1=yes; 0 = no;-7;"unknown"	
Others present in location but not using drugs.	Check "Yes" if there is <u>any</u> evidence in file that other **CAPABLE ADULTS OR TEENAGERS** were present at injury location, regardless of whether others were using	ME's scene investigation, police reports, EMS	1. To evaluate effect of "amnesty law" and 2. to determine whether **someone was present who could have administered naloxone**.		Use drop box to select Y or N.	**(OthersPresent)** Y=1; N=0.	1=yes; 0 = no;-7;"unknown"	

	drugs illicit drugs.							
EMS response	Check "Yes" if EMS responded, and "No" if they did not respond.	ME's scene investigation, police reports, EMS, Hospital records. If the file is missing EMS report, that does not necessarily mean that EMS did not respond. Look for other clues: e.g. hospital records, police, etc.	One of the main sources of information available.		Use drop box to select Y or N.	**(EMS)** Y=1; N=0.	1=yes; 0 = no;-7;"unknown"	
Naloxone administered	Check "Yes" if administered, "No" if not administered. "unknown" if no reports, and no mention of naloxone.	EMS report, Police and/or Fire report.	Track whether naloxone is being administered. In 2013, the scope of practice was changed in Ohio to allow all levels of EMS providers to give		Use drop box to select Y or N.	**(Naloxone)1=Yes; 0 = No.;-7;"unknown"**	1=yes; 0 = no;-7;"unknown". If there are discrepencies as to how many doses were administered, always take EMS report as the most accurate.	do we need to look for clues in toxicology report?

			naloxone, not just the providers with the highest level of EMS training.					
If no Naloxone/Narcan, why not?	describe why no Naloxone/Narcan administration	EMS report, Police and/or Fire report	understand why not administered, important to know if patient was DOA	N/A		**(WhyNoNalox) typed**		
Who (what agency administered naloxone?)	Check all that administered naloxone. **PD** - Police Department; **EMS -** Emergency Medical Services or Fire Department; **DAWN -** bystander.	EMS report, Police and/or Fire report	Track who is administering naloxone. In 2016, naloxone became available without a prescription, so this field was added specifically to track whether bystanders were administering naloxone.	In 2015 and 2016, the charts were reviewed by trimester in this order: 1st trimester **2015** then 1st trimester 2016; 2nd trimester 2015, 2nd trimester 2016; then third. **Who administered naloxone was added for chart reviews starting in the 2nd trimester of 2015 and beyond.**	Enter "Y" in field.	**(Naloxone_PD)** Y=1; Default=0 for new cases. **(Naloxone_EMS)**; Y=1; Default=0 for new cases; **(Naloxone_DAWN)** Y=1; Default=0 for new cases	This field was pulled apart into the variables below	
Did police administer naloxone?	Yes/No/Unknown	Police Report				**(Naloxone_PD) 0=Police did NOT administer Narcan;1=Police DID administer Narcan;-7;"unknown"**		

If yes, how many doses did police administer?	integer	Police Report				**(Naloxone_PD_dose) integer, unknown should be entered as -7**		
Did EMS administer naloxone?	Yes/No/Unknown	EMS report, Hospital Records				**(Naloxone_EMS) 0=EMS did NOT administer Narcan;1=EMS DID administer Narcan;-7;"unknown"**		
If yes, how many doses did EMS administer?	integer	EMS report				**(Naloxone_EMS_dose)integer, unknown should be entered as -7**	2mg = 1 dose. Be sure to check dosage on EMS report, sometimes multiple doses are reported under one "Narcan"	
Did DAWN administer naloxone?	Yes/No/Unknown	EMS report, Police report, scene investigation report				**(Naloxone_DAWN) 0=DAWN did NOT administer Narcan;1=DAWN DID administer Narcan; "-7" ="unknown"**		
If yes, how many doses did EMS administer?	integer	EMS report				**(Naloxone_DAWN_dose) integer, unknown should be entered as -7**	2mg = 1 dose. Be sure to check dosage on EMS report, sometimes multiple doses are reported under one "Narcan"	
Is there evidence of other	Yes/No/Unknown	scene investigatio				**(Naloxone_other) description if someone else**		

administration of naloxone?		n, police report				**administered naloxone**		
Dose of other administration of naloxone	number	investigation report, police report				**(Naloxone_Oth_dose) if someone else administered, how much? Unknown should be -7**	If there are discrepencies as to how many doses were administered, always take EMS report as the most accurate.	
Other: Epi Only?	Answer required only if EMS responded. Check the box IF **Epinephrine was the ONLY drug administered to the case.** If both Narcan and Epinephrine were administered, enter "NO"	EMS report	Track whether EMS personnel are ONLY administering epinephrine and NOT naloxone. It is expected with increased education about the prevalence of opioid overdoses and the increased availability of naloxone, the number of epi only cases should decrease over time. Dr. Gilson did send out a previous communication to EMS agencies that naloxone should be administered to anyone who has potentially overdosed.		Enter "Y" in field.	**(Epi only)** Y=1; N=0.	Yes or No.1=Yes; 0 = No;-7=Unknown	

To where did EMS transport patient	Check where EMS transported client	EMS report, police report	possible identification of HIDI alert point		Use drop box to select Transport to Hospital, transport to CCMEO, somewhere else or or no EMS transport	(EMS_Transport) 1=EMS transport to Hospital; 2=EMS transport to CCMEO (morgue); 3=EMS transport other place; 4= EMS did not transport		
Paraphernalia Present	Check "Yes" if any drug paraphernalia was present at injury location. Common examples of paraphernalia include the following (see attached list for more examples): needles, syringes, medical tubing, or other cloth for making a tourniquet, spoons.	ME's scene investigation, police reports, EMS	1. Indicator of "how they're using" i.e., IV or snorting. 2.Police collect the paraphernalia from the scene as evidence, but the paraphernalia is not always tested at the time of death. The paraphernalia, however, remains in evidence so that it can be tested in the future. This indicator,therefore, can be used to show that there is paraphernalia		Use drop box to select Y or N. Enter description of paraphrenalia in adjacent text box.	**(Paraphrenalia Present)** Y=1; N=0.	Yes or No.1=Yes; 0 = No;-7=Unknown	

			available for testing.					
ParaphernaliaType	Description of paraphernalia	ME's scene investigation, police reports, EMS	1. Indicator of "how they're using" i.e., IV or snorting.		Describe paraphernalia.	**(ParaDescription)** Text.	drop down list created	
ParaphType_other							for items not in drop down	
Previous (legal) prescription pain medication use (OARRS)	ME's office reviews OARRS data to determine if decedent was in OARRS database. Writes Yes or No.	Not in chart.	Looking for prescribed opiates prior to death		Previous Legal Rx of Drugs. Use drop box to select Y or N.	**(OARRS)** Y=1; N=0.	Drop down list created	

Medications	Medications in OARRS prescribed to deceased. WRITE DOWN ALL MEDS deceased was prescribed. Leave blank if deceased was not in OARRS.	scene investigation, police report, medical records	Looking for prescribed opiates prior to death		Enter Meds. **BE CAREFUL WITH SPELLING.**	**(OARRS_MEDS)** text.	prescription medications that are found on scene and are in the decedent's name and prescription medication in medical records in medication lists that are OARRS reportable drugs or related drugs	
OARRS_OPIATES This variable is not on the paper form. It is calculated in the computer.			This is an indicator variable. It is used in the calculation of decedents who were prescribed opiates before death.		Spell medications correctly in the medications field. If they are spelled incorrectly, the computer program will not identify them as an opiate.	**(OARRS_Opiates)** 1= any of the following meds were in OARRS: morphine, hydrocodone, hydromorphone, oxycontin, oxycodone, fentanyl, codeine or codiene, tramadol, propoxyphene, methadone.		
Doctor Shopping? (5 different prescribing doctors in one calendar year)	This field is completed by the ME's office using data fro the OARRS database.		Risk factor for potential opiate-related overdose?		Use drop box to select Y or N.	**(Dr Shopping)** Y=1; N=0.	can be calculated from above with various definitions	not filling out from CCMEO extrcted data
Pharmacy Shopping? (5 different prescribing pharmacies in one calendar year)	This field is completed by the ME's office using data fro the OARRS database.		Risk factor for potential opiate-related overdose?		Use drop box to select Y or N.	**(Pharm Shopping)** Y=1 N=0.	can be calculated from above with various definitions	not filling out from CCMEO extrcted data

Previous illicit drug use?	Check "Yes" if there is ANY EVIDENCE in file that case has used illicit drugs in the past PRIOR to current overdose. For example, if family members state that case was a "known heroin user" then that is evidence of illicit drug use. This variable will always be checked "Yes" if intravenous drug use is checked "Yes."	ME's scene investigation, police reports, EMS report, medical records, autopsy that shows physical evidence of previous illicit drug use or lists illicit drug use in Findings.	Looking for potential markers of increased risk of opiate-related overdose. Were they abusing their own prescriptions, or had they been working the streets for drugs sometime? This data helps "tell the story."		Use drop box to select Y or N.	**(IllicitUse)** Y=1; N=0.		
Intravenous drug use?	Check "Yes" if there is ANY EVIDENCE in file that case has used intravenous drugs PRIOR to current overdose.	ME's scene investigation, police reports, EMS report, medical records ("tracks" or "abscesses" from IV drug use), autopsy that shows physical evidence of previous IV drug use ("tracks" or	Looking for potential markers of increased risk of opiate-related overdose. Were they abusing their own prescriptions, or had they been working the streets for drugs sometime? This data helps "tell the story."		Use drop box to select Y or N.	**(IVuse)**Y=1; N=0.		

		"abscesses") or lists IV drug use in Findings.						

Period of abstinence	Check "Yes" if it is reported in file or there is evidence in file that case was abstinent FOR ANY AMOUNT of Time. Abstinence is typically interpreted as complete abstinence which is defined NO USE OF THE DRUG and no use or asymptomatic use of other substances during a period of time (meaning that case does not start abusing other drugs). Abstinence can be voluntary or involuntary. Involuntary abstinence is enforced abstinence due to hospitalization or incarceration. If case has a history of rehabilitation treatment or	ME's scene investigation, police reports, EMS report, medical records, The Alcohol, Drug Addiction and Mental Health Services (ADAMHS) of Cuyahoga County.	Looking for potential markers of increased risk of opiate-related overdose. After a period of abstinence, tolerance decreases. Therefore, if the same amount of drug is ingested after abstinence as before, then an over-dose is more likely to result.		Use drop box to select Y or N.	**(Abstinence)** Y=1; N=0.	1=Yes; 0 = No; -7=Unknown	

	detoxification, then case also has a period of abstinence. If there is a reference to a period of sobriety, then this also implies that case was abstinent.							

_____ time period	Answer required only if there was **Period of Abstinence**. Indicate length of abstinence from drug of choice (if known) in days, months, or years.	ME's scene investigation, police reports, EMS report, medical records, The Alcohol, Drug Addiction and Mental Health Services (ADAMHS) of Cuyahoga County.	Initially this variable was included because it was hoped that a cut-off point could be established as to how long one could "safely" be abstinent without increasing the risk of overdose if one started using again. However, it has not been possible to establish a cut-off point with the available data.		Enter length of time and include months/days/years	**(AbstinenceTime)** Text.	Length of time abstinent years - NN.NN (1 month = .08. 2 mos=.17, 3m=.25, 4m=.33. 5m=.42, 6m=.50, 7m=.58, 8m=.67, 9m=.75, 10m=.83, 11m=.92)	Changed to number input

Previous medical treatment	Check "Yes" if there is any evidence in file of a history of medical treatment for any reason regardless of the length of time (even though it states the past two years). Include the date(s), reason (e.g. chronic heart disease, chronic pain due to shoulder injury), and location (e.g., hospital, clinic, urgent care, private healthcare) where treatment was received. Pay particular attention to any procedures (surgical, or dental) or injuries for which case may have been prescribed pain relief.	ME's scene investigation, EMS report, medical records, autopsy.	Looking for certain conditions leading to prescription drug abuse, e.g., did case have an injury or surgical procedure for which prescription opioids were prescribed?		Use drop box to select Y or N. If there was medical treatment, complete the fields **date, location, and reason** with as much information as you have.	**(MedRx)** Y=1; N=0. There are also fields for descriptive information re: date **(MedRx_Date)**, reason for treatment **(MedRx_Reason)** , and location where treatment was given **(MedRx_Location)**.	1=Yes; 0 = No; -7=Unknown	This has been expanded with the variables below to give analyzable data for most recent three medical treatments
Most recent medical treatment date						(**MedRx 1_Date) MM/YYYY**		

Most recent medical treatment location						**(MedRx 1_Location)**		
Most recent medical treatment reason						**(MedRx 1_Reason)**		
Second most recent medical treatment date						**(MedRx 2_Date) MM/YYYY**		
Second most recent medical treatment location						**(MedRx 2_Location)**		
Second most recent medical treatment reason						**(MedRx 2_Reason)**		
Third most recent medical treatment date						**(MedRx 3_Date) MM/YYYY**		
Third most recent medical treatment location						**(MedRx 3_Location)**		
Third most recent medical treatment reason						**(MedRx 3_Reason)**		

Mental Health History	Check "Yes" if there is any evidence in file of a history of mental illness or mental health problems in PAST regardless of whether case received professional treatment. Two common mental health problems include anxiety, and depression. Indicate date(s), reason (type of illness or problem) and location where treated. If case did not receive treatment, indicate no treatment.	ME's scene investigation, EMS report, medical records, autopsy, The Alcohol, Drug Addiction and Mental Health Services (ADAMHS) of Cuyahoga County.	This question was asked to determine if patients had a comorbid diagnosis of a mental health disorder. This information is important because there is concern re: prescribing benzodiazepines and prescription opiates, effective treatment requires treating both conditions, and for health professionals, there is an opportunity to identify opiate abuse and prevent overdoses in clients who have a mental health condition.		Use drop box to select Y or N. If there was history of a **diagnosed mental health problems**, complete the fields **date, location, and reason** with as much information as you have.	**(MH_Rx)** Y=1; N=0. There are also fields for descriptive information re: date **(MH_Date)**, reason for treatment **(MH_Reason)** , and location where treatment was given **(MH_Location)**.	1=Yes; 0 = No; -7=Unknown	
Most recent mental health diagnosis/ treatment date						**(Ment_Health Hx 1_Date) MM/YYYY**		
Most recent mental health diagnosis/ treatment location						**(Ment_Health Hx 1_Location)**		
Most recent mental health						**(Ment_Health Hx 1_Reason)**		

diagnosis/ treatment reason								
Second most recent mental health diagnosis/ treatment date						**(Ment_Health Hx 2_Date) MM/YYYY**		
Second most recent mental health diagnosis/ treatment location						**(Ment_Health Hx 2_Location)**		
Second most recent mental health diagnosis/ treatment reason						**(Ment_Health Hx 2_Reason)**		
Third most recent mental health diagnosis/ treatment date						**(Ment_Health Hx 3_Date) MM/YYYY**		
Third most recent mental health diagnosis/ treatment location						**(Ment_Health Hx 3_Location)**		
Third most recent mental health diagnosis/ treatment reason						**(Ment_Health Hx 3_Reason)**		

Previous detoxification/rehabilitation treatment	Check "Yes" if there is any evidence in file of previous detoxification/ rehabilitation treatment. Indicate date(s), reason (the name of the drug(s)), and location (Name of detox/rehab facility if known). This information may come from the family or friends. The medical records from the treatment do not have to be obtained.	ME's scene investigation, EMS report, medical records, autopsy, The Alcohol, Drug Addiction and Mental Health Services (ADAMHS) of Cuyahoga County.	Previous detox or rehab shows whether case was treated for opiate-related abuse in the past,		Use drop box to select Y or N. If there was **history of detox**, complete the fields **date, location, and reason** with as much information as you have.	**(Detox)** Y=1; N=0. There are also fields for descriptive information re: date **(Detox_Date)**, reason for treatment **(Detox_Reason)** , and location where treatment was given **(Detox_Location)**.		
Most recent detoxification/rehabilitation date						**(Prev_detox_rehab 1_Date) MM/YYYY**		
Most recent detoxification/rehabilitation location						**(Prev_detox_rehab 1_Location)**		
Most recent detoxification/rehabilitation reason						**(Prev_detox_rehab 1_Reason)**		
Second most recent detoxification/rehabilitation date						**(Prev_detox_rehab 2_Date) MM/YYYY**		
Second most recent						**(Prev_detox_rehab 2_Location)**		

detoxification/rehabilitation location								
Second most recent detoxification/rehabilitation reason						**(Prev_detox_rehab 2_Reason)**		
Third most recent detoxification/rehabilitation date						**(Prev_detox_rehab 3_Date) MM/YYYY**		
Third most recent detoxification/rehabilitation location						**(Prev_detox_rehab 3_Location)**		
Third most recent detoxification/rehabilitation reason						**(Prev_detox_rehab 3_Reason)**		
Previous overdose or OD related ER visits	Check "Yes" if there is any evidence in file of previous overdose or OD related ER visit. This report may come from friends or family members. The medical records from the visit do not have to be obtained. If there was a previous overdose or OD related ER visit, indicate date(s), reason (type of drug overdosed on),	ME's scene investigation, EMS report, medical records, autopsy,	Risk factor for potential opiate-related overdose? Potential Intervention Point?		Use drop box to select Y or N. If there was **history of Overdose**, complete the fields **date, location, and reason** with as much information as you have.	**(OD_ER)** Y=1; N=0. There are also fields for descriptive information re: date **(OD_Date)**, reason for treatment **(OD_Reason)** , and location where treatment was given **(OD_Location)**.		

	and location where treated							
Most recent OD or OD related ER visit detox/rehab treatment date						**(Prev_OD1_Date) MM/YYYY**		
Most recent OD or OD related ER visit detox/rehab treatment location						**(Prev_OD1_Location)**		
Most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD1_Reason)**		
Second most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD2_Date) MM/YYYY**		
Second most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD2_Location)**		

Second most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD2_Reason)**		
Third most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD3_Date) MM/YYYY**	deleted, due to number of columns and lack of real data.	
Third most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD3_Location)**		
Third most recent OD or OD related ER visit detox/rehab treatment reason						**(Prev_OD3_Reason)**		
Previous incarcerations last two years	Check "Yes" if criteria is met. Manager of CCME's office reviews the clerk of courts website for this information	Do not look in chart.	Risk factor for potential opiate-related overdose? Potential Intervention Point?		Use drop box to select Y or N. If there was history of **incarceration**, complete the fields **date, location, and reason** with as much information as you have.	**(Jail)** Y=1; N=0. There are also fields for descriptive information re: date **(Jail_date)**, reason for treatment (**Jail_reason)** , and location where treatment was given **(Jail_location)**.	-7;"Unknown";0;" No incarceration in the last 2 year";1;"Incerated in the last 2 years"	may be supplemented with court records or local municipalities (Case Explorer?)
Most recent incarceration date						**(Jail1__Date) MM/YYYY**		
Most recent incarceration location						**(Jail1_Location)**		

