OFFICE OF THE CHIEF MEDICAL EXAMINER AND DEPARTMENT OF FORENSIC SCIENCES DATA HIGHLIGHTS

Dr. Stephen Raso, Deputy Chief Toxicologist at OCME **Alexandra Evans**, Chemist, DFS

Live Long DC - Opioid Stakeholders Summit

4-19-22



Office of the Chief Medical Examiner

The DC Office of the Chief Medical Examiner (OCME) has investigated a total of 1869 opioid-related fatal overdose from January 2016 to January 31, 2022.



Demographic Figures

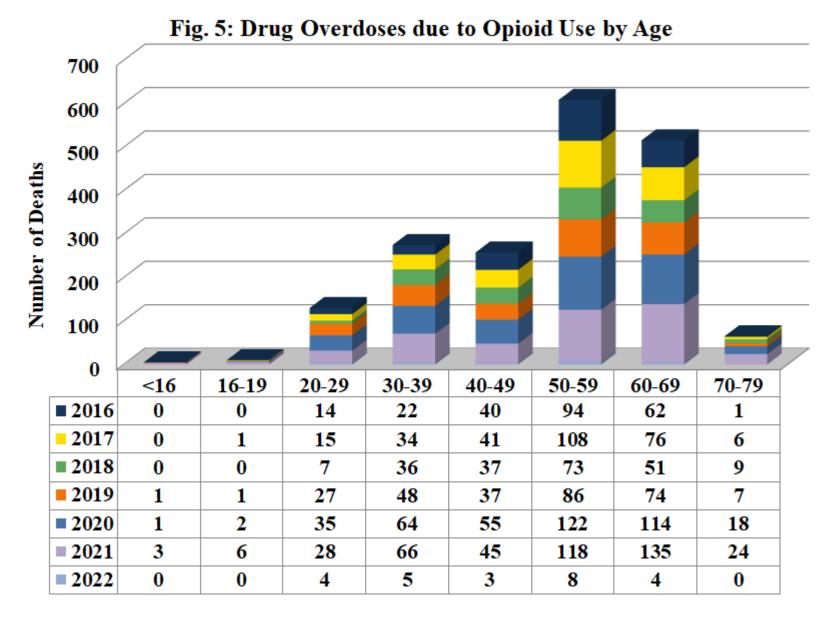




Figure 7: Percentage of Drug Overdoses due to Opioid Use by Gender and Year

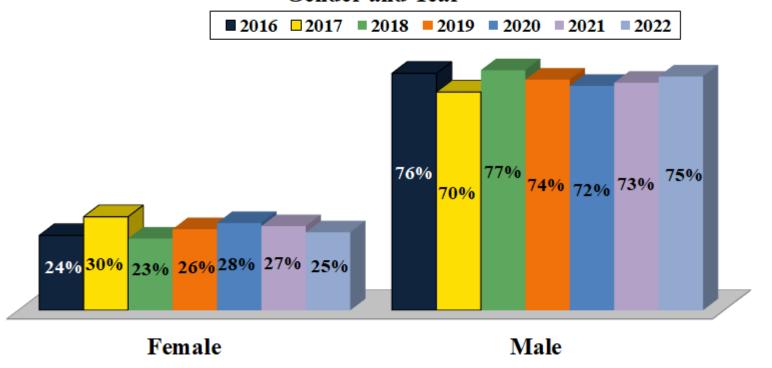
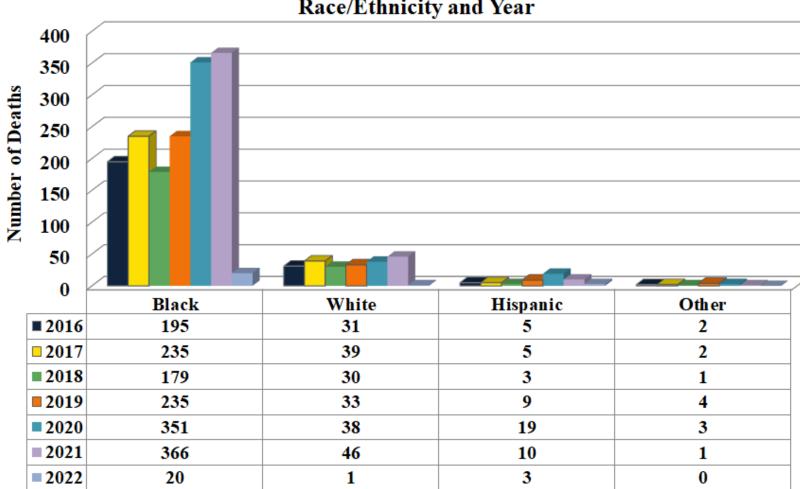
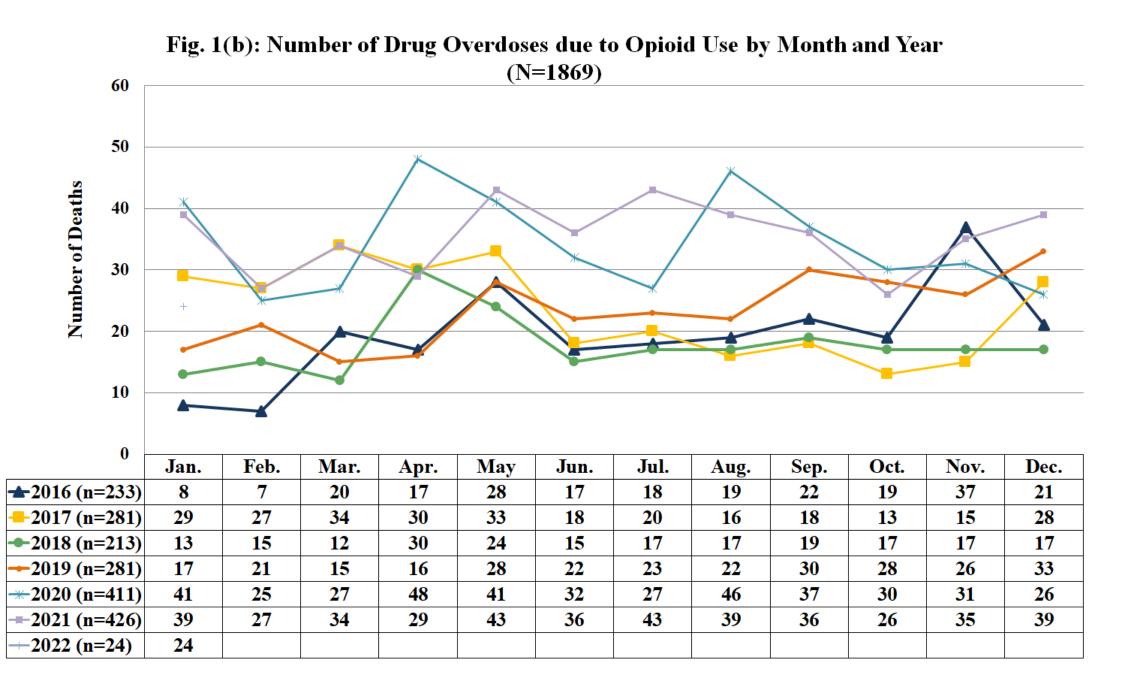