Most recent incarceration reason						**(Jail1_Reason)**		
Second most recent incarceration reason						**(Jail2__Date) MM/YYYY**		
Second most incarceration reason						**(Jail2_Location)**		
Second most recent incarceration reason						**(Jail2_Reason)**		
Third most recent incarceration reason						**(Jail3__Date) MM/YYYY**		
Third most recent incarceration reason						**(Jail3_Location)**		
Third most recent incarceration reason						**(Jail3_Reason)**		
Previous arrests	Check "Yes" if criteria is met. Manager of CCME's office reviews the clerk of courts website for this information	Do not look in chart.	Risk factor for potential opiate-related overdose? Potential Intervention Point?		Use drop box to select Y or N. If there was history of **arrest**, complete the fields **date, location, and reason** with as much information as you have.	**(Arrest)** Y=1; N=0. There are also fields for descriptive information re: date **(Arrest_date)**, reason for treatment (**Arrest_Reason)** , and location where treatment was given **(Arrest_Location)**.		
Most recent arrest date						**(Arrest1__Date) MM/YYYY**		

Most recent arrest location						**(Arrest1_Location)**		
Most recent arrest reason						**(Arrest1_Reason)**		
Second most recent arrest reason						**(Arrest2__Date) MM/YYYY**		
Second most arrest reason						**(Arrest2_Location)**		
Second most recent arrest reason						**(Arrest2_Reason)**		
Third most recent arrest reason						**(Arrest3__Date) MM/YYYY**		
Third most recent arrest reason						**(Arrest3_Location)**		
Third most recent arrest reason						**(Arrest3_Reason)**		
Previous law enforcement contact/paroles	Check "Yes" if criteria is met. Manager of CCME's office reviews the clerk of courts website for this information	Do not look in chart.	Risk factor for potential opiate-related overdose? Potential Intervention Point?		Use drop box to select Y or N. If there was history of **previous law enforcement contact or parole**, complete the fields **date, location, and reason** with as much information as you have.	**(LawContact)** Y=1; N=0. There are also fields for descriptive information re: date **(LawContact_Date)**, reason for treatment (**LawContact_Reason)** , and location where treatment was given **(LawContact_Location)**.	-7;"Unknown";0;"No law enforcement contact/parole in the last 2 year";1;"had law enforcement contact/parole in the last 2 years"	
Most recent law enforcement contact/parole date						**(Law Contact 1__Date) MM/YYYY**		

Most recent law enforcement contact/parole location						**(Law Contact 1_Location)**		
Most recent law enforcement contact/parole reason						**(Law Contact 1_Reason)**		
Second most recent law enforcement contact/parole reason						**(Law Contact 2__Date) MM/YYYY**		
Second most law enforcement contact/parole reason						**(Law Contact 2_Location)**		
Second most recent law enforcement contact/parole reason						**(Law Contact 2_Reason)**		
Third most recent law enforcement contact/parole reason						**(Law Contact 3__Date) MM/YYYY**		
Third most recent law enforcement contact/parole reason						**(Law Contact 3_Location)**		
Third most recent law enforcement contact/parole reason						**(Law Contact 3_Reason)**		
Drug Court?	Manager of CCME's office reviews the clerk of courts website for this information	Do not look in chart.	Risk factor for potential opiate-related overdose? Potential Intervention Point?		Use drop box to select Y or N.	**(Drug Ct)** Y=1; N=0	"-7;"Unknown";0;" No, not seen in drug court";1;"Yes, part of the drug court program"	

RECOMMENDATION Education	**Leave blank.** This field is updated by computer with 1 (representing yes) if the decedent meets one or more of the following criteria: 1) has had medical treatment, 2) psychological treatment, 3) been in detox or rehab programs, 4) had an overdose or OD related ER Visits, 5) been incarcerated, 6) arrested, 7) had previous law enforcement contact, or was in drug court.	Do not look in chart.	1. Were there opportunities to intervene and educate the case or caregivers regarding the risk factors for overdosing in order to reduce the risk of overdose?		Not on the database form	**(EDUC)** Y=1; N=0.	Not in database	

RECOMMENDATION - DAWN	Leave Blank. This field is updated by computer with 1 (representing yes) if the decedent was using drugs with others OR if there were others present in the location but were not using drugs.	Review information from ME's scene investigation, police, and EMS reports to determine if a capable person was present.	**Was there someone present with the case at the time the case overdosed who was capable of recognizing and responding to the overdose and administering naloxone? PROJECT DESCRIPTION**: Project DAWN is an opioid overdose education and naloxone distribution (OEND) program. Program participants are educated on the risk factors of opioid overdose, how to recognize an opioid overdose, and how to respond to an opioid overdose by calling 911, giving rescue breaths, and administering nasal naloxone. Eligible participants are given FREE		Not on the database form	**(DAWN)** Y=1; N=0.	Not in database	

			naloxone kits containing 2 vials of naloxone hydrochloride medication.					

Any addition information that does not fit into the form, but seems of interest, such as unopened boxes of naloxone or other notes from the PD/CCMEO investigation reports or EMS notes						(AdditionalINFO) record any information of interest	"Additional Info" - medication lists from medical records, drug of choice, pathway to addiction information, information about what decedent was doing in the last couple of fays before OD, any information that is important in the investigation report/police report or any other information that may be helpful in identifying an intervention point before the fatality	

SPSS_datadictionary_NIJ_CCMEO_data2014-2019_combined

Name	Type	Width	Decimals	Label	Values	Field Notes	Missing	Columns	Align	Measure	Role
ccmeo_case_hashed	String	32	0	CCMEO-ID hashed	None		None	32	Left	Nominal	Input
ccmeo_year	Numeric	1	0	Year of death	{1, 2014| 2, 2015| 3, 2016 | 4, 2017 | 5, 2018 | 6, 2019}...	coded	None	12	Right	Nominal	Input
cause_of_death	String	377	0	Cause of Death from Death Certificate	None	uploaded from CCMEO file	None	50	Left	Nominal	Input
street1	String	39	0	Street address of residence of decedent	None	uploaded from CCMEO file, stripped of address and apartment numbers	None	39	Left	Nominal	Input
city	String	33	0	City of residence of decedent	None	uploaded from CCMEO file	None	33	Left	Nominal	Input
state	String	14	0	Satate of residence of decedent	None	uploaded from CCMEO file	None	14	Left	Nominal	Input
zip	Numeric	5	0	Zipcode of residence of decedent	None	uploaded from CCMEO file	None	12	Right	Scale	Input
death_date_month	Numeric	2	0	Month of death	None	uploaded from CCMEO file	None	12	Right	Nominal	Input
death_date_day	Numeric	2	0	Day of death	None	uploaded from CCMEO file	None	12	Right	Scale	Input
death_date_year	Numeric	4	0	Year of death	None	uploaded from CCMEO file	None	12	Right	Scale	Input
race	String	33	0	Race, from death certificate	text	uploaded from CCMEO file	None	33	Left	Nominal	Input
hispanic	String	3	0	Hispanic, from death certificate	None	uploaded from CCMEO file	None	3	Left	Nominal	Input
gender	String	6	0	Gender, from death certificate	None	uploaded from CCMEO file	None	6	Left	Nominal	Input
age	String	22	0	age of decedent at time of death	None	uploaded from CCMEO file	None	22	Left	Nominal	Input
marital_status	String	28	0	marital status from death certificate	None	uploaded from CCMEO file	None	28	Left	Nominal	Input

occupation	String	60	0	Occupation from death certificate	None	uploaded from CCMEO file	None	50	Left	Nominal	Input
rc_inj_location	String	68	0	street address of injury location	None	uploaded from CCMEO file	None	50	Left	Nominal	Input
rc_inj_cty_state	String	40	0	city and state of injury location	None	uploaded from CCMEO file	None	40	Left	Nominal	Input
rc_injury_date	Date	29	0	date of injury	None	uploaded from CCMEO file	None	11	Right	Scale	Input
rid_approx	Numeric	1	0	Was the date approximate?	{1, approximate |2, unknown |blank, actual}	coded from CCMEO data	None	12	Right	Nominal	Input
rc_injury_time	String	25	0	time of injury	None	uploaded from CCMEO file	None	25	Left	Nominal	Input
rc_inj_place1	String	74	0	received injury place	None	uploaded from CCMEO file, with identifiers removed	None	50	Left	Nominal	Input
rc_vplace_cleaned	String	94	0	place of death	None	uploaded from CCMEO file, with identifiers removed	None	50	Left	Nominal	Input
rc_vcity	String	20	0	City of death	None	uploaded from CCMEO file	None	20	Left	Nominal	Input
accidental	Numeric	1	0	Manner of death, ruled	{1, Accidental | 2, Suicide | 3, Manner undetermined | 4, Homicide}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___3	Numeric	1	0	COD_Acute bronchiopneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___29	Numeric	1	0	COD_Acute multiple prescription drug toxicity.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___49	Numeric	1	0	COD_Acute myocardial infarct with complications	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___36	Numeric	1	0	COD_Acute myocardial infarct with rupture and hemopericardium.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___24	Numeric	1	0	COD_Acute pneumonitis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___1	Numeric	1	0	COD_Acute toxicity/intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_reason___22	Numeric	1	0	COD_Alcoholic steatohepatitis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___48	Numeric	1	0	COD_Anoxic brain injury	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___51	Numeric	1	0	COD_Anoxic encephalopathy	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___11	Numeric	1	0	COD_Anoxic encephalopathy and acute bronchopneumonia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___20	Numeric	1	0	COD_Anoxic encephalopathy and aspiration pneumonia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___55	Numeric	1	0	COD_Anoxic-ischemic encephalopathy following cardiopulmonary arrest with resuscitation	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___5	Numeric	1	0	COD_Anoxic-ischemic encephalopathy following prolonged cardiopulmonary arrest.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___35	Numeric	1	0	COD_Aortic dissection due to hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___34	Numeric	1	0	COD_Atherosclerotic and hypertensive cardiovascular disease in the setting of acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___43	Numeric	1	0	COD_Atherosclerotic cardiovascular disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___18	Numeric	1	0	COD_Atherosclerotic cardiovascular disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___38	Numeric	1	0	COD_Atherosclerotic cardiovascular disease with severe coronary artery atherosclerosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___28	Numeric	1	0	COD_Atherosclerotic cardiovascular disease with severe coronary	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

				artery atherosclerosis and congestive heart failure.							
cod_reason___12	Numeric	1	0	COD_Atherosclerotic cardiovascular disease with severe coronary atherosclerosis and acute myocardial ischemia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___17	Numeric	1	0	COD_Atherosclerotic cardiovascular disease with severe coronary atherosclerosis and acute myocardial ischemia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___25	Numeric	1	0	COD_Atherosclerotic coronary artery disease with coronary arterial thrombosis and myocardial infarct.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___14	Numeric	1	0	COD_Atherosclerotic coronary artery disease with myocardial infarct.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___7	Numeric	1	0	COD_Bacterial endocarditis with complications due to chronic intravenous drug abuse.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___46	Numeric	1	0	COD_Brain injury	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___41	Numeric	1	0	COD_Chronic ethanolism with clinicopathologic sequelae	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___27	Numeric	1	0	COD_Chronic intravenous drug abuse with acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___58	Numeric	1	0	COD_Chronic Obstructive Pulmonary Disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___10	Numeric	1	0	COD_Complications of acute drug and ethanol toxicity and chronic ethanolism	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_reason___16	Numeric	1	0	COD_Complications of acute drug and ethanol toxicity and chronic ethanolism	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___9	Numeric	1	0	COD_Complications of acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___21	Numeric	1	0	COD_Diabetic ketoacidosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___15	Numeric	1	0	COD_Diffuse alveolar damage.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___23	Numeric	1	0	COD_Diffuse anoxic encephalopathy.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___6	Numeric	1	0	COD_Hemorrhagic infarct of left basal ganglia with subarachnoid and intraventricular hemorrhage.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___32	Numeric	1	0	COD_Hemorrhagic infarct of left basal ganglia with subarachnoid and intraventricular hemorrhage.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___4	Numeric	1	0	COD_Hypertensive atherosclerotic cardiovascular disease with severe coronary artery atherosclerosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___40	Numeric	1	0	COD_Hypertensive atheroslerotic cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___13	Numeric	1	0	COD_Hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___50	Numeric	1	0	COD_Hypoxic ischemic encephalopathy	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___30	Numeric	1	0	COD_Hypoxic-hypercapnic respiratory failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___39	Numeric	1	0	COD_Intracerebral hemorrhage	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___33	Numeric	1	0	COD_Intrathalamic hemorrhage with	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

				intraventricular extension.							
cod_reason___37	Numeric	1	0	COD_Intrauterine hypoxic ischemic encephalopathy.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___26	Numeric	1	0	COD_Multisystem organ failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___52	Numeric	1	0	COD_myocardial ischemia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___53	Numeric	1	0	COD_norfentanyl	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___100	Numeric	1	0	COD_Other	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___44	Numeric	1	0	COD_Perforated gastric ulcer with acute peritonitis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___54	Numeric	1	0	COD_Pseudomonas fibrinous pericarditis with congestive heart failure	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___31	Numeric	1	0	COD_Respiratory failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___56	Numeric	1	0	COD_Right occipital lobe hemorrhage with intraventricular extension and cerebral edema with herniation	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___42	Numeric	1	0	COD_Sepsis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___19	Numeric	1	0	COD_Septic shock with multisystem organ failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___45	Numeric	1	0	COD_Spontaneous hypertensive intracerebral hemorrhage with intraventricular hemorrhage	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___57	Numeric	1	0	COD_Spontaneous rupture of atherosclerotic abdominal aorta aneurysm	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_reason___2	Numeric	1	0	COD_Sudden Cardiac Death	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_reason___8	Numeric	1	0	COD_toxicity and diabetic ketoacidosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
other_codinfo	String	132	0	COD_Other cause of death reason description	None	coded from death certificate	None	50	Left	Nominal	Input
cod_dueto____7	Numeric	1	0	No Due to cause of death	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___28	Numeric	1	0	Acute and chronic opioid use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___1	Numeric	1	0	Acute bronchiopneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___2	Numeric	1	0	Acute cocaine intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___3	Numeric	1	0	Acute intoxication by baclofen	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___4	Numeric	1	0	Acute intoxication by cocaine and ethanol	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___5	Numeric	1	0	Acute intoxication by heroin	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___6	Numeric	1	0	Acute intoxication by the combined effects of cocaine and ethanol	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___7	Numeric	1	0	Acute intoxication by the combined effects of ethanol, alprazolam, citalopram, diphenhydramine, and doxylamine	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___8	Numeric	1	0	Acute intoxication by the combined effects of oxycodone and venlafaxine	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___9	Numeric	1	0	Acute multiple prescription drug toxicity.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___10	Numeric	1	0	Acute myocardial infarct with rupture and hemopericardium.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___11	Numeric	1	0	Acute pneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___12	Numeric	1	0	Acute pneumonitis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_dueto___13	Numeric	1	0	Acute toxicity/intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___14	Numeric	1	0	Alcoholic steatohepatitis, severe.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___88	Numeric	1	0	Anoxic brain injury following intoxication by heroin	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___15	Numeric	1	0	Anoxic encephalopathy and acute bronchopneumonia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___16	Numeric	1	0	Anoxic encephalopathy and aspiration pneumonia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___17	Numeric	1	0	Anoxic-ischemic encephalopathy following prolonged cardiopulmonary arrest.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___18	Numeric	1	0	Aortic dissection due to hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___19	Numeric	1	0	Arnold-Chiari malformation.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___20	Numeric	1	0	Arteriosclerotic coronary artery disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___84	Numeric	1	0	Aspiration pneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___21	Numeric	1	0	Asthma	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___22	Numeric	1	0	Atherosclerotic and hypertensive cardiovascular disease in the setting of acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___23	Numeric	1	0	Atherosclerotic and hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___24	Numeric	1	0	Atherosclerotic cardiovascular disease with myocardial ischemia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___25	Numeric	1	0	Atherosclerotic cardiovascular disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

				with severe coronary artery atherosclerosis							
cod_dueto___26	Numeric	1	0	Atherosclerotic cardiovascular disease with severe coronary artery atherosclerosis and congestive heart failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___27	Numeric	1	0	Atherosclerotic cardiovascular disease with severe coronary atherosclerosis and acute myocardial ischemia.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___83	Numeric	1	0	Atherosclerotic cardiovascular disease, probable	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___29	Numeric	1	0	Atherosclerotic cardiovascular disease, severe.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___30	Numeric	1	0	Atherosclerotic coronary artery disease with coronary arterial thrombosis and myocardial infarct.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___31	Numeric	1	0	Atherosclerotic coronary artery disease with myocardial infarct.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___32	Numeric	1	0	Bacterial endocarditis with complications due to chronic intravenous drug abuse.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___33	Numeric	1	0	Bullous pulmonary emphysema.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___82	Numeric	1	0	Cardiopulmonary arrest with cardiopulmonary resuscitation	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___34	Numeric	1	0	Chronic alcoholism	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___35	Numeric	1	0	Chronic back pain	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___93	Numeric	1	0	Chronic cocaine abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_dueto___36	Numeric	1	0	Chronic ethanol abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___37	Numeric	1	0	Chronic ethanol abuse with hepatic steatosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___38	Numeric	1	0	Chronic intravenous drug abuse with acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___39	Numeric	1	0	Chronic obstructive pulmonary disease (COPD)	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___40	Numeric	1	0	chronic pancreatitis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___85	Numeric	1	0	Clinicopathologic sequelae of ingestion of sodium hydroxide-containing product with aspiration	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___41	Numeric	1	0	Combined acute methamphetamine and ethanol toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___42	Numeric	1	0	Combined citalopram and methadone toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___43	Numeric	1	0	Complications of acute drug and ethanol toxicity and chronic ethanolism, including gastrointestinal hemorrhage	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___44	Numeric	1	0	Complications of acute intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___45	Numeric	1	0	Depression	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___46	Numeric	1	0	Diabetes mellitus	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___47	Numeric	1	0	diabetic ketoacidosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___48	Numeric	1	0	Diffuse alveolar damage.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___49	Numeric	1	0	Diffuse anoxic encephalopathy.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___50	Numeric	1	0	Hemorrhagic infarct of left basal ganglia with	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

				subarachnoid and intraventricular hemorrhage.							
cod_dueto___51	Numeric	1	0	Hemorrhagic infarct of left basal ganglia with subarachnoid and intraventricular hemorrhage.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___52	Numeric	1	0	Hepatic cirrhosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___53	Numeric	1	0	Hepatic fibrosis with steatosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___86	Numeric	1	0	Hypertension	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___81	Numeric	1	0	Hypertensive and atherosclerotic cardiovascular disease with remote bypass grafting	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___54	Numeric	1	0	Hypertensive and dilated cardiomyopathy	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___55	Numeric	1	0	Hypertensive atherosclerotic cardiovascular disease with severe coronary artery atherosclerosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___56	Numeric	1	0	Hypertensive atherosclerotic heart disease with severe atherosclerosis of left anterior descending artery.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___57	Numeric	1	0	Hypertensive atherosclerotic cardiovascular disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___58	Numeric	1	0	Hypertensive cardiovascular and renovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___59	Numeric	1	0	Hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_dueto___60	Numeric	1	0	Hypoxic-hypercapnic respiratory failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___90	Numeric	1	0	Intractable seizures	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___61	Numeric	1	0	Intrathalamic hemorrhage with intraventricular extension.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___62	Numeric	1	0	Intrauterine hypoxic ischemic encephalopathy.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___87	Numeric	1	0	Maternal drug abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___63	Numeric	1	0	Multisystem organ failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___64	Numeric	1	0	Obesity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___92	Numeric	1	0	Opiate use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___100	Numeric	1	0	OTHER	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___65	Numeric	1	0	Polycystic kidney disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___91	Numeric	1	0	Polysubstance abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___66	Numeric	1	0	Pulmonary emphysema	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___67	Numeric	1	0	Recent cocaine abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___68	Numeric	1	0	Recent cocaine and ethanol use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___69	Numeric	1	0	Recent cocaine intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___70	Numeric	1	0	Recent cocaine use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___71	Numeric	1	0	Recent heroin use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___72	Numeric	1	0	Recent intoxication with methadone and opiates	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___89	Numeric	1	0	Recurrent ileus	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___73	Numeric	1	0	Respiratory failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_dueto___74	Numeric	1	0	Septic shock with multisystem organ failure.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___75	Numeric	1	0	Sertraline toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___76	Numeric	1	0	Severe coronary artery disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___77	Numeric	1	0	Spinal tuberculosis with paraplegia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___78	Numeric	1	0	Sudden Cardiac Death	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___79	Numeric	1	0	toxicity and diabetic ketoacidosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_dueto___80	Numeric	1	0	Type II diabetes mellitus.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
other_duetoinfo	String	161	0	Other COD due to description	None	coded from death certificate	None	50	Left	Nominal	Input
cod_othcond____7	Numeric	1	0	No Other condition listed	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___58	Numeric	1	0	Other condition, Acute bronchopneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___2	Numeric	1	0	Other condition, Acute cocaine intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___3	Numeric	1	0	Other condition, Acute intoxication by baclofen	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___43	Numeric	1	0	Other condition, Acute intoxication by cocaine and heroin	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___33	Numeric	1	0	Other condition, Acute intoxication by heroin	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___56	Numeric	1	0	Other condition, Acute intoxication by oxycodone	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___4	Numeric	1	0	Other condition, Acute intoxication by the combined effects of cocaine and ethanol	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___5	Numeric	1	0	Other condition, Acute intoxication by the combined effects of ethanol, alprazolam, citalopram,	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

				diphenhydramine, and doxylamine							
cod_othcond___55	Numeric	1	0	Other condition, Acute intoxication by the combined effects of heroin, fentanyl, and cocaine	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___54	Numeric	1	0	Other condition, Acute intoxication by the combined effects of opiates and benzodiazepines	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___6	Numeric	1	0	Other condition, Acute intoxication by the combined effects of oxycodone and venlafaxine	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___7	Numeric	1	0	Other condition, Acute pneumonia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___46	Numeric	1	0	Other condition, Acute toxicity/intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___73	Numeric	1	0	Other condition, Analgesic medication therapy for bariatric surgery	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___37	Numeric	1	0	Other condition, Arnold-Chiari malformation.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___8	Numeric	1	0	Other condition, Arteriosclerotic coronary artery disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___9	Numeric	1	0	Other condition, Asthma	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___40	Numeric	1	0	Other condition, Atherosclerotic and hypertensive cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___38	Numeric	1	0	Other condition, Atherosclerotic cardiovascular disease with myocardial ischemia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_othcond___32	Numeric	1	0	Other condition, Bullous pulmonary emphysema.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___10	Numeric	1	0	Other condition, Chronic alcoholism	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___36	Numeric	1	0	Other condition, Chronic back pain.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___11	Numeric	1	0	Other condition, Chronic ethanol abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___12	Numeric	1	0	Other condition, Chronic ethanol abuse with hepatic steatosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___13	Numeric	1	0	Other condition, Chronic obstructive pulmonary disease (COPD)	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___14	Numeric	1	0	Other condition, chronic pancreatitis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___65	Numeric	1	0	Other condition, Cocaine abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___15	Numeric	1	0	Other condition, Combined acute methamphetamine and ethanol toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___42	Numeric	1	0	Other condition, Combined citalopram, and methadone toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___52	Numeric	1	0	Other condition, Combined ethanol, and benzodiazepine toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___34	Numeric	1	0	Other condition, Depression	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___16	Numeric	1	0	Other condition, Diabetes mellitus	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___45	Numeric	1	0	Other condition, Diabetes Mellitus, Type II	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___60	Numeric	1	0	Other condition, Diabetic ketoacidosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___69	Numeric	1	0	Other condition, Dilated cardiomyopathy with widely patent foramen ovale	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_othcond___64	Numeric	1	0	Other condition, Endocarditis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___68	Numeric	1	0	Other condition, Environmental hypothermia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___27	Numeric	1	0	Other condition, Hepatic cirrhosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___29	Numeric	1	0	Other condition, Hepatic fibrosis with steatosis.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___70	Numeric	1	0	Other condition, History of bipolar disorder	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___72	Numeric	1	0	Other condition, Hypertension	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___49	Numeric	1	0	Other condition, Hypertensive, and atherosclerotic cardiovascular disease with remote bypass grafting	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___17	Numeric	1	0	Other condition, Hypertensive and dilated cardiomyopathy	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___61	Numeric	1	0	Other condition, Hypertensive atherosclerotic cardiovascular disease with remote myocardial infarct	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___51	Numeric	1	0	Other condition, Hypertensive atherosclerotic cardiovascular disease with severe coronary artery atherosclerosis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___31	Numeric	1	0	Other condition, Hypertensive atherosclerotic heart disease with severe atherosclerosis of left anterior descending artery.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_othcond___19	Numeric	1	0	Other condition, Hypertensive atherosclerotic cardiovascular disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___39	Numeric	1	0	Other condition, Hypertensive cardiovascular and renovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___66	Numeric	1	0	Other condition, Hypertensive, dilated and atherosclerotic cardiovascular disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___41	Numeric	1	0	Other condition, Left tibia and fibula fracture.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___50	Numeric	1	0	Other condition, Maternal acute intoxication with opiates, cocaine and barbiturates	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___20	Numeric	1	0	Other condition, Obesity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___200	Numeric	1	0	Other condition, Other condition	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___21	Numeric	1	0	Other condition, Polycystic kidney disease	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___63	Numeric	1	0	Other condition, Polysubstance abuse, not otherwise specified	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___48	Numeric	1	0	Other condition, Pulmonary emphysema	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___53	Numeric	1	0	Other condition, Recent abuse of cocaine and heroin.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___1	Numeric	1	0	Other condition, Recent cocaine abuse	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___22	Numeric	1	0	Other condition, Recent cocaine and ethanol use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___23	Numeric	1	0	Other condition, Recent cocaine intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___24	Numeric	1	0	Other condition, Recent cocaine use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input

cod_othcond___62	Numeric	1	0	Other condition, Recent fentanyl intoxication	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___47	Numeric	1	0	Other condition, Recent heroin use	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___25	Numeric	1	0	Other condition, Recent intoxication with methadone and opiates	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___57	Numeric	1	0	Other condition, Recent stroke with intraventricular hemorrhage	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___26	Numeric	1	0	Other condition, Sertraline toxicity	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___30	Numeric	1	0	Other condition, Severe coronary artery disease.	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___71	Numeric	1	0	Other condition, Sleep apnea	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___44	Numeric	1	0	Other condition, Spinal tuberculosis with paraplegia	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___59	Numeric	1	0	Other condition, Steatohepatitis	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond___67	Numeric	1	0	Other condition, Substance use disorder (heroin)	{0, unchecked |1, checked}	coded from death certificate	None	12	Right	Nominal	Input
cod_othcond_other	String	131	0	Other other condition description	None	coded from death certificate	None	50	Left	Nominal	Input
cod_drugs_all___1	Numeric	1	0	3-methylfentanyl	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___76	Numeric	1	0	5F-ADB (5F-MDMB-PINACA)	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___2	Numeric	1	0	acetaminophen	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___3	Numeric	1	0	acetyl fentanyl	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___79	Numeric	1	0	Acrylfentanyl	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___21	Numeric	1	0	alfentanil	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___4	Numeric	1	0	alpha-pyrrolidinovalerophenone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___5	Numeric	1	0	alprazolam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___72	Numeric	1	0	amitriptyline	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___6	Numeric	1	0	amlodipine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___7	Numeric	1	0	amphetamine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___8	Numeric	1	0	baclofen	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___9	Numeric	1	0	benzodiazepines	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___10	Numeric	1	0	buprenorphine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___11	Numeric	1	0	bupropion	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___12	Numeric	1	0	butalbital	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___61	Numeric	1	0	carfentanil	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___13	Numeric	1	0	carisoprodol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___14	Numeric	1	0	chlorofluorocarbon	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___78	Numeric	1	0	chlorpheniramine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___15	Numeric	1	0	citalopram	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___16	Numeric	1	0	clomipramine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___17	Numeric	1	0	clonazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___18	Numeric	1	0	clonopin	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___19	Numeric	1	0	cocaine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___77	Numeric	1	0	Codeine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___20	Numeric	1	0	cyclobenzaprine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___22	Numeric	1	0	despropionyl-fentanyl (4-ANPP)	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___23	Numeric	1	0	dextromethorphan	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___24	Numeric	1	0	diazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___25	Numeric	1	0	dibutylone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___26	Numeric	1	0	diphenhydramine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___27	Numeric	1	0	doxepin	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___28	Numeric	1	0	doxylamine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___71	Numeric	1	0	escitalopram	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___29	Numeric	1	0	ethanol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___30	Numeric	1	0	fentanyl	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___31	Numeric	1	0	fluoxetine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___73	Numeric	1	0	flurazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___32	Numeric	1	0	furanyl-fetanyl	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___33	Numeric	1	0	gabapentin	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___34	Numeric	1	0	heroin	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___74	Numeric	1	0	Heroin probable	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___35	Numeric	1	0	hydrocodone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___36	Numeric	1	0	hydromorphone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___37	Numeric	1	0	hydroxyzine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___38	Numeric	1	0	ketamine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___39	Numeric	1	0	lorazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___40	Numeric	1	0	marijuana/marijuana metabolites	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___41	Numeric	1	0	meclizine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___42	Numeric	1	0	methadone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___43	Numeric	1	0	methamphetamine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___69	Numeric	1	0	Methanol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___44	Numeric	1	0	metoprolol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___45	Numeric	1	0	mirtazapine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___70	Numeric	1	0	mitragynine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___46	Numeric	1	0	morphine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___57	Numeric	1	0	nordiazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___80	Numeric	1	0	nortriptyline	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___47	Numeric	1	0	opiates	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___200	Numeric	1	0	Other Drug	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___48	Numeric	1	0	oxycodone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___49	Numeric	1	0	paroxetine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___50	Numeric	1	0	phencyclidine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___51	Numeric	1	0	phenobarbital	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___52	Numeric	1	0	pregabalin	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___53	Numeric	1	0	promethazine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___54	Numeric	1	0	propofol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___55	Numeric	1	0	pseudoephedrine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___56	Numeric	1	0	quetiapine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___75	Numeric	1	0	salicylate	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___58	Numeric	1	0	sertraline	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___59	Numeric	1	0	sodium hydroxide	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___60	Numeric	1	0	temazepam	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___62	Numeric	1	0	topiramate	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___63	Numeric	1	0	tramadol	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___64	Numeric	1	0	trazodone	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___65	Numeric	1	0	U-47700	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___66	Numeric	1	0	valproic acid	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input

cod_drugs_all___67	Numeric	1	0	venlafaxine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___81	Numeric	1	0	xylazine	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_drugs_all___68	Numeric	1	0	zolpidem	{0, unchecked |1, checked}	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	12	Right	Nominal	Input
cod_othdrugname_all	String	66	0	Other cause of drugs, including all listed in COD due to and other conditions	None	all COD drugs all include all drugs listed in the cause of death, including in "other conditions"	None	50	Left	Nominal	Input
otherdrugspresent_nr____7	Numeric	1	0	Other drugs present, not listed in COD, No other drugs found that were not related to COD	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___1	Numeric	1	0	Other drugs present, not listed in COD, 11-hydroxy-Tetrahydrocannabinol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___2	Numeric	1	0	Other drugs present, not listed in COD, 1-Benzylpiperazine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___3	Numeric	1	0	Other drugs present, not listed in COD, 1-methyl-3phenylpropyl amine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___4	Numeric	1	0	Other drugs present, not listed in COD, 2-Hydroxy-Ethyl-Flurazepam	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___5	Numeric	1	0	Other drugs present, not listed in COD, 3-HydroxyCotinine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___6	Numeric	1	0	Other drugs present, not listed in COD, 6-Acetylmorphine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___7	Numeric	1	0	Other drugs present, not listed in COD, 7-Aminoclonazepam	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___8	Numeric	1	0	Other drugs present, not listed in COD, Acetaldehyde	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___9	Numeric	1	0	Other drugs present, not listed in COD, Acetaminophen	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___10	Numeric	1	0	Other drugs present, not listed in COD, Acetone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___11	Numeric	1	0	Other drugs present, not listed in COD, Alfentanil (Alfenta, Rapifen)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___12	Numeric	1	0	Other drugs present, not listed in COD, Alprazolam (Xanax)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___13	Numeric	1	0	Other drugs present, not listed in COD, Amantadine (Symmetrel)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___14	Numeric	1	0	Other drugs present, not listed in COD, Amitriptyline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___15	Numeric	1	0	Other drugs present, not listed in COD, Amobarbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___16	Numeric	1	0	Other drugs present, not listed in COD, Amoxapine (Asendin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___17	Numeric	1	0	Other drugs present, not listed in COD, Amphetamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___18	Numeric	1	0	Other drugs present, not listed in COD, Ampyrone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___19	Numeric	1	0	Other drugs present, not listed in COD, Anhydro Ecgonine Methyl Ester	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___20	Numeric	1	0	Other drugs present, not listed in COD, Antipyrine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___21	Numeric	1	0	Other drugs present, not listed in COD, Atenolol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___22	Numeric	1	0	Other drugs present, not listed in COD, Atomoxatine (Strattera)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___23	Numeric	1	0	Other drugs present, not listed in COD, Atropine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___24	Numeric	1	0	Other drugs present, not listed in COD, Benzhydrol (DPH-HY)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___303	Numeric	1	0	Other drugs present, not listed in COD, Benzodiazepines (non-specified)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___25	Numeric	1	0	Other drugs present, not listed in COD, Benzoylecgonine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___26	Numeric	1	0	Other drugs present, not listed in COD, Benztropine (Cogentin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___27	Numeric	1	0	Other drugs present, not listed in COD, beta-Phenethylamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___28	Numeric	1	0	Other drugs present, not listed in COD, Bromazepam (Lexotan, Brazepam)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___29	Numeric	1	0	Other drugs present, not listed in COD, Brompheniramine (Dimetapp, Bromfed) (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___30	Numeric	1	0	Other drugs present, not listed in COD, Brucine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___31	Numeric	1	0	Other drugs present, not listed in COD, Bupivacaine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___32	Numeric	1	0	Other drugs present, not listed in COD, Bupropion (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___33	Numeric	1	0	Other drugs present, not listed in COD, Bupropion Eryhtro Metabolite	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___34	Numeric	1	0	Other drugs present, not listed in COD, Bupropion Morpholinol Metabolite	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___35	Numeric	1	0	Other drugs present, not listed in COD, Bupropion Threo Metabolite	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___36	Numeric	1	0	Other drugs present, not listed in COD, Buspirone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___37	Numeric	1	0	Other drugs present, not listed in COD, Butabarbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___38	Numeric	1	0	Other drugs present, not listed in COD, Butalbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___39	Numeric	1	0	Other drugs present, not listed in COD, Caffeine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___40	Numeric	1	0	Other drugs present, not listed in COD, cannabinol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___41	Numeric	1	0	Other drugs present, not listed in COD, Carbamazepine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___42	Numeric	1	0	Other drugs present, not listed in COD, Carbamazepine artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___43	Numeric	1	0	Other drugs present, not listed in COD, Carbinoxamine (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___44	Numeric	1	0	Other drugs present, not listed in COD, Carboxyquetiapine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___45	Numeric	1	0	Other drugs present, not listed in COD, Carisoprodal (SOMA)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___46	Numeric	1	0	Other drugs present, not listed in COD, Cetirizine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___47	Numeric	1	0	Other drugs present, not listed in COD, Chlorcyclizine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___48	Numeric	1	0	Other drugs present, not listed in COD, Chlordiazepoxide	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___49	Numeric	1	0	Other drugs present, not listed in COD, Chloroprocaine (Nesacaine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___50	Numeric	1	0	Other drugs present, not listed in COD, Chlorpheniramine (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___51	Numeric	1	0	Other drugs present, not listed in COD, Chlorpromazine (Thorazine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___52	Numeric	1	0	Other drugs present, not listed in COD, Chlorpropamide	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___53	Numeric	1	0	Other drugs present, not listed in COD, Cholesterol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___54	Numeric	1	0	Other drugs present, not listed in COD, Cimetidine (Tagamet)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___55	Numeric	1	0	Other drugs present, not listed in COD, Cinnamoyl cocaine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___56	Numeric	1	0	Other drugs present, not listed in COD, cis-Doxepin (Aponal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___57	Numeric	1	0	Other drugs present, not listed in COD, Citalopram (Celexa, lexapro)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___58	Numeric	1	0	Other drugs present, not listed in COD, Clemastine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___59	Numeric	1	0	Other drugs present, not listed in COD, Clindamycin (Dalacin, BenzaClin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___60	Numeric	1	0	Other drugs present, not listed in COD, Clomipramine (Anafranil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___300	Numeric	1	0	Other drugs present, not listed in COD, Clonazepam (Klonopin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___61	Numeric	1	0	Other drugs present, not listed in COD, Clopidogrel (Plavix)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___62	Numeric	1	0	Other drugs present, not listed in COD, Clozapine (Clozaril)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___63	Numeric	1	0	Other drugs present, not listed in COD, Cocaethylene (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___64	Numeric	1	0	Other drugs present, not listed in COD, Cocaine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___65	Numeric	1	0	Other drugs present, not listed in COD, Codeine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___66	Numeric	1	0	Other drugs present, not listed in COD, Cotinine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___67	Numeric	1	0	Other drugs present, not listed in COD, Cyclizine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___68	Numeric	1	0	Other drugs present, not listed in COD, Cyclizine mtb.	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___69	Numeric	1	0	Other drugs present, not listed in COD, Cyclobenzaprine (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___70	Numeric	1	0	Other drugs present, not listed in COD, Cyproheptadine (Periactin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___71	Numeric	1	0	Other drugs present, not listed in COD, Deacetyldiltiazem	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___72	Numeric	1	0	Other drugs present, not listed in COD, Dealkyl-Flurazepam Mtb.	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___73	Numeric	1	0	Other drugs present, not listed in COD, delta-9-Tetrahydrocannabinol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___74	Numeric	1	0	Other drugs present, not listed in COD, Demoxepam	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___75	Numeric	1	0	Other drugs present, not listed in COD, DesaminoDiphenhydramine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___76	Numeric	1	0	Other drugs present, not listed in COD, Desipramine (Norpramin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___77	Numeric	1	0	Other drugs present, not listed in COD, Desmethyl Trimipramine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___78	Numeric	1	0	Other drugs present, not listed in COD, Dextromethorphan (DXM)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___79	Numeric	1	0	Other drugs present, not listed in COD, Dextrorphan (DXO)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___80	Numeric	1	0	Other drugs present, not listed in COD, Diacetylmorphine (Heroin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___81	Numeric	1	0	Other drugs present, not listed in COD, Diazepam (Valium)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___82	Numeric	1	0	Other drugs present, not listed in COD, Dicyclomine or Dicycloverine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___83	Numeric	1	0	Other drugs present, not listed in COD, Diethylcathinone (Amfepramone)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___84	Numeric	1	0	Other drugs present, not listed in COD, Dihydrocodeine-I (Synalgos)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___85	Numeric	1	0	Other drugs present, not listed in COD, Diltiazem	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___86	Numeric	1	0	Other drugs present, not listed in COD, Dimethyltryptamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___87	Numeric	1	0	Other drugs present, not listed in COD, Diphenhydramine (Dimedrol)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___88	Numeric	1	0	Other drugs present, not listed in COD, Disopyramide (Norpace)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___89	Numeric	1	0	Other drugs present, not listed in COD, Disopyramide Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___90	Numeric	1	0	Other drugs present, not listed in COD, Donepezil (Aricept)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___304	Numeric	1	0	Other drugs present, not listed in COD, Doxepin	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___91	Numeric	1	0	Other drugs present, not listed in COD, Doxylamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___92	Numeric	1	0	Other drugs present, not listed in COD, Ecgonine Methyl Ester	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___93	Numeric	1	0	Other drugs present, not listed in COD, EDDP	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___94	Numeric	1	0	Other drugs present, not listed in COD, EMDP	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___95	Numeric	1	0	Other drugs present, not listed in COD, Ephedrine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___302	Numeric	1	0	Other drugs present, not listed in COD, Escitalopram (Lexapro)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___96	Numeric	1	0	Other drugs present, not listed in COD, Esmolol (Brevibloc)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___97	Numeric	1	0	Other drugs present, not listed in COD, Esmolol Formyl Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___301	Numeric	1	0	Other drugs present, not listed in COD, Ethanol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___98	Numeric	1	0	Other drugs present, not listed in COD, Ethoheptazine (Zactane)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___99	Numeric	1	0	Other drugs present, not listed in COD, Ethosuximide (Emeside, Zarontin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___100	Numeric	1	0	Other drugs present, not listed in COD, Ethotoin - INTERNAL STD	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___101	Numeric	1	0	Other drugs present, not listed in COD, Ethylene Glycol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___102	Numeric	1	0	Other drugs present, not listed in COD, Etomidate	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___103	Numeric	1	0	Other drugs present, not listed in COD, Fenfluramine (Pondimin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___104	Numeric	1	0	Other drugs present, not listed in COD, Fenoprofen (Nalfon)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___105	Numeric	1	0	Other drugs present, not listed in COD, Fentanyl (Durogesic, Duragesic, Sublimaze)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___106	Numeric	1	0	Other drugs present, not listed in COD, Flecainide (Tambocor)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___107	Numeric	1	0	Other drugs present, not listed in COD, Fluconazole (Diflucan, Trican)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___108	Numeric	1	0	Other drugs present, not listed in COD, Fluoxetine (Prozac, Sarafem)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___109	Numeric	1	0	Other drugs present, not listed in COD, Fluphenazine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___110	Numeric	1	0	Other drugs present, not listed in COD, Flurazepam (Dalmane, Dalmadorm)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___111	Numeric	1	0	Other drugs present, not listed in COD, Fluvoxamine (Luvox)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___112	Numeric	1	0	Other drugs present, not listed in COD, Gabapentin (Neurontin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___113	Numeric	1	0	Other drugs present, not listed in COD, Galantamine (Nivalin, Razadyne)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___114	Numeric	1	0	Other drugs present, not listed in COD, Gamma-hydroxybutyric acid (GHB)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___115	Numeric	1	0	Other drugs present, not listed in COD, Glutethimide (Doriden)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___116	Numeric	1	0	Other drugs present, not listed in COD, Guaifenesin	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___117	Numeric	1	0	Other drugs present, not listed in COD, Guaifenesin	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___118	Numeric	1	0	Other drugs present, not listed in COD, Haloperidol (Aloperidin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___119	Numeric	1	0	Other drugs present, not listed in COD, Harmane	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___120	Numeric	1	0	Other drugs present, not listed in COD, Hydrocodone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___121	Numeric	1	0	Other drugs present, not listed in COD, Hydromorphone (Palladone, Dilaudid)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___122	Numeric	1	0	Other drugs present, not listed in COD, Hydroxyamitriptyline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___123	Numeric	1	0	Other drugs present, not listed in COD, Hydroxyethyl Flurazepam	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___124	Numeric	1	0	Other drugs present, not listed in COD, Hydroxytramadol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___125	Numeric	1	0	Other drugs present, not listed in COD, Hydroxytramadol (-H2O)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___126	Numeric	1	0	Other drugs present, not listed in COD, Hydroxyzine (30 ug/mL) (Vistaril, Atarax)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___127	Numeric	1	0	Other drugs present, not listed in COD, Hydroxyzine mtb.	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___128	Numeric	1	0	Other drugs present, not listed in COD, Ibubrofen (Motrin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___129	Numeric	1	0	Other drugs present, not listed in COD, Imipramine (Antideprin, Deprimin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___130	Numeric	1	0	Other drugs present, not listed in COD, Isopropanol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___131	Numeric	1	0	Other drugs present, not listed in COD, Ketamine (20 ug/mL) (Ketanest, Ketaset, Ketalar)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___132	Numeric	1	0	Other drugs present, not listed in COD, Ketoprofen (Orudis, Oruvail)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___133	Numeric	1	0	Other drugs present, not listed in COD, Lamotrigine (Lamictal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___134	Numeric	1	0	Other drugs present, not listed in COD, Laudanosine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___135	Numeric	1	0	Other drugs present, not listed in COD, Levamisole (Ergamisol)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___136	Numeric	1	0	Other drugs present, not listed in COD, Levetiracetam	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___137	Numeric	1	0	Other drugs present, not listed in COD, Levetiracetam (Keppra)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___138	Numeric	1	0	Other drugs present, not listed in COD, Levorphanol (Levo-Dromoran)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___139	Numeric	1	0	Other drugs present, not listed in COD, Lidocaine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___140	Numeric	1	0	Other drugs present, not listed in COD, Lidocaine Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___141	Numeric	1	0	Other drugs present, not listed in COD, Linezolid (Zyvox)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___142	Numeric	1	0	Other drugs present, not listed in COD, Loratadine (Claritin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___143	Numeric	1	0	Other drugs present, not listed in COD, Lorazepam (Ativan, Temesta)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___144	Numeric	1	0	Other drugs present, not listed in COD, Loxapine (Loxapac, Loxitane)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___145	Numeric	1	0	Other drugs present, not listed in COD, Mafenide (Sulfamylon)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___146	Numeric	1	0	Other drugs present, not listed in COD, Maprotiline (Deprilept, Ludiomil, Psymion)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___147	Numeric	1	0	Other drugs present, not listed in COD, m-Chlorophenylpiperazine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___148	Numeric	1	0	Other drugs present, not listed in COD, Meclizine (Dramamine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___149	Numeric	1	0	Other drugs present, not listed in COD, Medazepam (Nobrium, Rudotel)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___150	Numeric	1	0	Other drugs present, not listed in COD, MEG-X (Desethyl-Lidocaine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___151	Numeric	1	0	Other drugs present, not listed in COD, Memantine (Axura)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___152	Numeric	1	0	Other drugs present, not listed in COD, Meperidine (Demerol)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___153	Numeric	1	0	Other drugs present, not listed in COD, Mephentermine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___154	Numeric	1	0	Other drugs present, not listed in COD, Mephenytoin (Mesantoin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___155	Numeric	1	0	Other drugs present, not listed in COD, Mepivacaine (Carbocaine, Polocaine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___156	Numeric	1	0	Other drugs present, not listed in COD, Meprobamate (Miltown, Equanil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___157	Numeric	1	0	Other drugs present, not listed in COD, Mesoridazine (Serentil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___158	Numeric	1	0	Other drugs present, not listed in COD, Metaxalone (Skelaxin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___159	Numeric	1	0	Other drugs present, not listed in COD, Methadone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___160	Numeric	1	0	Other drugs present, not listed in COD, Methamphetamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___161	Numeric	1	0	Other drugs present, not listed in COD, Methane	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___162	Numeric	1	0	Other drugs present, not listed in COD, Methanol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___163	Numeric	1	0	Other drugs present, not listed in COD,	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