Fig. 6: Number of Drug Overdoses due to Opioid Use by Race/Ethnicity and Year



AVERAGE NUMBER OF MONTHLY FATAL OVERDOSES DUE TO OPIOID USE

2017: **23** 2018: **18** 2019: **23** 2020: **34** *2021*: **36**



TRENDS IN PRESCRIPTION OPIOIDS IN FATAL OVERDOSES

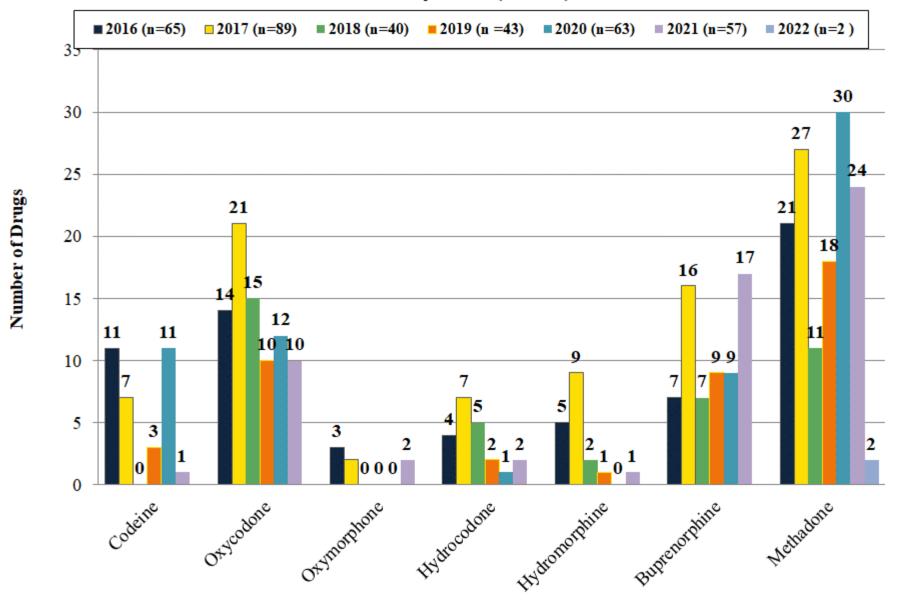
The number of prescription opioids found in opioid related overdoses has varied over the years of data collection, however methadone and oxycodone are currently the most prevalent prescription opioids identified.





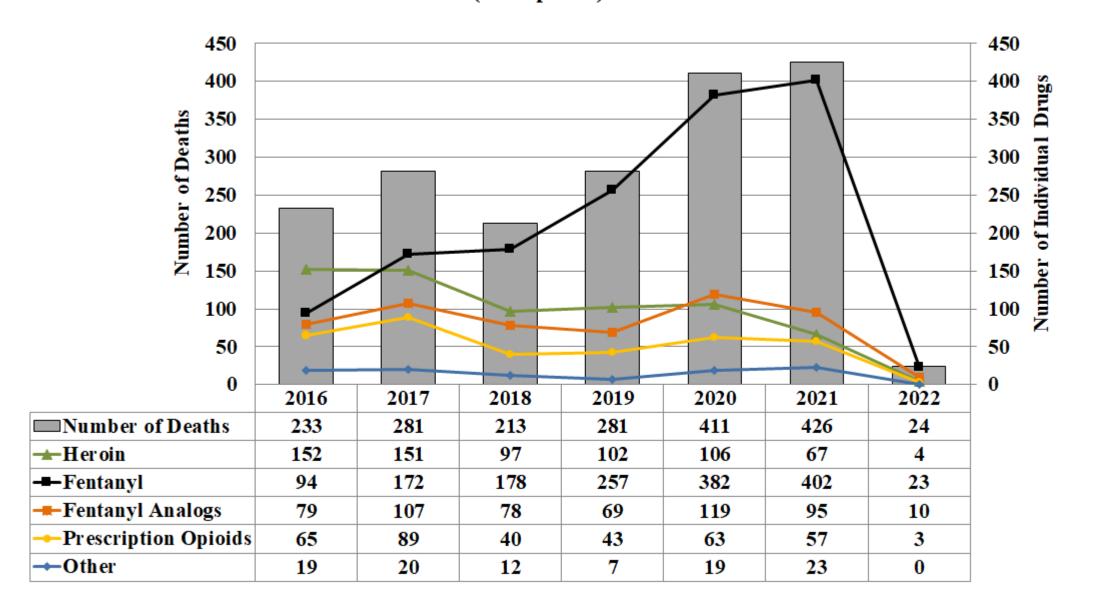


Fig. 4: Number of Prescription Opioids Contributing to Drug Overdoses by Year (n=359)