				Methapyrilene - INTERNAL STD (Sominex, Nytol)							
otherdrugspresent_nr___164	Numeric	1	0	Other drugs present, not listed in COD, Methaqualone (Quaaludes, Sopors)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___165	Numeric	1	0	Other drugs present, not listed in COD, Methylenedioxyamphetamine (MDA)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___166	Numeric	1	0	Other drugs present, not listed in COD, Methylenedioxymethamphetamine (MDMA)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___167	Numeric	1	0	Other drugs present, not listed in COD, Methylphenidate (Ritalin, Concerta, Metadate)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___168	Numeric	1	0	Other drugs present, not listed in COD, Metoclopramide (Maxolon)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___169	Numeric	1	0	Other drugs present, not listed in COD, Metoprolol (30 ug/mL) (Lopresor)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___170	Numeric	1	0	Other drugs present, not listed in COD, Metoprolol Formyl Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___171	Numeric	1	0	Other drugs present, not listed in COD, Metronidazole (Flagyl)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___172	Numeric	1	0	Other drugs present, not listed in COD, Mexiletine (Mexitil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___173	Numeric	1	0	Other drugs present, not listed in COD, Midazolam (Dormicum, Hypnovel, Versed)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___174	Numeric	1	0	Other drugs present, not listed in COD, Mirtazapine (Remeron, Avanza)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___175	Numeric	1	0	Other drugs present, not listed in COD, Morphine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___176	Numeric	1	0	Other drugs present, not listed in COD, Nadolol (Corgard, Anabet)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___177	Numeric	1	0	Other drugs present, not listed in COD, Nalorphine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___178	Numeric	1	0	Other drugs present, not listed in COD, Naloxone (Narcan, Nalone, Narcanti)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___179	Numeric	1	0	Other drugs present, not listed in COD, Naproxen (Aleve)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___180	Numeric	1	0	Other drugs present, not listed in COD, NDealkylDisopyramide(-H2O	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___181	Numeric	1	0	Other drugs present, not listed in COD, NDealkylDisopyramide(-NH3	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___182	Numeric	1	0	Other drugs present, not listed in COD, N-Dealkylquetiapine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___183	Numeric	1	0	Other drugs present, not listed in COD, Nefazodone (Serzone, Nefadar)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___184	Numeric	1	0	Other drugs present, not listed in COD, Nevirapine (Viramune)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___185	Numeric	1	0	Other drugs present, not listed in COD, Nicotine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___186	Numeric	1	0	Other drugs present, not listed in COD, Nitrazepam (Alodorm)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___187	Numeric	1	0	Other drugs present, not listed in COD, Nomifensine (Merital, Alival)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___188	Numeric	1	0	Other drugs present, not listed in COD, Norchlorcyclizine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___189	Numeric	1	0	Other drugs present, not listed in COD, Norchlordiazepoxide	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___190	Numeric	1	0	Other drugs present, not listed in COD, Norcitalopram	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___191	Numeric	1	0	Other drugs present, not listed in COD, Norclomipramine/Desmethyl Clomipramine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___192	Numeric	1	0	Other drugs present, not listed in COD, Norclozapine/Desmethyl Clozapine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___193	Numeric	1	0	Other drugs present, not listed in COD, Norcocaine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___194	Numeric	1	0	Other drugs present, not listed in COD, Norcodeine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___195	Numeric	1	0	Other drugs present, not listed in COD, Norcyclobenzaprine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___196	Numeric	1	0	Other drugs present, not listed in COD, Nordextromethorphan	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___197	Numeric	1	0	Other drugs present, not listed in COD, Nordiazepam (Stilney, Madar, Vegesan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___198	Numeric	1	0	Other drugs present, not listed in COD, Nordoxepin	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___199	Numeric	1	0	Other drugs present, not listed in COD, Norfluoxetine/seproxetine (5 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___200	Numeric	1	0	Other drugs present, not listed in COD, Norharmane	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___201	Numeric	1	0	Other drugs present, not listed in COD, Norketamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___202	Numeric	1	0	Other drugs present, not listed in COD, Normeperidine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___203	Numeric	1	0	Other drugs present, not listed in COD, Norpromethazine/Desmethyl Promethazine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___204	Numeric	1	0	Other drugs present, not listed in COD, Norpropoxyphene	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___205	Numeric	1	0	Other drugs present, not listed in COD, Norpropoxyphene-I	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___206	Numeric	1	0	Other drugs present, not listed in COD, Norsertraline/Desmethyl Sertraline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___207	Numeric	1	0	Other drugs present, not listed in COD, Nortramadol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___208	Numeric	1	0	Other drugs present, not listed in COD, Nortriptyline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___209	Numeric	1	0	Other drugs present, not listed in COD, Norvenlafaxine/Desmethyl Venlafaxine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___210	Numeric	1	0	Other drugs present, not listed in COD, NorVerapamil	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___299	Numeric	1	0	Other drugs present, not listed in COD, o-desmethylvenlafaxine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___211	Numeric	1	0	Other drugs present, not listed in COD, Olanzapine (Zyprexa)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___212	Numeric	1	0	Other drugs present, not listed in COD, Orphenadrine (Norflex)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___1000	Numeric	1	0	Other drugs present, not listed in COD, Other	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___213	Numeric	1	0	Other drugs present, not listed in COD, Oxaprozin (Daypro)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___214	Numeric	1	0	Other drugs present, not listed in COD, Oxcarbazepine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___215	Numeric	1	0	Other drugs present, not listed in COD, Oxcarbazepine (Trileptal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___216	Numeric	1	0	Other drugs present, not listed in COD, Oxybutynine (Ditropan, Lyrinel XL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___217	Numeric	1	0	Other drugs present, not listed in COD, Oxycodone (OxyContin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___218	Numeric	1	0	Other drugs present, not listed in COD, Oxymorphone (Opana, Numorphan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___219	Numeric	1	0	Other drugs present, not listed in COD, Papaverine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___220	Numeric	1	0	Other drugs present, not listed in COD, Paroxetine (Seroxat, Paxil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___221	Numeric	1	0	Other drugs present, not listed in COD, Pentazocine (Fortral, Talwim NX)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___222	Numeric	1	0	Other drugs present, not listed in COD, Pentobarbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___223	Numeric	1	0	Other drugs present, not listed in COD, Pentoxifylline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___224	Numeric	1	0	Other drugs present, not listed in COD,	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

				Pentoxifylline (Trental, Pentox, Flexital)							
otherdrugspresent_nr___225	Numeric	1	0	Other drugs present, not listed in COD, Perphenazine (Trilafon, Etrafon, Triavail)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___226	Numeric	1	0	Other drugs present, not listed in COD, Phencyclidine (PCP, Angel Dust)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___227	Numeric	1	0	Other drugs present, not listed in COD, Phendimetrazine (Bontril, Adipost)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___228	Numeric	1	0	Other drugs present, not listed in COD, Pheniramine (Avil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___229	Numeric	1	0	Other drugs present, not listed in COD, Phenmetrazine (Preludin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___230	Numeric	1	0	Other drugs present, not listed in COD, Phenobarbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___231	Numeric	1	0	Other drugs present, not listed in COD, Phenothiazine (AFI-Tiazin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___232	Numeric	1	0	Other drugs present, not listed in COD, Phentermine (Adipex P)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___233	Numeric	1	0	Other drugs present, not listed in COD, Phenylephrine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___234	Numeric	1	0	Other drugs present, not listed in COD, Phenylpropanolamine (20 ug/mL) (Norephedrine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___235	Numeric	1	0	Other drugs present, not listed in COD, Phenyltoloxamine (Ed-Flex, Dologesic)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___236	Numeric	1	0	Other drugs present, not listed in COD, Phenytoin	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___237	Numeric	1	0	Other drugs present, not listed in COD, Pramoxine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___238	Numeric	1	0	Other drugs present, not listed in COD, Prazepam (Centrac, Centrax, Demetrin)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___239	Numeric	1	0	Other drugs present, not listed in COD, Prilocaine (Citanest)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___240	Numeric	1	0	Other drugs present, not listed in COD, Primidone	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___241	Numeric	1	0	Other drugs present, not listed in COD, Procainamide (Pronestyl, Procan, Procanbid)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___242	Numeric	1	0	Other drugs present, not listed in COD, Procaine (Novocaine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___243	Numeric	1	0	Other drugs present, not listed in COD, Prochlorperazine (Compazine, Phenotil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___244	Numeric	1	0	Other drugs present, not listed in COD, Promethazine (Phenergan, Fargan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___245	Numeric	1	0	Other drugs present, not listed in COD, Propafenone (Rythmol SR, Rytmonorm)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___246	Numeric	1	0	Other drugs present, not listed in COD, Propoxyphene (Darvocet-N, Darvon, Di-Gesic)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___247	Numeric	1	0	Other drugs present, not listed in COD, Propoxyphene Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___248	Numeric	1	0	Other drugs present, not listed in COD, Propranolol (Avlocardyl, Inderal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___249	Numeric	1	0	Other drugs present, not listed in COD, Propranolol Derivative	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___250	Numeric	1	0	Other drugs present, not listed in COD, Propylbenzoylecgonine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___251	Numeric	1	0	Other drugs present, not listed in COD, Propylene Glycol	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___252	Numeric	1	0	Other drugs present, not listed in COD, Protriptyline (Vivactil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___253	Numeric	1	0	Other drugs present, not listed in COD, Pseudoephedrine (20 ug/mL) (Sudafed, MecinexD)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___254	Numeric	1	0	Other drugs present, not listed in COD, Pseudoephedrine Formyl Artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___255	Numeric	1	0	Other drugs present, not listed in COD, Pyrilamine (Mepyramine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___256	Numeric	1	0	Other drugs present, not listed in COD, Pyrimethamine (Daraprim	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___257	Numeric	1	0	Other drugs present, not listed in COD, Quetiapine (40 ug/mL) (Seroquel, Ketipinor)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___258	Numeric	1	0	Other drugs present, not listed in COD, Quinidine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___259	Numeric	1	0	Other drugs present, not listed in COD, Quinine (40 ug/mL)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___260	Numeric	1	0	Other drugs present, not listed in COD, Ritalinic Acid	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___261	Numeric	1	0	Other drugs present, not listed in COD, Salicylate	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___262	Numeric	1	0	Other drugs present, not listed in COD, Scopolamine (Levo-Duboisine, Hyoscine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___263	Numeric	1	0	Other drugs present, not listed in COD, Secobarbital	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___264	Numeric	1	0	Other drugs present, not listed in COD, Sertraline (Zoloft)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___265	Numeric	1	0	Other drugs present, not listed in COD, Strychnine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___266	Numeric	1	0	Other drugs present, not listed in COD, Sufentanil (Sufenta)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___267	Numeric	1	0	Other drugs present, not listed in COD, Sulforidazine (Imagotan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___268	Numeric	1	0	Other drugs present, not listed in COD, Temazepam (Restoril)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___269	Numeric	1	0	Other drugs present, not listed in COD, Tetracaine (Pontocaine, Dicaine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___270	Numeric	1	0	Other drugs present, not listed in COD, Theobromine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___271	Numeric	1	0	Other drugs present, not listed in COD, Theophylline	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___272	Numeric	1	0	Other drugs present, not listed in COD, Thioridazine (20 ug/mL) (Mellaril)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___273	Numeric	1	0	Other drugs present, not listed in COD, Thioridazine Ring Mtb.	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___274	Numeric	1	0	Other drugs present, not listed in COD, Thymol (2-isopropyl-5-methylphenol)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___275	Numeric	1	0	Other drugs present, not listed in COD, Ticlopidine (Ticlid)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___276	Numeric	1	0	Other drugs present, not listed in COD, Tolbutamide	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___277	Numeric	1	0	Other drugs present, not listed in COD, Tolnaftate (Tinactin, Odor Eaters)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___278	Numeric	1	0	Other drugs present, not listed in COD, Topiramate (Topamax)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___279	Numeric	1	0	Other drugs present, not listed in COD, Topiramate artifact	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___280	Numeric	1	0	Other drugs present, not listed in COD, Tramadol (Ultram, Tramal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___281	Numeric	1	0	Other drugs present, not listed in COD, trans-Doxepin (Aponal)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___282	Numeric	1	0	Other drugs present, not listed in COD, Tranylcypromine (Parnate, Jatrosom)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___283	Numeric	1	0	Other drugs present, not listed in COD, Trazodone (30 ug/mL) (Desyrel)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___284	Numeric	1	0	Other drugs present, not listed in COD, Triazolam (Apo-Triazo, Halcion, Hypam)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___285	Numeric	1	0	Other drugs present, not listed in COD, Trifluoperazine (Eskazinyl)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___286	Numeric	1	0	Other drugs present, not listed in COD, Trifluoromethylphenylpiperazine (TFMPP, Legal X)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___287	Numeric	1	0	Other drugs present, not listed in COD, Trihexyphenidyl (Artane, Aop-Trihex, Benzhexol)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___288	Numeric	1	0	Other drugs present, not listed in COD, Trimethobenzamide (Tebamide, Tigan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___289	Numeric	1	0	Other drugs present, not listed in COD, Trimethoprim (Proloprim, Monotrim, Triprim)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___290	Numeric	1	0	Other drugs present, not listed in COD, Trimipramine (Surmontil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___291	Numeric	1	0	Other drugs present, not listed in COD, Tripelennamine (Pyribenzamine)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___292	Numeric	1	0	Other drugs present, not listed in COD, Triprolidine (Actidil, Myidil)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___293	Numeric	1	0	Other drugs present, not listed in COD, Triptamine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___294	Numeric	1	0	Other drugs present, not listed in COD, Tyramine	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___295	Numeric	1	0	Other drugs present, not listed in COD, Venlafaxine (Effexor)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___296	Numeric	1	0	Other drugs present, not listed in COD, Verapamil (Isoptin, Verelan, Calan)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input

otherdrugspresent_nr___297	Numeric	1	0	Other drugs present, not listed in COD, Zolpidem (Ambien)	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr___298	Numeric	1	0	Other drugs present, not listed in COD, Zonisamide	{0, unchecked |1, checked}	from toxicology report	None	12	Right	Nominal	Input
otherdrugspresent_nr_other	String	92	0	Other drugs present, not listed in COD, description	None	from toxicology report	None	50	Left	Nominal	Input
educ_level	Numeric	2	0	Education level, death certificate, coded	{-7, unknown; 0, no highschool; 1, some highschool; 2, high school; 3, some college; 4, associates degree; 5, college; 6, post college}	coded from death certificate	None	12	Right	Scale	Input
veteran	Numeric	2	0	Veteran status, death certificate, coded	{0, No, not a veteran| 1, yes, a veteran| -7, unknown}	coded from death certificate	None	12	Right	Scale	Input
pregnant	Numeric	3	0	Pregnancy status	{-11, Not applicable (male); -7, unknown; 0, No, not pregnant; 1, Yes, pregnant}	coded from death certificate	None	12	Right	Scale	Input
hospital_case	Numeric	2	0	Hospital case (Did the deceased die in the hospital)	{-7, Unknown; 0, No, not a hosptial case, they did not die in the hospital; 1, Yes, the deceased died in the hospital}	from scene investigation	None	12	Right	Scale	Input
no_scene	Numeric	2	0	There was NO death scene	{0, There IS a death scene| 1, There is NO death scene|-7, unknown}	from scene investigation	None	12	Right	Scale	Input
medrx	Numeric	2	0	Was there a history of medical treatments in the last 2 years? (from medicolegal death investigation)	{-7, Unknown/Unavailable; 0, No; 1, Yes}	from medicolegal death investigation	None	12	Right	Scale	Input
mental_health_hx	Numeric	2	0	Was there a history of mental health treatment or a mental health	{-7, Unknown/Unavailable; 0, No; 1, Yes}	from medicolegal death investigation	None	12	Right	Scale	Input

				diagnosis? (from medicolegal death investigation)							
drugsothers	Numeric	2	0	Was the decedent using drugs with others at the time of death? (from medicolegal death investigation)	{-7, Unknown/Unavailable; 0, No, not using drugs with others; 1, Yes, was using drugs with others}	from medicolegal death investigation	None	12	Right	Scale	Input
otherspresent	Numeric	2	0	Were others present, but not using drugs at the time of death? (from medicolegal death investigation)	{-7, Unknown; 0, No others were present at the time of OD; 1, Others were present, but NOT using drugs}	from medicolegal death investigation	None	12	Right	Scale	Input
paraphernaliapresent	Numeric	2	0	Was paraphernalia present? (from medicolegal death investigation)	{-8, NA, no scene; -7, Unknown; 0, No paraphernalia was present; 1, Yes, paraphernalia was present}	from medicolegal death investigation	None	12	Right	Scale	Input

paraphernaliatype1	Numeric	2	0	Type of pharphernalia found on scene, first	{1, "Cutting utensils (fingernail clippers, scissors, etc.)" | 2, "smoking tools (bongs, pipes, water pipes, ecigerettes, hookas, straight shooter (pipe), cigars, rolling papers, glass tubes, toilet paper rolls, sure close (adhesive), etc.)" | 3, "tournaquets (string, bands, belts, latex straps, shoelaces, etc.)" | 4, roach clips | 5, tin foil squares (for heaitng and inhaling without pipe) | 6, "injection paraphrenalia (needles, syringes, syringe caps, spoons, etc.)" | 7, drug kit | 8, "sniffing/snorting/insufflation paraphrenalia (straws, paper tubes, small mirrors, razorblades, cards, credit cards, rolled dollar bills, beakers with water, shot glasses with water, cups with water etc.)" | 9, "enhancing paraphrenalia		None	12	Right	Scale	Input

					(surgical/dust masks, glow sticks, vicks vap-o-rub, other)" | 10, "teeth protectors (lollipops, pacifiers, etc.)" | 11, "inhaling/huffing paraphrenalia (aerosol cans, tubes of glue, balloons, nozzles, rags, paper bags, etc.)" | 12, "containers with residue (baggies, wax papers, envelopes, tear offs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 13, "containers without residue (baggies, wax papers, envelopes, tearoffs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 14, "heating/cooking tools (lighters, tea light or votive candles, other candles, light bulbs)" | 15, "remaining drugs, compounds or drug residue types" | 16, "empty prescription container, drug on container" | 17,						

					"cotton swabs, q-tips" | 18, "filter materials: chore boy, steel wool, dryer sheet, cotton balls, filters" | 19, marijuana grinder | -8, NO paraphernalia}						
paraphernalia_type1_quant	Numeric	3	0	Quantity of pharaphernalia, first type	X | -7 = Not applicable | -11 no number given	Enter -7 for NA. If no number, but descriptor enter -11 here, and describe in	None	12	Right	Scale	Input

						paraphernalia5_quant_desc					
paraphernalia1_quant_desc	String	331	0	Further description of the quantity and/or type of parapheralia, first type	None	Paraphernalia description of quantity, such as many, some, several from investigative report. Can enter 1 spoon, several needles, etc. Enter "NA" for not applicable.	None	50	Left	Nominal	Input

paraphernaliatype2	Numeric	2	0	Type of pharphernalia found on scene, second	{1, "Cutting utensils (fingernail clippers, scissors, etc.)" | 2, "smoking tools (bongs, pipes, water pipes, ecigerettes, hookas, straight shooter (pipe), cigars, rolling papers, glass tubes, toilet paper rolls, sure close (adhesive), etc.)" | 3, "tournaquets (string, bands, belts, latex straps, shoelaces, etc.)" | 4, roach clips | 5, tin foil squares (for heaitng and inhaling without pipe) | 6, "injection paraphrenalia (needles, syringes, syringe caps, spoons, etc.)" | 7, drug kit | 8, "sniffing/snorting/insufflation paraphrenalia (straws, paper tubes, small mirrors, razorblades, cards, credit cards, rolled dollar bills, beakers with water, shot glasses with water, cups with water etc.)" | 9, "enhancing paraphrenalia		None	12	Right	Scale	Input

					(surgical/dust masks, glow sticks, vicks vap-o-rub, other)" | 10, "teeth protectors (lollipops, pacifiers, etc.)" | 11, "inhaling/huffing paraphrenalia (aerosol cans, tubes of glue, balloons, nozzles, rags, paper bags, etc.)" | 12, "containers with residue (baggies, wax papers, envelopes, tear offs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 13, "containers without residue (baggies, wax papers, envelopes, tearoffs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 14, "heating/cooking tools (lighters, tea light or votive candles, other candles, light bulbs)" | 15, "remaining drugs, compounds or drug residue types" | 16, "empty prescription container, drug on container" | 17,						

					"cotton swabs, q-tips" | 18, "filter materials: chore boy, steel wool, dryer sheet, cotton balls, filters" | 19, marijuana grinder | -8, No 2nd type of paraphernalia}						
paraphernalia_type2_quant	Numeric	3	0	Quantity of pharaphernalia, second type	X | -7 = Not applicable | -11 no number given	Enter -7 for NA. If no number, but descriptor enter -11 here, and describe in	None	12	Right	Scale	Input

						paraphernalia5_quant_desc					
paraphernalia2_quant_desc	String	309	0	Further description of the quantity and/or type of parapheralia, second type	None	Paraphernalia description of quantity, such as many, some, several from investigative report. Can enter 1 spoon, several needles, etc. Enter "NA" for not applicable.	None	50	Left	Nominal	Input

paraphernaliatype3	Numeric	2	0	Type of pharphernalia found on scene, third	{1, "Cutting utensils (fingernail clippers, scissors, etc.)" | 2, "smoking tools (bongs, pipes, water pipes, ecigerettes, hookas, straight shooter (pipe), cigars, rolling papers, glass tubes, toilet paper rolls, sure close (adhesive), etc.)" | 3, "tournaquets (string, bands, belts, latex straps, shoelaces, etc.)" | 4, roach clips | 5, tin foil squares (for heaitng and inhaling without pipe) | 6, "injection paraphrenalia (needles, syringes, syringe caps, spoons, etc.)" | 7, drug kit | 8, "sniffing/snorting/insufflation paraphrenalia (straws, paper tubes, small mirrors, razorblades, cards, credit cards, rolled dollar bills, beakers with water, shot glasses with water, cups with water etc.)" | 9, "enhancing paraphrenalia		None	12	Right	Scale	Input

					(surgical/dust masks, glow sticks, vicks vap-o-rub, other)" | 10, "teeth protectors (lollipops, pacifiers, etc.)" | 11, "inhaling/huffing paraphrenalia (aerosol cans, tubes of glue, balloons, nozzles, rags, paper bags, etc.)" | 12, "containers with residue (baggies, wax papers, envelopes, tear offs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 13, "containers without residue (baggies, wax papers, envelopes, tearoffs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 14, "heating/cooking tools (lighters, tea light or votive candles, other candles, light bulbs)" | 15, "remaining drugs, compounds or drug residue types" | 16, "empty prescription container, drug on container" | 17,						

					"cotton swabs, q-tips" | 18, "filter materials: chore boy, steel wool, dryer sheet, cotton balls, filters" | 19, marijuana grinder | -8, No 3rd type of paraphernalia}						
paraphernalia_type3_quant	Numeric	3	0	Quantity of pharaphernalia, third type	X | -7 = Not applicable | -11 no number given	Enter -7 for NA. If no number, but descriptor enter -11 here, and describe in	None	12	Right	Scale	Input

						paraphernalia5_quant_desc					
paraphernalia3_quant_desc	String	238	0	Further description of the quantity and/or type of parapheralia, third type	None	Paraphernalia description of quantity, such as many, some, several from investigative report. Can enter 1 spoon, several needles, etc. Enter "NA" for not applicable.	None	50	Left	Nominal	Input

paraphernaliatype4	Numeric	2	0	Type of pharphernalia found on scene, fourth	{1, "Cutting utensils (fingernail clippers, scissors, etc.)" | 2, "smoking tools (bongs, pipes, water pipes, ecigerettes, hookas, straight shooter (pipe), cigars, rolling papers, glass tubes, toilet paper rolls, sure close (adhesive), etc.)" | 3, "tournaquets (string, bands, belts, latex straps, shoelaces, etc.)" | 4, roach clips | 5, tin foil squares (for heaitng and inhaling without pipe) | 6, "injection paraphrenalia (needles, syringes, syringe caps, spoons, etc.)" | 7, drug kit | 8, "sniffing/snorting/insufflation paraphrenalia (straws, paper tubes, small mirrors, razorblades, cards, credit cards, rolled dollar bills, beakers with water, shot glasses with water, cups with water etc.)" | 9, "enhancing paraphrenalia		None	12	Right	Scale	Input

					(surgical/dust masks, glow sticks, vicks vap-o-rub, other)" | 10, "teeth protectors (lollipops, pacifiers, etc.)" | 11, "inhaling/huffing paraphrenalia (aerosol cans, tubes of glue, balloons, nozzles, rags, paper bags, etc.)" | 12, "containers with residue (baggies, wax papers, envelopes, tear offs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 13, "containers without residue (baggies, wax papers, envelopes, tearoffs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 14, "heating/cooking tools (lighters, tea light or votive candles, other candles, light bulbs)" | 15, "remaining drugs, compounds or drug residue types" | 16, "empty prescription container, drug on container" | 17,						

					"cotton swabs, q-tips" | 18, "filter materials: chore boy, steel wool, dryer sheet, cotton balls, filters" | 19, marijuana grinder | -8, No 4th type of paraphernalia}						
paraphernalia_type4_quant	Numeric	3	0	Quantity of pharaphernalia, fourth type	X | -7 = Not applicable | -11 no number given	Enter -7 for NA. If no number, but descriptor enter -11 here, and describe in	None	12	Right	Scale	Input

						paraphernalia5_quant_desc					
paraphernalia4_quant_desc	String	211	0	Further description of the quantity and/or type of parapheralia, fourth type	None	Paraphernalia description of quantity, such as many, some, several from investigative report. Can enter 1 spoon, several needles, etc. Enter "NA" for not applicable.	None	50	Left	Nominal	Input

paraphernaliatype5	Numeric	2	0	Type of pharphernalia found on scene, fifth	{1, "Cutting utensils (fingernail clippers, scissors, etc.)" | 2, "smoking tools (bongs, pipes, water pipes, ecigerettes, hookas, straight shooter (pipe), cigars, rolling papers, glass tubes, toilet paper rolls, sure close (adhesive), etc.)" | 3, "tournaquets (string, bands, belts, latex straps, shoelaces, etc.)" | 4, roach clips | 5, tin foil squares (for heaitng and inhaling without pipe) | 6, "injection paraphrenalia (needles, syringes, syringe caps, spoons, etc.)" | 7, drug kit | 8, "sniffing/snorting/insufflation paraphrenalia (straws, paper tubes, small mirrors, razorblades, cards, credit cards, rolled dollar bills, beakers with water, shot glasses with water, cups with water etc.)" | 9, "enhancing paraphrenalia		None	12	Right	Scale	Input

					(surgical/dust masks, glow sticks, vicks vap-o-rub, other)" | 10, "teeth protectors (lollipops, pacifiers, etc.)" | 11, "inhaling/huffing paraphrenalia (aerosol cans, tubes of glue, balloons, nozzles, rags, paper bags, etc.)" | 12, "containers with residue (baggies, wax papers, envelopes, tear offs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 13, "containers without residue (baggies, wax papers, envelopes, tearoffs, tubes, lipstick or marker casings, candy wrappers, makeup bags, etc.)" | 14, "heating/cooking tools (lighters, tea light or votive candles, other candles, light bulbs)" | 15, "remaining drugs, compounds or drug residue types" | 16, "empty prescription container, drug on container" | 17,						

					"cotton swabs, q-tips" | 18, "filter materials: chore boy, steel wool, dryer sheet, cotton balls, filters" | 19, marijuana grinder | -8, No 5th type of paraphernalia}						
paraphernalia_type5_quant	Numeric	3	0	Quantity of pharaphernalia, fifth type	X | -7 = Not applicable | -11 no number given	Enter -7 for NA. If no number, but descriptor enter -11 here, and describe in	None	12	Right	Scale	Input

						paraphernalia5_quant_desc					
paraphernalia5_quant_desc	String	110	0	Further description of the quantity and/or type of parapheralia, fifth type	None	Paraphernalia description of quantity, such as many, some, several from investigative report. Can enter 1 spoon, several needles, etc. Enter "NA" for not applicable.	None	50	Left	Nominal	Input
paraphtype_other	String	264	0	Other paraphernalia on scene, description	None	from medicolegal death investigation	None	50	Left	Nominal	Input
drugssubstance_at_scene____7	Numeric	1	0	No other recorded drug/residue at scene	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___12	Numeric	1	0	aerosol sprays	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___2	Numeric	1	0	amphetamine salts,	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___6	Numeric	1	0	benzodiazepine	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___10	Numeric	1	0	clear liquid	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___4	Numeric	1	0	cocaine	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___3	Numeric	1	0	crack cocaine	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___7	Numeric	1	0	diazepam	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input

drugssubstance_at_scene___15	Numeric	1	0	felt-tip markers	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___14	Numeric	1	0	gasoline	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___17	Numeric	1	0	glue	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___19	Numeric	1	0	grayish powder	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___1	Numeric	1	0	heroin	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___9	Numeric	1	0	light blue pills	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___5	Numeric	1	0	marijuana	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___16	Numeric	1	0	nail polish remover (acetone)	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___18	Numeric	1	0	nitrites (room deodorizers)	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___22	Numeric	1	0	other	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___13	Numeric	1	0	paint thinner	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___20	Numeric	1	0	purple heroin	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___21	Numeric	1	0	purple powder	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input

drugssubstance_at_scene___8	Numeric	1	0	tan rock-like substance	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
drugssubstance_at_scene___11	Numeric	1	0	white residue	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
otherdrugs_description	String	372	0	Other drug substance description	None	from medicolegal death investigation	None	50	Left	Nominal	Input
other_evidence_at_scene___1	Numeric	1	0	No OtherEvidence	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___2	Numeric	1	0	cell phone	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___3	Numeric	1	0	alcohol/empty alcohol containers	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___4	Numeric	1	0	bottle opener	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___5	Numeric	1	0	tweezers	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___6	Numeric	1	0	scales	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
other_evidence_at_scene___7	Numeric	1	0	Other	{0, unchecked |1, checked}	from medicolegal death investigation	None	12	Right	Nominal	Input
otherevidence_description	String	466	0	Other evidence at scene, description	None	from medicolegal death investigation	None	50	Left	Nominal	Input
oarrs_or_prev_psc_drugs	Numeric	2	0	Are there currently or previously prescribed OARRS-reportable drugs prescribed to decedent	{0, No | 1, Yes | -7, Unknown}	from medicolegal death investigation	None	12	Right	Scale	Input
oarrsmeds___76	Numeric	1	0	5F-ADB (5F-MDMB-PINACA)	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in	None	12	Right	Nominal	Input