TRENDS IN THE NUMBERS OF OPIOID DRUGS CONTRIBUTING TO FATAL OVERDOSES

Fig. 2: Total Number of Opioid Drugs Contributing to Drug Overdoses by Year (All Opioids)

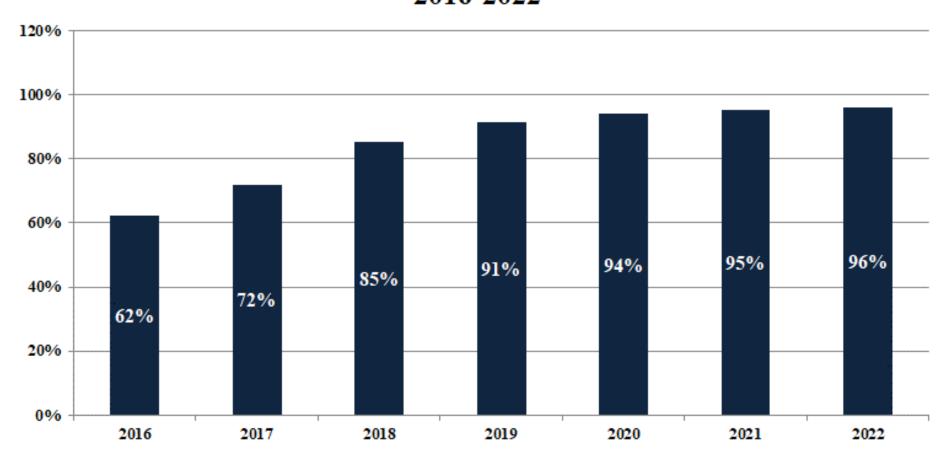


Overall, the most prevalent opioid drugs identified were **fentanyl** followed by heroin and **fentanyl analogs**.

Fentanyl	<u>2020</u> 94%	<u>2021</u> 94%
Heroin	26%	16%
FA's	29%	22%



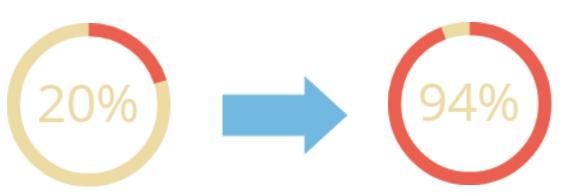
Figure 3: Percent of Overdose Deaths Involving Fentanyl 2016-2022



66 cases in 2021 contained Fluorofentanyl in the cause of death

The percentage of cases containing fentanyl or a fentanyl analog:

2015: 20% > 2020: 94%



In 2021, fentanyl has been involved in 95% of the fatal overdoses.

Trends in Cocaine and Opioid Fatal Overdoses

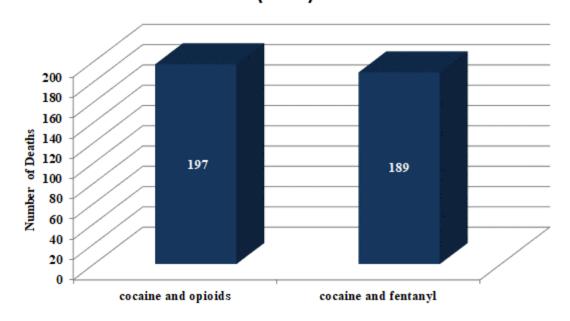
Since 2018: - opioid-only fatal overdose have steadily increased

- cocaine-only fatal overdoses have decreased
- cocaine and opioid overdoses have remained steady but have significant increased in Black Males