						medicolegal death investigation					
oarrsmeds___2	Numeric	1	0	acetaminophen (in combination with opioid)	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___21	Numeric	1	0	alfentanil	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___4	Numeric	1	0	alpha-pyrrolidinovalerophenone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___5	Numeric	1	0	alprazolam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___72	Numeric	1	0	amitriptyline	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___6	Numeric	1	0	amlodipine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___7	Numeric	1	0	amphetamine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___8	Numeric	1	0	baclofen	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___9	Numeric	1	0	benzodiazepines	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___10	Numeric	1	0	buprenorphine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___11	Numeric	1	0	bupropion	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___12	Numeric	1	0	butalbital	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___13	Numeric	1	0	carisoprodol	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___14	Numeric	1	0	chlorofluorocarbon	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___78	Numeric	1	0	chlorpheniramine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___15	Numeric	1	0	citalopram	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___16	Numeric	1	0	clomipramine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___17	Numeric	1	0	clonazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___18	Numeric	1	0	clonopin	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___77	Numeric	1	0	Codeine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___20	Numeric	1	0	cyclobenzaprine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___23	Numeric	1	0	dextromethorphan	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___24	Numeric	1	0	diazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___25	Numeric	1	0	dibutylone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___26	Numeric	1	0	diphenhydramine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___27	Numeric	1	0	doxepin	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___28	Numeric	1	0	doxylamine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___71	Numeric	1	0	escitalopram	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___30	Numeric	1	0	fentanyl	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___31	Numeric	1	0	fluoxetine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___73	Numeric	1	0	flurazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___32	Numeric	1	0	furanyl-fetanyl	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___33	Numeric	1	0	gabapentin	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___35	Numeric	1	0	hydrocodone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___36	Numeric	1	0	hydromorphone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___37	Numeric	1	0	hydroxyzine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___38	Numeric	1	0	ketamine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___39	Numeric	1	0	lorazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___40	Numeric	1	0	marijuana/marijuana metabolites	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___41	Numeric	1	0	meclizine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___42	Numeric	1	0	methadone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___43	Numeric	1	0	methamphetamine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___69	Numeric	1	0	Methanol	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___44	Numeric	1	0	metoprolol	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___45	Numeric	1	0	mirtazapine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___70	Numeric	1	0	mitragynine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___46	Numeric	1	0	morphine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___57	Numeric	1	0	nordiazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___80	Numeric	1	0	nortriptyline	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___47	Numeric	1	0	opiates	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___200	Numeric	1	0	Other Drug	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___48	Numeric	1	0	oxycodone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___49	Numeric	1	0	paroxetine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___50	Numeric	1	0	phencyclidine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___51	Numeric	1	0	phenobarbital	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___52	Numeric	1	0	pregabalin	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___53	Numeric	1	0	promethazine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___54	Numeric	1	0	propofol	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___55	Numeric	1	0	pseudoephedrine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___56	Numeric	1	0	quetiapine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___75	Numeric	1	0	salicylate	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___58	Numeric	1	0	sertraline	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___59	Numeric	1	0	sodium hydroxide	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___60	Numeric	1	0	temazepam	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___62	Numeric	1	0	topiramate	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___63	Numeric	1	0	tramadol	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___64	Numeric	1	0	trazodone	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___66	Numeric	1	0	valproic acid	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrsmeds___67	Numeric	1	0	venlafaxine	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input

oarrsmeds___68	Numeric	1	0	zolpidem	{0, unchecked |1, checked}	Names of OARRS-reportable prescriptions on scene or in medicolegal death investigation	None	12	Right	Nominal	Input
oarrs_rpt_oth_desc	String	39	0	Other OARRS-reportable drug on scene or in files from medicolegal investigation	None		None	39	Left	Nominal	Input
illicituse	Numeric	2	0	Is there a history of illicit drug use?	{-7, Unknown| 0, No| 1, Yes}	From CCMEO, investigation report	None	12	Right	Scale	Input
ivuse	Numeric	2	0	Is there a history of IV drug use?	{-7, Unknown| 0, No| 1, Yes}	From CCMEO file, investigation report or medical records	None	12	Right	Scale	Input
abstinence	Numeric	2	0	Was there a period of abstinence from drug use?	{-7, Unknown| 0, No| 1, Yes}	From CCMEO, investigation report	None	12	Right	Scale	Input
prev_detox_rehab_tx	Numeric	2	0	Was the deceased in detox or rehab in the last two years?	{-7, Unknown| 0, No| 1, Yes}	from scene investigation, police report, EMS report or Cleveland Treatment Center or The Centers reports	None	12	Right	Scale	Input
prevod_or_od_er	Numeric	2	0	Had the decedent had a previous OD or OD-related ER visit?	{-7, Unknown| 0, No| 1, Yes}	In CCMEO investigator's report, police report, EMS reports, medical records	None	12	Right	Scale	Input
jail	Numeric	2	0	Was the deceased incarcerated in the last 2 years?	{-7, Unknown| 0, No| 1, Yes}	CCMEO case file, police report	None	12	Right	Scale	Input
arrest	Numeric	2	0	Had the decedent been arrested in the last two years?	{-7, Unknown| 0, No| 1, Yes}	From CCMEO investigative file	None	12	Right	Scale	Input

law_contact	Numeric	2	0	Had decedent had other law enforcement contact in the last 2 years (parole, etc.)	{-7, Unknown| 0, No| 1, Yes}	From CCMEO investigative file	None	12	Right	Scale	Input
drug_ct	Numeric	2	0	Had decedent participated in a diversionary drug court?	{-7, Unknown| 0, No| 1, Yes}	From CCMEO investigation	None	12	Right	Scale	Input
dc_intiating_overdose	Numeric	3	0	Did the decedent have a drug court initiating overdose?	{-11, NA|-7, Unknown|0, No|1, Yes}...	From CCMEO investigation	None	12	Right	Scale	Input
dc_graduated	Numeric	3	0	Did decedent graduate from drug court	{-11, NA|-7, Unknown|0, No|1, Yes}...	From CCMEO investigation	None	12	Right	Scale	Input
ems	Numeric	2	0	Did EMS respond to the scene?	{0, EMS did NOT respond | 1, Yes, EMS responded | -7, Unknown}	presence of EMS report or mentioned in scene investigation	None	12	Right	Scale	Input
naloxone	Numeric	2	0	Was Naloxone/Narcan administered?	{0, Naloxone/Narcan was NOT administered | 1, Naloxone/Narcan WAS administered | -7, Unknown}	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
whynonalox	String	83	0	If Naloxone was not administered, why not?	None	If decedent was dead at time of first responder arrival, write DOA; If Naloxone was administered, type NA, Otherwise, please categorize as follows: "Unknown", "apparent overdose not suspected" where not clear why not treated for OD, "apparent [other health emergency, such as stroke,	None	50	Left	Nominal	Input

						cardiac issue, diabetic emergency] suspected", OR "apparent opiate overdose not suspected" (where designated as cocaine or other non-opiate overdose).					
naloxone_ems	Numeric	3	0	Did EMS administer Naloxone/Narcan	{0, EMS did NOT administer Naloxone/Narcan | 1, EMS DID administer Naloxone/Narcan | -7, Unknown | -11, N/A Did not respond}	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
naloxone_ems_dose	Numeric	3	1	How many 2 mg doses of Naloxone/Narcan did EMS administer?	X.X|-7.0, unknown	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
epi_only	Numeric	2	0	Was epinephrine the only drug administered by EMS (i.e. no Naloxone/Narcan)	{0, Epinephrine was not the only drug administered by EMS | 1, Epinephrine WAS the only drug administered by EMS (i.e. no Naloxone/Narcan) | -8, No drugs were administered by EMS | -7, Unknown}	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input

ems_transport	Numeric	1	0	Where did EMS transport to?	{1, EMS transported to hospital | 2, EMS transported to CCMEO (morgue) | 3, EMS transported to other facility | 4, EMS did not transport}	from EMS report, police report, ER report, investigation report	None	12	Right	Nominal	Input
naloxone_pd	Numeric	3	0	Did Police administer Naloxone/Narcan?	{0, Responding police did NOT administer Naloxone/Narcan | 1, Responding police DID administer Naloxone | -7, Unknown | -11, N/A Did not respond}	From police report	None	12	Right	Scale	Input
naloxone_pd_dose	Numeric	2	0	How many 2 mg doses of Naloxone/Narcan did the responding police administer?	X.X|-7.0, unknown	From police report	None	12	Right	Scale	Input
naloxone_dawn	Numeric	2	0	Was a Project DAWN Naloxone dose administered?	{0, No Project DAWN Naloxone dose was administered | 1, A Project DAWN Naloxone dose WAS administered | -7, Unknown}	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
naloxone_dawn_dose	Numeric	3	1	How many 2 mg doses from Project DAWN were administered?	X.X|-7.0, unknown|-8.0, not applicable	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
naloxone_other	String	93	0	Who other than police, EMS, or Project DAWN provided/administered Naloxone/Narcan?	None	from EMS report, police report, ER report, investigation report	None	50	Left	Nominal	Input

naloxone_oth_dose	Numeric	3	1	How many doses of Naloxone/Narcan were administered by entity identified in "naloxone_other"	X.X|-7.0, unknown|-8.0, not applicable	from EMS report, police report, ER report, investigation report	None	12	Right	Scale	Input
oarrs_file	Numeric	1	0	Was there an OARRS (PDMP) file related to the decedent?	{1, YES. Decedent had OARRS histories outside of the range of OARRS i.e. more than year ago | 0, NO. No OARRS data outside of 1 year range}	from CCMEO review	None	12	Right	Nominal	Input
o_unspecified_opioid	Numeric	1	0	Unspecified Opioid	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_unspecified_barbituate	Numeric	1	0	Unspecified Barbiturate	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_unspecified_drugs	Numeric	1	0	Unspecified Drugs	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@11difluoroethane	Numeric	1	0	1,1-difluoroethane	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@2furanylfentanyl	Numeric	1	0	2-furanyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@34methylenedioxymethamphetamine	Numeric	1	0	3,4 methylenedioxymethamphetamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@3methylenedioxymethamphetamine	Numeric	1	0	3-methylenedioxymethamphetamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@5fluoroMDMBPINACA5fluoroEMBPINACA	Numeric	1	0	5-fluoro-MDMB-PINACA/5-fluoro-EMB-PINACA	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
@5fluoroMDMBPICA	Numeric	1	0	5-fluoro-MDMB-PICA	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

@10hydroxycarbazepine	Numeric	1	0	10-hydroxycarbazepine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
abchimaca	Numeric	1	0	Ab-chimaca	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
acetaldehyde	Numeric	1	0	Acetaldehyde	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
aripiprazole	Numeric	1	0	Aripiprazole	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
benzonatate	Numeric	1	0	Benzonatate	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
benztropine	Numeric	1	0	Benztropine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
benzylfentanyl	Numeric	1	0	Benzyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
betahydroxyfentanyl	Numeric	1	0	Beta-hydroxy fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
buspirone	Numeric	1	0	Buspirone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
butyrylfentanyl	Numeric	1	0	Butyryl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cannibinoid	Numeric	1	0	Cannabinoid	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
carbamazepine	Numeric	1	0	Carbamazepine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
carisoprodol	Numeric	1	0	Carisoprodol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

chlordiazepoxide	Numeric	1	0	Chlordiazepoxide	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
chlorpromazine	Numeric	1	0	Chlorpromazine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cilostazol	Numeric	1	0	Cilostazol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cistrans3methylfentanyl	Numeric	1	0	Cis/trans-3-methylfentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
citronellaoil	Numeric	1	0	Citronella oil	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
clonidine	Numeric	1	0	Clonidine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
clozapine	Numeric	1	0	Clozapine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cocaethylene	Numeric	1	0	Cocaethylene	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
colchicine	Numeric	1	0	Colchicine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cyclobenzaprine	Numeric	1	0	Cyclobenzaprine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
cyclopropylfentanyl	Numeric	1	0	Cyclopropyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
dichloromethane	Numeric	1	0	Dichloromethane	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
duloxetine	Numeric	1	0	Duloxetine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

eszopiclone	Numeric	1	0	Eszopiclone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Ethylacetate	Numeric	1	0	Ethyl acetate	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
ethylether	Numeric	1	0	Ethyl ether	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Ethyleneglycol	Numeric	1	0	Ethylene glycol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
etizolam	Numeric	1	0	Etizolam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
eutylone	Numeric	1	0	Eutylone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
flecainide	Numeric	1	0	Flecainide	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
flualprazolam	Numeric	1	0	Flualprazolam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
flubromazolam	Numeric	1	0	Flubromazolam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
fluorofentanyl	Numeric	1	0	Fluoro fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
fluorofuranylfentanyl	Numeric	1	0	Fluoro furanyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Fluoroisobutyrylfentanyl	Numeric	1	0	Fluoroisobutyryl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
haloperidol	Numeric	1	0	Haloperidol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

hydroxychloroquine	Numeric	1	0	Hydroxychloroquine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
ibuprofen	Numeric	1	0	Ibuprofen	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
imipramine	Numeric	1	0	Imipramine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
insulin	Numeric	1	0	Insulin	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
isobutyrylfentanyl	Numeric	1	0	Isobutyrylfentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
isopropanol	Numeric	1	0	Isopropanol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
isotonitazene	Numeric	1	0	Isotonitazene	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
isovalerylfentanyl	Numeric	1	0	Isovaleryl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
lamotrigine	Numeric	1	0	Lamotrigine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
levetiracetam	Numeric	1	0	Levetiracetam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
lidocaine	Numeric	1	0	Lidocaine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
lisdexamfetamine	Numeric	1	0	Lisdexamfetamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
lisinopril	Numeric	1	0	Lisinopril	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

lithium	Numeric	1	0	Lithium	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
loperamide	Numeric	1	0	Loperamide	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
lysergicacid	Numeric	1	0	Lysergic acid	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
MDMA	Numeric	1	0	MDMA	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
memantine	Numeric	1	0	Memantine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
meperidine	Numeric	1	0	Meperidine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
meprobomate	Numeric	1	0	Meprobomate	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
metaxalone	Numeric	1	0	Metaxalone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
metenolone	Numeric	1	0	Metenolone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
metformin	Numeric	1	0	Metformin	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
methoxyacetylfentany	Numeric	1	0	Methoxyacetyl fentany	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
methylenedioxymethamphetamine	Numeric	1	0	Methylenedioxymethamphetamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
methylphenidate	Numeric	1	0	Methylphenidate	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

midazolam	Numeric	1	0	Midazolam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Nethylpentylone	Numeric	1	0	N-ethyl pentylone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
narcotic	Numeric	1	0	Narcotic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
nifedipine	Numeric	1	0	Nifedipine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
nonspecifiedfentanylanalogues	Numeric	1	0	Non-specified fentanyl analogue(s)	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
norfentanyl	Numeric	1	0	Norfentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
olanzapine	Numeric	1	0	Olanzapine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
orphenadrine	Numeric	1	0	Orphenadrine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
oxazepam	Numeric	1	0	Oxazepam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Oxymorphone	Numeric	1	0	Oxymorphone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
parafluorofuranylfentanyl	Numeric	1	0	Para-fluoro furanyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
parafluoroisobutyrylfentanyl	Numeric	1	0	Para-fluoro isobutyryl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
pentobarbital	Numeric	1	0	Pentobarbital	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

phentermine	Numeric	1	0	Phentermine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
phenylpropanolamine	Numeric	1	0	Phenylpropanolamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
phenytoin	Numeric	1	0	Phenytoin	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
pivaloylfentanyl	Numeric	1	0	Pivaloyl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
primidone	Numeric	1	0	Primidone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
propoxyphene	Numeric	1	0	Propoxyphene	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
propranolol	Numeric	1	0	Propranolol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
propyleneglycol	Numeric	1	0	Propylene glycol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
pyrazolam	Numeric	1	0	Pyrazolam	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
pyrilamine	Numeric	1	0	Pyrilamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
Risperidone	Numeric	1	0	Risperidone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
sodiumnitrite	Numeric	1	0	Sodium nitrite	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
sotalol	Numeric	1	0	Sotalol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

tamsulosin	Numeric	1	0	Tamsulosin	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
tapentadol	Numeric	1	0	Tapentadol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
tizanidine	Numeric	1	0	Tizanidine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
toluene	Numeric	1	0	Toluene	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
trenbolone	Numeric	1	0	Trenbolone	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
valerylfentanyl	Numeric	1	0	Valeryl fentanyl	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
valproicacid	Numeric	1	0	Valproic acid	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
xylazine	Numeric	1	0	Xylazine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
zaleplon	Numeric	1	0	Zaleplon	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_ACE_inhibitor	Numeric	1	0	Category Ace Inhibitor	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_refrigerant_gas	Numeric	1	0	Category Refrigerant Gas	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antipsychotic	Numeric	1	0	Category Antipsychotic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_anorectic	Numeric	1	0	Category Anorectic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

o_beta_blocker	Numeric	1	0	Category Beta Blocker	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_nonbenzo_sedative	Numeric	1	0	Category Non--benzo sedative	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_benzodiazepine	Numeric	1	0	Category Benzodiazepine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_muscle_relaxant...121	Numeric	1	0	Category Muscle Relaxant	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_quinoline	Numeric	1	0	Quinoline	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_nonmonograph	Numeric	1	0	Category Nonmonograph, OTC monograph	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_Biguanide	Numeric	1	0	Category Biguanide	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_anticonvulsant	Numeric	1	0	Category Anticonvulsant	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antidepressant	Numeric	1	0	Category Antidepressant	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_cannabinoid_synthornot	Numeric	1	0	Cannabinoid synthetic and not synthetic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antifreeze	Numeric	1	0	Category Antifreeze	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_ca_channel_blocker	Numeric	1	0	Category Channel Blocker	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_MDMAMDEAMDA	Numeric	1	0	Category MDMA/MDEA/MDA	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

o_rubbing_alcohol	Numeric	1	0	Category Rubbing Alcohol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_solvent	Numeric	1	0	Category Solvent	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antiarrhythmic	Numeric	1	0	Category Antiarrhythmic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antimanic	Numeric	1	0	Category Antimanic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antidiabetic	Numeric	1	0	Category Antidiabetic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_helium	Numeric	1	0	Category Helium	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_alpha1_blocker	Numeric	1	0	Category alpha-1_blocker	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_PDE3inhibitor	Numeric	1	0	Category PDE3 inhibitor	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_NSAID	Numeric	1	0	Category NSAID	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_tranquilizer	Numeric	1	0	Category Tranquilizer	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_Alpha2Agonist	Numeric	1	0	Category Alpha-2-Agonist	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_steroid	Numeric	1	0	Category Steroid	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_NMDAreceptorantagonists	Numeric	1	0	Category NMDA receptor antagonists	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

o_stimulant	Numeric	1	0	Category Stimumlant	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_muscle_relaxant...145	Numeric	1	0	Category Muscle Relaxant	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_unspecifiedcausticsubstance	Numeric	1	0	Unspecified caustic substance	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_nonnarcotice_Antitussive	Numeric	1	0	Category Non-narcotic Antitussive	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antigout_Microtubule_polymerizationinhibitor	Numeric	1	0	Category Antigout_Microtubule_polymerization inhibitor	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_anxiolytics	Numeric	1	0	Category Anxiolytic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_otherorganiccompound	Numeric	1	0	Other organic compound	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_hallucinagen	Numeric	1	0	Category Hallucinagen	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_anticholinergics	Numeric	1	0	Category Anticholinergic	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_essentialoil	Numeric	1	0	Essential oil	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_antihistamine	Numeric	1	0	Category Antihistamine	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_inorganiccompound	Numeric	1	0	Category inorganic compound	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
o_synthetic_alcohol	Numeric	1	0	Category Synthetic alcohol	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input

o_inorganic_salt	Numeric	1	0	Category inorganic salt	{0, unchecked |1, checked}	coded from "cod_othdrugname_all"	None	12	Right	Nominal	Input
fen_analogs	Numeric	1	0	Group Fentanyl Analogues	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
gabapentinoids	Numeric	1	0	Group Gabapentinoids	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
benzodiaz	Numeric	1	0	Group Benzodiazepines	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
stimulants	Numeric	1	0	Group Stimulants	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
heroin	Numeric	1	0	Group Heroin	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
barbiturates	Numeric	1	0	Group Barbiturates	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
other_opioids	Numeric	1	0	Group Other Opioids	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
nonopioid_painreliever	Numeric	1	0	Group Non Opioid Pain Relievers	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
cannabinoids	Numeric	1	0	Group Cannabinoids	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
hallucinogen	Numeric	1	0	Group Hallucinogens	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
antipsychotic	Numeric	1	0	Group Antipsychotics	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
antidepressant	Numeric	1	0	Group Antidepressants	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
anticonvulsant	Numeric	1	0	Group Anticonvulants	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
nonbenzo_sedative	Numeric	1	0	Group Non-benzo sedatives and anxiolytic	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
musc_relaxant	Numeric	1	0	Group Muscle Relaxants	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
antihistaminic	Numeric	1	0	Group Antihistaminics	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
antitussive	Numeric	1	0	Group Antitussives	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
anaesthetic	Numeric	1	0	Group Anaesthetics	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input
other_alcohol	Numeric	1	0	Group Other alcohols	{0, not in group |1, in group}	created from COD drugs all	None	12	Right	Nominal	Input

tot_opioids	Numeric	1	0	Category All Opioids (heroin, fentanyl, analogs, carfentanil other opioids)	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
depressants	Numeric	1	0	Category CNS depressants (barbiturates, alcohol, non-benzo sedative, anaesthetic agents)	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
other_drugs	Numeric	1	0	Category Other Drugs and substances (all outside of opioids, depressants, stimulants and benzos and other Categories)	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_other_drugs	Numeric	1	0	Exclusive COD category: Only other drugs	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid	Numeric	1	0	Exclusive COD category: Only opioids	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_stimulants	Numeric	1	0	Exclusive COD category: Stimulants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_benzodiaz	Numeric	1	0	Exclusive COD category: Benzodiazepines only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_depressants	Numeric	1	0	Exclusive COD category: Depressants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_stimulant	Numeric	1	0	Exclusive COD category: Opioids and Stimulants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_benzodiaz	Numeric	1	0	Exclusive COD category: Opioids and Benzodiazepines only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_depressants	Numeric	1	0	Exclusive COD category: Opioids and Depressants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_stimulant_benzodiaz	Numeric	1	0	Exclusive COD category: Stimulants and benzodiazepines only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_stimulant_depressants	Numeric	1	0	Exclusive COD category: Stimulants and depressants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_benzodiaz_depressants	Numeric	1	0	Exclusive COD category: Benzodiazepines and depressants only	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input

only_opioid_stimulant_benzo	Numeric	1	0	Exclusive COD category: Opioids, stimulants and benzodiazepines	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_stimulant_depressant	Numeric	1	0	Exclusive COD category: Opioids, stimulants and depressants	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_benzo_depressant	Numeric	1	0	Exclusive COD category: Opioids, benzodiazepines and depressants	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_benzo_stimulant_depressant	Numeric	1	0	Exclusive COD category: Benzodiazepines, stimulants and depressants	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
only_opioid_benzo_stimulant_depressant	Numeric	1	0	Exclusive COD category: Opioids, benzodiazepines, stimulants and depressants	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
all_drug	Numeric	1	0	Exclusive COD category: Opioids, Benzodiazepines, stimulants, depressants and other drug	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
mixedwith_otherdrugs	Numeric	1	0	Exclusive COD category: Other drugs mixed with opioids and/or benzos and/or stimulants and/or depressants	{0, not in category |1, in category}	created from COD drugs all	None	12	Right	Nominal	Input
opioids_otherdrugs	Numeric	8	0	Alt Exclusive COD category: Other drugs mixed with opioids and/or benzos and/or stimulants and/or depressants, including opioids	{0, not in category |1, in category}	created from COD drugs all	None	20	Right	Nominal	Input
mixedwith_no_opioids	Numeric	8	0	Alt Exclusive COD category: Other drugs mixed with opioids and/or benzos and/or stimulants and/or depressants, no opioids	{0, not in category |1, in category}	created from COD drugs all	None	22	Right	Nominal	Input
all_fentanyl	Numeric	8	0	Non-exclusive all Fentanyl group (includes fentanyl, analogs and carfentanil	{0, not in group |1, in group}	created from COD drugs all	None	14	Right	Nominal	Input

Appendix D. Brochure for Medical Examiner Office Training Sample

Appendix E: Prosecution case data dictionaries

NIJHCICourtData_DataDictionary_Appendix

Variable / Field Name	Form Name	Field Type	Field Label	Choices, Calculations, OR Slider Labels	Field Note
court_case_id	basic_case_information	text	Court_Case_ID		assigned case id
prosecutor	characteristics	dropdown	Prosecutor	1, USATTY NDOH | 2, Cuyahoga County	
case_county	characteristics	radio	What county did it occur in?	1, Allen | 2, Ashtabula | 3, Cuyahoga | 4, Lorain | 5, Lucas | 6, Mahoning | 7, Marion | 8, Medina | 9, Summit | 10, Trumbull | 11, Wayne | 20, Other | 99, Unknown	
case_county_oth	characteristics	text	Please list "other" county		
associated_cases	characteristics	text	Were there associated cases/defendants?		please list cases and defendants, separated by commas
other_cases_yn	characteristics	dropdown	Were there other common pleas cases associated with defendant?	1, Yes | 0, No, none listed	enter case numbers, separated by commas
other_case_number	characteristics	text	What were the other case numbers are associated with this defendant?		record case number(s), separated by a comma
defendant_age	characteristics	text	Defendant's age		
defendant_race	characteristics	checkbox	Defendant's race	1, Alaska Native | 2, American Indian | 3, Asian | 4, Black or African American | 5, Native Hawaiian/Pacific Islander | 6, White or	

				Caucasian | 7, Other | -8, Refused | -9, Unknown	
def_race_other	characteristics	text	Other race description		
defendant_ethnicity	characteristics	dropdown	Defendant's ethnicity (Hispanic or non-Hispanic)	1, Hispanic | 0, Non-hispanic | -9, Unknown	
defendant_gender	characteristics	dropdown	Defendant's gender	1, Male | 2, Female | 3, Non-binary/third gender | 4, Other | -9, Unknown	
def_gender_other	characteristics	text	Defendant gender other description		
indictment	characteristics	checkbox	On what charges was the defendant Indicted?	1, Felony homicide | 2, Corruption with drugs | 3, Possession with intent to distribute | 4, Involuntary manslaughter | 5, Trafficking offense | 6, Drug possession | 7, Possessing criminal tools | 9, other	
indictment_other	characteristics	text	Other indictment		describe other indictment, separate other indictments with commas
indictment_felony_level	characteristics	dropdown	What was the highest level of Felony charged?	1, Felony 1 (state) | 2, Felony 2 (state) | 3, Felony 3 (state) | 4, Felony 4 (state) | 5, Felony 5 (state) | 6, Class A Felony (federal) | 7, Class B Felony (federal) | 8, Class C Felony (federal) | 9, Class D Felony (federal) | 10, Class E Felony (federal) | 11, Other	
indictment_highest_other	characteristics	text	Other highest class of charge		
indictment_month	characteristics	text	What was the month of the indictment?		enter 99 for unknown

indictment_year	characteristics	text	What was the year of the indictment?		enter 9999 for unknown
indictiment_count_n	characteristics	text	How many counts were in the indictment?		
indictment_count1	characteristics	text	Please describe Count 1		
statutes_count1	characteristics	text	Statues referenced in Count 1		Separate multiple statutes with comma
indictment_count2	characteristics	text	Please describe Count 2		
statutes_count2	characteristics	text	Statues referenced in Count 2		Separate multiple statutes with comma
indictment_count3	characteristics	text	Please describe Count 3		
statutes_count3	characteristics	text	Statues referenced in Count 3		Separate multiple statutes with comma
indictment_count4	characteristics	text	Please describe Count 4		
statutes_count4	characteristics	text	Statues referenced in Count 4		Separate multiple statutes with comma
indictment_count5	characteristics	text	Please describe Count 5		
statutes_count5	characteristics	text	Statues referenced in Count 5		Separate multiple statutes with comma
indictment_count6	characteristics	text	Please describe Count 6		
statutes_count6	characteristics	text	Statues referenced in Count 6		Separate multiple statutes with comma
indictment_count7	characteristics	text	Please describe Count 7		
statutes_count7	characteristics	text	Statues referenced in Count 7		Separate multiple statutes with comma
indictment_count8	characteristics	text	Please describe Count 8		
statutes_count8	characteristics	text	Statues referenced in Count 8		Separate multiple statutes with comma
indictment_count9	characteristics	text	Please describe Count 9		
statutes_count9	characteristics	text	Statues referenced in Count 9		Separate multiple statutes with comma
indictment_count10	characteristics	text	Please describe Count 10		

statutes_count10	characteristics	text	Statues referenced in Count 10		Separate multiple statutes with comma
indictment_count_other	characteristics	text	Any other counts in the indictment		
previous_drugfelony	characteristics	dropdown	Was there a previous drug felony requiring mandatory life sentence?	1, Yes | 2, No | -9, Unknown	
motions_filed_yn	characteristics	dropdown	Were there motions (other than continuance and discovery) filed in the case?	0, No | 1, Yes | 9, Unknown	
motion_type	characteristics	checkbox	If there were motions filed, what kind?	1, Motion to suppress | 2, Motion in limine | 9, Other (do not include motions for continuance or discovery)	
suppress_description	characteristics	notes	Description of Motion(s) to Suppress		
suppress_results	characteristics	text	Result of motion(s) to suppress (granted/denied)		
in_limine_description	characteristics	notes	Description of motion(s) in limine		
limine_result	characteristics	text	Results of motion(s) in limine (preclude prejudicial testimony or evidence, etc.)		
other_motion_desc	characteristics	notes	"Other" consequential motions (do not record motions for continuance or discovery)		
other_motion_result	characteristics	notes	Other consequential motion result		
pled_or_trial	characteristics	dropdown	Was the case pled out, did it go to trial, or was it dismissed/withdrawn?	1, Case was pled out | 2, Case went to trial | 3, Pending | 4, Dismissed/withdrawn | 5, Other	

other_dismissed_describe	characteristics	notes	"Other" plead/trial/withdrawn circumstance		Please describe why either why the case was withdrawn/dismissed or any "other" special circumsatances
plead_charges	characteristics	text	If pled, to what charge(s) did they plead guilty or no contest?		If they did not plead, enter "NA"
convited_yn	characteristics	dropdown	If they went to trial, were they convicted or acquitted?	0, Acquitted on all charges | 1, Convicted on all or some of charges | -9, NA, Defendant pled to charges	
conviction	characteristics	text	On what charges was the defendant convicted?		
conviction_month	characteristics	text	What was the month of the plea/conviction/acquittal?		enter 99 for unknown
conviction_year	characteristics	text	What was the year of the plea/conviction/acquittal?		enter 9999 for unknown
sentence	characteristics	text	What was the sentence received?		
indictment_death	characteristics	text	How many deaths were related to the indictment?		
dec1_ccmeo_yn	characteristics	dropdown	Was Decedent 1 a Cuyahoga County ME case?	0, No | 1, Yes	
decedent1_me_n	characteristics	text	What is Decedent 1's CCMEO or other ME case ID?		If related decedent was a CCMEO case, please answer only the relationship question, the 911 call, and statements questionsof each decedent. The rest will be directly downloaded from CCMEO data

nine11_call_yn	characteristics	dropdown	911 call associated with the death of decedent 1?	0, No | 1, Yes | 9, Unknown	
nine11call_notes	characteristics	notes	911 call notes		
death_npol_response	characteristics	text	Number of officers reponding to scene		
policerpt_witness	characteristics	notes	Witness statements from police reports		
police_statement	characteristics	notes	Police report description of call		
decedent1_relationship	characteristics	text	What was the relationship of Decedent 1 to the defendant?		
decedent1_cod	characteristics	text	What was the decedent 1's cause of death?		From Death Certificate
dec1_death_mon_1	characteristics	text	What was decedent 1's month of death		enter 99 for unknown
dec1_death_year	characteristics	text	What was decedent 1's year of death?		enter 9999 for unknown
decedent1_age	characteristics	text	What was Decedent 1's age?		
decent1_race	characteristics	checkbox	What was Decedent 1's race?	1, Alaska Native | 2, American Indian | 3, Asian | 4, Black or African American | 5, Native Hawaiian/Pacific Islander | 6, White or Caucasian | 7, Other | -8, Refused | -9, Unknown	
dec1_race_other	characteristics	text	Decedent 1's "Other" race description		
decedent1_ethnicity	characteristics	dropdown	What was Decedent 1's ethnicity?	1, Hispanic | 0, Non-hispanic | -9, Unknown	
decedent1_gender	characteristics	dropdown	What was decedent 1's gender?	1, Male | 2, Female | 3, Non-binary/third gender | 4, Other | -9, Unknown	
dec1_gender_other	characteristics	text	Decedent 1's other gender, description		
decedent1_inventory	characteristics	notes	List inventory from death scene from decedent 1		From police report

other_drugs_decedent	characteristics	notes	What drugs other than those in the COD were in the decedent's body at the time of death (ME toxicology report)		
death_location_dec1	characteristics	text	Death location of decedent 1		
dec2_ccmeo_yn	characteristics	dropdown	Was Decedent 2 a Cuyahoga County ME case?	0, No | 1, Yes	
decedent2_me_n	characteristics	text	What is Decedent 2's CCMEO or other ME case ID?		
nine11_call_yn_dec2	characteristics	dropdown	911 call associated with the decedent 2 death?	0, No | 1, Yes | 9, Unknown	
nine11call_notes_dec2	characteristics	notes	911 call notes, decedent 2		
death_npol_response_dec2	characteristics	text	Number of officers reponding_decedent 2		
policerpt_witness_dec2	characteristics	notes	Witness statements_decedent 2		
police_statemt_dec2	characteristics	notes	Police report description of call		
decedent2_relationship	characteristics	text	What was the relationship of Decedent 2 to the defendant?		
decedent2_cod	characteristics	text	What was the decedent 2's cause of death?		From Death Certificate
dec2_death_mon	characteristics	text	What was decedent 2's month of death		enter 99 for unknown
dec2_death_year	characteristics	text	What was decedent 2's year of death?		enter 9999 for unknown
decedent2_age	characteristics	text	What was Decedent 2's age?		
decent2_race	characteristics	checkbox	What was Decedent 2's race?	1, Alaska Native | 2, American Indian | 3, Asian | 4, Black or African American | 5, Native Hawaiian/Pacific Islander | 6, White or Caucasian | 7, Other | -8, Refused | -9, Unknown	

dec2_race_other	characteristics	text	Decedent 2's "Other" race description		
decedent2_ethnicity	characteristics	dropdown	What was Decedent 2's ethnicity?	1, Hispanic | 0, Non-hispanic | -9, Unknown	
decedent2_gender	characteristics	dropdown	What was decedent 2's gender?	1, Male | 2, Female | 3, Non-binary/third gender | 4, Other | -9, Unknown	
dec2_gender_other	characteristics	text	Decedent 2's other gender, description		
decedent2_inventory	characteristics	notes	List inventory from death scene from decedent 2		From police report
other_drugs_decedent2	characteristics	notes	What drugs other than those in the COD were in the decedent's (2) body at the time of death (ME toxicology report)		
death_location_dec2	characteristics	text	Death location of decedent 2		
dec3_ccmeo_yn	characteristics	dropdown	Was Decedent 3 a Cuyahoga County ME case?	0, No | 1, Yes	
decedent3_me_n	characteristics	text	What is Decedent 3's CCMEO or other ME case ID?		
nine11_call_yn_dec3	characteristics	dropdown	911 call associated with the decedent 3 death?	0, No | 1, Yes | 9, Unknown	
nine11call_notes_dec3	characteristics	notes	911 call notes, decedent 3		
death_npol_response_dec3	characteristics	text	Number of officers reponding_decedent 3		
policerpt_witness_dec3	characteristics	notes	Witness statements_decedent 3		
policerpt_witness_dec4	characteristics	notes	Witness statements_decedent 3		
police_statemt_dec3	characteristics	notes	Police report description of call for Decedent 3		
police_statemt_dec4	characteristics	notes	Police report description of call for Decedent 3		
decedent3_relationship	characteristics	text	What was the relationship of Decedent 3 to the defendant?		

decedent3_cod	characteristics	text	What was the decedent 3's cause of death?		From Death Certificate
dec3_death_mon	characteristics	text	What was decedent 3's month of death		enter 99 for unknown
dec3_death_year	characteristics	text	What was decedent 3's year of death?		enter 9999 for unknown
decedent3_age	characteristics	text	What was Decedent 3's age?		
decent3_race	characteristics	checkbox	What was Decedent 3's race?	1, Alaska Native | 2, American Indian | 3, Asian | 4, Black or African American | 5, Native Hawaiian/Pacific Islander | 6, White or Caucasian | 7, Other | -8, Refused | -9, Unknown	
dec3_race_other	characteristics	text	Decedent 3's "Other" race description		
decedent3_ethnicity	characteristics	dropdown	What was Decedent 3's ethnicity?	1, Hispanic | 0, Non-hispanic | -9, Unknown	
decedent3_gender	characteristics	dropdown	What was decedent 3's gender?	1, Male | 2, Female | 3, Non-binary/third gender | 4, Other | -9, Unknown	
dec3_gender_other	characteristics	text	Decedent 3's other gender, description		
decedent3_inventory	characteristics	notes	List inventory from death scene from decedent 3		From police report
other_drugs_decedent3	characteristics	notes	What drugs other than those in the COD were in the decedent's (3) body at the time of death (ME toxicology report)		
death_location_dec3	characteristics	text	Death location of decedent 3		
dec4_ccmeo_yn	characteristics	dropdown	Was Decedent 4 a Cuyahoga County ME case?	0, No | 1, Yes	
decedent4_me_n	characteristics	text	What is Decedent 4's CCMEO or other ME case ID?		
nine11_call_yn_dec4	characteristics	dropdown	911 call associated with the decedent 4 death?	0, No | 1, Yes | 9, Unknown	

nine11call_notes_dec4	characteristics	notes	911 call notes, decedent 4		
death_npol_response_dec4	characteristics	text	Number of officers reponding_decedent 4		
decedent4_relationship	characteristics	text	What was the relationship of Decedent 4 to the defendant?		
decedent4_cod	characteristics	text	What was the decedent 4's cause of death?		From Death Certificate
dec4_death_mon	characteristics	text	What was decedent 4's month of death		enter 99 for unknown
dec4_death_year	characteristics	text	What was decedent 4's year of death?		enter 9999 for unknown
decedent4_age	characteristics	text	What was Decedent 4's age?		
decent4_race	characteristics	checkbox	What was Decedent 4's race?	1, Alaska Native | 2, American Indian | 3, Asian | 4, Black or African American | 5, Native Hawaiian/Pacific Islander | 6, White or Caucasian | 7, Other | -8, Refused | -9, Unknown	
dec4_race_other	characteristics	text	Decedent 4's "Other" race description		
decedent4_ethnicity	characteristics	dropdown	What was Decedent 4's ethnicity?	1, Hispanic | 0, Non-hispanic | -9, Unknown	
decedent4_gender	characteristics	dropdown	What was decedent 4's gender?	1, Male | 2, Female | 3, Non-binary/third gender | 4, Other | -9, Unknown	
dec4_gender_other	characteristics	text	Decedent 4's other gender, description		
decedent4_inventory	characteristics	notes	List inventory from death scene from decedent 4		From police report
other_drugs_decedent4	characteristics	notes	What drugs other than those in the COD were in the decedent's (4) body at the time of death (ME toxicology report)		
death_location_dec4	characteristics	text	Death location of decedent 4		

appealed	characteristics	dropdown	Was the conviction appealed?	1, Yes | 2, No | -9, Unknown	
appeal_description	characteristics	notes	Appeal description		
appeal_outcome	characteristics	dropdown	If appealed, what was the outcome?	1, Upheld | 2, Overturned | 3, Pending | 4, Other	
appeal_outcome_other	characteristics	text	Please describe "other" appeal outcome		
other_information	characteristics	notes	Other pertinent information from case file or docket		
prox_cause	evidence	notes	Proximate cause/Chain of Evidence		
case_summary	case_summary	notes	Please provide an overall summary of the Case		
doc_name_1	case_summary	text	{doc_date_1} Document Name 1		Documents used in review
doc_date_1	case_summary	text	Document Date 1		Documents used in review
doc_name_2	case_summary	text	{doc_date_2} Document Name 2		Documents used in review
doc_date_2	case_summary	text	Document Date 2		Documents used in review
doc_name_3	case_summary	text	{doc_date_3} Document Name 3		Documents used in review
doc_date_3	case_summary	text	Document Date 3		Documents used in review
doc_name_4	case_summary	text	{doc_date_4} Document Name 4		Documents used in review
doc_date_4	case_summary	text	Document Date 4		Documents used in review
doc_name_5	case_summary	text	{doc_date_5} Document Name 5		Documents used in review
doc_date_5	case_summary	text	Document Date 5		Documents used in review
doc_name_6	case_summary	text	{doc_date_6} Document Name 6		Documents used in review
doc_date_6	case_summary	text	Document Date 6		Documents used in review

doc_name_7	case_summary	text	{doc_date_7} Document Name 7		Documents used in review
doc_date_7	case_summary	text	Document Date 7		Documents used in review
doc_name_8	case_summary	text	{doc_date_8} Document Name 8		Documents used in review
doc_date_8	case_summary	text	Document Date 8		Documents used in review
doc_name_9	case_summary	text	{doc_date_9} Document Name 9		Documents used in review
doc_date_9	case_summary	text	Document Date 9		Documents used in review
doc_name_10	case_summary	text	{doc_date_10} Document Name 10		Documents used in review
doc_date_10	case_summary	text	Document Date 10		Documents used in review
doc_name_11	case_summary	text	{doc_date_11} Document Name 11		Documents used in review
doc_date_11	case_summary	text	Document Date 11		Documents used in review
doc_name_12	case_summary	text	{doc_date_12} Document Name 12		Documents used in review
doc_date_12	case_summary	text	Document Date 12		Documents used in review
doc_name_13	case_summary	text	{doc_date_13} Document Name 13		Documents used in review
doc_date_13	case_summary	text	Document Date 13		Documents used in review
doc_name_14	case_summary	text	{doc_date_14} Document Name 14		Documents used in review
doc_date_14	case_summary	text	Document Date 14		Documents used in review
doc_name_15	case_summary	text	{doc_date_15} Document Name 15		Documents used in review
doc_date_15	case_summary	text	Document Date 15		Documents used in review

doc_name_16	case_summary	text	{doc_date_16} Document Name 16		Documents used in review
doc_date_16	case_summary	text	Document Date 16		Documents used in review
doc_name_17	case_summary	text	{doc_date_17} Document Name 17		Documents used in review
doc_date_17	case_summary	text	Document Date 17		Documents used in review
doc_name_18	case_summary	text	{doc_date_18} Document Name 18		Documents used in review
doc_date_18	case_summary	text	Document Date 18		Documents used in review
doc_name_19	case_summary	text	{doc_date_19} Document Name 19		Documents used in review
doc_date_19	case_summary	text	Document Date 19		Documents used in review
doc_name_20	case_summary	text	{doc_date_20} Document Name 20		Documents used in review
doc_date_20	case_summary	text	Document Date 20		Documents used in review

All NDOH Cases Dictionary

Name	Type	Width	decimals	Label	Values	Missing	Columns	Align	Measure	Role
CaseNumber	String	51	0	Case Number	None	None	27	Left	Nominal	Input
CaseYear	Numeric	4	0	Year filed	None	None	8	Right	Scale	Input
CountyName	String	8	0	County in which tried	None	None	8	Left	Nominal	Input
Title_Section.1	String	30	0	Title and section of USC violation_1	None	None	18	Left	Nominal	Input
Title_Section.2	String	30	0	Title and section of USC violation_2	None	None	18	Left	Nominal	Input
Title_Section.3	String	30	0	Title and section of USC violation_3	None	None	18	Left	Nominal	Input
Title_Section.4	String	30	0	Title and section of USC violation_4	None	None	18	Left	Nominal	Input
Title_Section.5	String	30	0	Title and section of USC violation_5	None	None	18	Left	Nominal	Input
Title_Section.6	String	30	0	Title and section of USC violation_6	None	None	18	Left	Nominal	Input
NDO_Eastern	Numeric	8	0	Part of the NDO_Eastern?	0, No | 1, Yes, part of the Eastern District	None	13	Right	Nominal	Input
Eastern_Akron	Numeric	8	0	Part of the NDO_Eastern_Akron region?	0, No | 1, Yes	None	15	Right	Nominal	Input
Eastern_Cleveland	Numeric	8	0	Part of the NDO_Eastern_Cleveland region?	0, No | 1, Yes	None	19	Right	Nominal	Input
Eastern_Youngstown	Numeric	8	0	Part of the NDO_Eastern_Youngstown region?	0, No | 1, Yes	None	20	Right	Nominal	Input
filter_$	Numeric	1	0	NDO_Eastern = 1 (FILTER)	{0, Not Selected|1, Selected}	None	10	Right	Nominal	Input

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Appendix F: HCI Interview/Focus Group Process

HCI Interview/Focus Group Consent

INFORMED CONSENT DOCUMENT—**Cuyahoga County (OH) Heroin and Crime Initiative**

You are invited to participate in an evaluation that is funded by the National Institute of Justice and conducted by Dr. Daniel Flannery, Dr. Mark Fleischer and a team of researchers at Case Western Reserve University (CWRU). You are invited because you are a Cuyahoga County medical examiner investigator or administrator, Cleveland Division of Police detective, Cuyahoga County prosecutor or a prosecutor with the US Attorney's Office Northern District of Ohio.

Background—The *Heroin and Crime Initiative* is an evaluation of the Heroin Involved Death Investigations (HIDI) protocol used to investigate fatal drug overdoses by the Cuyahoga County Medical Examiner's Office and the Cleveland Division of Police. We seek to investigate and identify the strengths and limitations of the HIDI protocol in its dynamic implementation within and among agencies cited above, and the ways in which its use impacts prosecutions of drug traffickers.

Procedures—We are interested in interviewing you to learn about your experience with the utilization and implementation of the HIDI protocol. Interviews will take between 15-20 minutes and be audio-recorded to accurately capture your responses. If you do not wish to be audio-recorded, then the audio recorder will not be used and the session will not be audio recorded. We may contact you for a follow-up interview before the end of the evaluation period.

Risks and Benefits/Compensation—There are no foreseeable risks or benefits to you, nor will you be compensated, for taking part in this interview.

Confidentiality—Interview records comprised of your recorded interview and notes taken by the researchers will be kept private and secured at CWRU by the evaluation team, but the team cannot guarantee that others in any small-group interviews will do the same. We ask participants to treat what is shared in any group interview setting as confidential. In any publications or professional conferences, we will not include information that identifies participants. Only the evaluation team, CWRU's review board for the protection of human participants and the Office of Human Research Protections will have access to evaluation records. All audio-recordings and related transcripts will be destroyed within three years of completion of the evaluation.

Voluntary Nature of Participation—Your participation is completely voluntary. If you choose not to participate, this will not affect your current or future relations with CWRU or the Cuyahoga County Medical Examiner's Office, Cleveland Division of Police, Cuyahoga County Prosecutor's Office or US Attorney's Office of the Northern District of Ohio. If you chose to participate, you can choose to stop participating for any reason at any time.

Contacts and Questions—You may ask any questions you have now. If you have any additional questions, concerns or complaints about this evaluation, you may contact Dr. Flannery at (216) 368-0109 or by email at djf6@case.edu. If Dr. Flannery cannot be reached, or if you would like to talk to someone other than him about any human subjects issues, please contact CWRU's Institutional Review Board at (216) 368-4514 or write: Institutional Review Board of Case Western Reserve University at 10900 Euclid Ave., Cleveland, OH 44106-7230.

Continued on reverse…

Consent—Your participation certifies that you are at least 18 years old, you have freely decided to participate in this audio-recorded interview, unless indicated at the time of consent, and you understand that you are not giving up any of your legal rights.

HCI Interview/Focus Group Question Guide

Individual/Small-Group Interviews Guides

Interview participants may be asked questions from the list below. Participants will not be asked every question, but in general, any question asked is included in this list. Questions chosen for a particular interview will depend on the participant's professional activities.

- Can you tell us the function of the HIDI protocol?
- Have you been involved in investigations that used the HIDI protocol? How many investigations do you know of that used the HIDI protocol? Have you been trained on the use of HIDI?
- What are HIDI's strengths? Weaknesses? Do you recall an incident when you used HIDI? In what ways did HIDI improve your work?
- What do you do when you get a HIDI medical alert?
- Have you been involved in HIDI investigations? Have you had to collect evidence? What type of evidence? Did you have to preserve it? How did you preserve it? Crime scenes are complex—how could you make HIDI investigations more effective?
- How many crime scenes have you been involved in that used HIDI? Does HIDI meet the needs of agencies collaborating in HIDI? What are its strengths? Weaknesses?
- Can you think of ways that might improve HIDI? HIDI requires collaborations among agencies. What makes that collaboration work smoothly? What are common problems in using HIDI?
- How often do your criminal investigations require collaboration among agencies? Can you think of particular ways that HIDI collaborations could be made smoother? Do you think other jurisdictions would be interested in HIDI for drug crime scenes?
- Who makes the decision of whether jurisdiction will lie with state or federal court? What are the factors guiding that decision?
- Other than general issues of jurisdiction, are there other factors that impact your decision whether to prosecute a case at the state or federal level? If so, can you give some examples?
- What are the most important criteria determining completeness and admissibility of evidence?
- What factors are used to determine if you will prosecute a trafficker for opioid-related death?
- How do you prepare for these types of cases? (Are there any differences in how you prosecute these types of cases?)

- Are former cases reviewed to determine what led some cases to successful prosecution while others were unsuccessful? If so, how does this information affect future prosecutions? Can you give some examples?
- What kind of data (qualitative, quantitative) and data collection processes (interviews, records, and surveys) are most important to your work?
- What kind of database management systems do you use?
- Do you share data with other agencies? Name the agencies you share data on a regular basis?
- Has the growing opioid epidemic affected your work? What are the most significant ways in which the opioid epidemic has affected your work?
- Has the growing availability of Narcan (naloxone) affected your work? What are the most significant changes in your work been influenced by Narcan?
- Over the course of a work week, estimate the number of shifts you had to administer Narcan?
- What is the highest number of times you've had to administer Narcan on a 24-hour shift?
- Over the course of your work as an EMS provider, has confronting opioid overdose cases, non-fatal and fatal, affected your attitude toward users of opioids?
- In providing medical care to opioid overdoes patients, have law enforcement officers been an added burden on your provision of care?
- What have been the most significant effects of the opioid epidemic on your work?
- In what ways has an increase in opioid overdoses increased ED's medical staff stress?
- What special training has ED medical staff received as a result of an increase in ED opioid cases?
- What do you think about administering naloxone to people experiencing an overdose?
- In providing medical care to opioid overdoes patients, have law enforcement officers been an added burden on your provision of care?
- Which HPS (by position title) are most likely to receive opioid-overdoes incident reports?
- Which HPS (by position title) are responsible for collecting incident reports on non-fatal opioid-overdose cases?
- Has fear of violence among HPS increased as a result of increased number of ED opioid cases?
- In what ways has an increase in opioid overdose cases increased the likelihood of violence in the ED?
- Can hospital police or security staff collect information about over-dose patients? Yes? No? Why?

- What barriers are there for working with law enforcement regarding non-fatal overdose cases that come into the emergency department?
- From the HIDI alert recipients, who are the people you've worked with most often on opioid cases in the past 6 months?
- From the HIDI alert recipients, who are the (people in your own agency?) you most trust on opioid investigations?
- From the HIDI alert recipients, who are the people in agencies other than yours whose opinions you trust the most on opioid cases?
- Please list the agencies that impose control over the opioid investigations, from most control to least.

HCI Interview/Focus Group Recruitment Script

RECRUITMENT SCRIPT—**Cuyahoga County (OH) Heroin and Crime Initiative**

The recruitment pool of potential interview participants for the *Cuyahoga County Heroin and Crime Initiative* is comprised of professionals from the:

- Cuyahoga County Medical Examiner's Office;
- Cleveland Division of Police;
- Cuyahoga County Prosecutor's Office; and
- US Attorney's Office Northern District of Ohio

whom have self-identified (if the employer) or been identified by their employer as knowledgeable of the Heroin Involved Death Investigation (HIDI) protocol. All of these employers and many of their agency's staff are already well-known by Drs. Flannery and Fleischer, and members of their research team, because they have a long history of working together on other research projects and/or are co-members of the US Attorney's Heroin and Opioid Task Force. Individuals to be interviewed have been identified as key informants involved in the response, investigation or prosecution to heroin-opiate related involved deaths.

Below find the in-person, telephone or email script that will be used to invite the Cuyahoga County Medical Examiner, the Commander of the Cleveland Division of Police, the Cuyahoga County Prosecutor and the US Attorney Northern District of Ohio to provide the research team with a list of potential interview participants whom the research team, in turn, will contact to recruit participants (these follow-up contacts will utilize Script II further below):

Script I.

Dear/Hello _____,

As you know, CWRU in collaboration with your office, received a grant from the National Institute of Justice to conduct an evaluation of the HIDI protocol and its use in Cuyahoga County.

One of our team's first tasks is to conduct brief, voluntary interviews with several of the stakeholders—which include the administrator and investigators from the Medical Examiner's Office, detectives from the Cleveland Division of Police, and prosecutors from both the Cuyahoga County Prosecutor's Office, and the US Attorney's Office Northern District of Ohio—to learn about the use of the HIDI protocol, as well as the flow of information moving from agency-to-agency in pursuit of successful prosecutions.

I write to ask your assistance in identifying the professionals on your staff whom work most closely with and/or have the greatest in-depth knowledge of the HIDI protocol. Our goal is to interview 12 CCMEO investigators and the one CCMEO Administrator, 6 CDP narcotics detectives and their one Commander, two CCPO prosecutors, and 3 federal prosecutors from the Office of the US Attorney whom interface most with the HIDI protocol. Please note that there are no foreseeable risks or benefits to participants, nor will participants be compensated, for

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IRB APPROVAL DATE: 02/02/2018

taking part in this interview. Interviews will take 15-20 minutes and be conducted individually or in small groups.

If you will please provide me with a list of appropriate potential participants from your agency that may also include you, I will pass it on to my team members for follow-up to obtain your and other potential participants' informed consent and schedule interviews.

If you have any questions or concerns, please do not hesitate to call me.

Thank you for your assistance.

Daniel Flannery, Ph.D.
Principal Investigator, Cuyahoga County (OH) Heroin and Crime Initiative
Dr. Semi J. and Ruth Begun Professor
Director, Begun Center for Violence Prevention, Research and Education
==========

Below find the in-person, telephone or email script that will be used to invite members of the potential pool of participants identified by the Cuyahoga County Medical Examiner, the Commander of the Cleveland Division of Police, the Cuyahoga County Prosecutor and the US Attorney Northern District of Ohio:

Script II.

Dear/Hello _____,

You are invited to participate in an evaluation conducted by Dr. Daniel Flannery, Dr. Mark Fleischer and a team of researchers at Case Western Reserve University (CWRU) because you are a:

- Cuyahoga County medical examiner investigator or administrator;
- Cleveland Division of Police detective;
- Cuyahoga County prosecutor; or a
- prosecutor with the US Attorney's Office Northern District of Ohio.

The *Heroin and Crime Initiative* is an evaluation of the Heroin Involved Death Investigations (HIDI) protocol used to investigate fatal drug overdoses by the Cuyahoga County Medical Examiner's Office and the Cleveland Division of Police. We seek to investigate and identify the strengths and limitations of the HIDI protocol in its dynamic implementation within and among agencies cited above, and the ways in which its use impacts investigations and prosecutions of drug traffickers.

We are interested in talking with you to learn about your experience with the utilization and implementation of the HIDI protocol. Interviews are completely voluntary, will take about 15-20 minutes and be audio-recorded to accurately capture your responses. If you do not wish to be

audio-recorded, then the audio recorder will not be used and the session will not be audio recorded.

If you choose not to participate, this will not affect your current or future work with CWRU or the Cuyahoga County Medical Examiner's Office, Cleveland Division of Police, Cuyahoga County Prosecutor's Office or US Attorney's Office of the Northern District of Ohio. If you agree to participate, you can choose to stop participating for any reason at any time.

There are no foreseeable risks or benefits to you, nor will you be compensated, for taking part in this interview. Interview records comprised of your recorded interview (if applicable) and notes taken by the researchers will be kept private and secured at CWRU by the research team, but we cannot necessarily guarantee that others in any small-group interviews will do the same. If we talk to you as part of a group, we ask participants to treat what is shared in any group interview setting as confidential. In any publications or professional conferences, we will not include information that identifies participants. Only the evaluation team, CWRU's review board for the protection of human participants, regulatory agencies and the National Institute of Justice will have access to evaluation records. All audio-recordings and related transcripts will be destroyed within three years of completion of the evaluation.

Please let me know if you are interested in participating in this evaluation and one of my team members will follow-up with you to schedule the interview and acquire your informed verbal consent.

Thank you for your consideration.

Sincerely,

Mark Fleischer, Ph.D.
Co-Principal Investigator, Cuyahoga County (OH) Heroin and Crime Initiative
Research Professor, Begun Center for Violence Prevention, Research and Education

<end>

 This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.