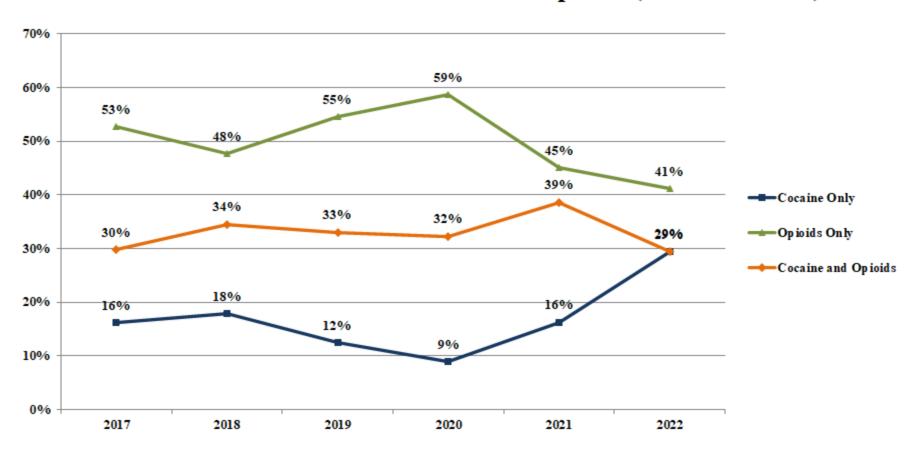
and Black Females

Breakdown of Cocaine and Opioid Overdoses by Year, Race and Gender 2017- Jan						
		2022				
	2017	2018	2019	2020	2021	2022
Black						
Male	55	61	62	75	125	
Female	32	17	31	50	55	2
White						
Male	5	6	4	10	10	(
Female	5	6	4	2	3	(
Other						
Male	2	1	4	8	4	1
Female	2	0	1	1	0	(

Breakdown of Opioid and Cocaine Involved Deaths (2021)



Percent of Deaths due to Cocaine and Opioids (2017-Jan 2022)



Trends in Location of Fatal Opioid Overdoses (2019)

- 76% of 2019 fatal opioid overdoses took place within a residence.
- 71% of those cases were within the decedent's household.

Location of Injury of Fatal Opioid Overdoses (2019)			
Residence	76%		
Decedents residence	71%		
Family members residence	6%		
Friend/aquantience residence	15%		
Hospital/Nursing Home	1%		
Hotel/Motel	0%		
Unspecified residence	2%		
Shelter/Halfway house	3%		
Vacant residence	1%		
Non-Residence*	23%		
Unknown	1%		
Unknown	170		

^{*} non-residence includes street, bus/train stop, car, outside, park, alley/rear of buildings, place of work, restaurant/shop, homeless camp

Location of Injury of Fatal Opioid Overdoses (2019)			
Residence	213		
Decedents residence	152		
Family members residence	13		
Friend/acquaintance residence	31		
Hospital/Nursing Home	2		
Hotel/Motel	0		
Unspecified residence	5		
Shelter/Halfway house	7		
Vacant residence	3		
Non-Residence*	66		
Unknown	2		

^{*} non-residence includes street, bus/train stop, car, outside, park, alley/rear of buildings, place of work, restaurant/shop, homeless camp

Trends in Location of Fatal Opioid Overdoses (2020)

78% of 2020 fatal opioid overdoses took place within a residence.

67% of those cases were within the decedent's household.

This may be driven by the pandemic and lock-down protocols, but also impacts the affect of the push for Naloxone availability to counter opioid abuse.

Location of Injury of Fatal Opioid Overdoses (Jan-Dec 2020)			
Residence	320		
Decedents residence	214		
Family members residence	10		
Friend/acquaintance residence	52		
Hospital/Nursing Home	2		
Hotel/Motel	7		
Unspecified residence	5		
Shelter/Halfway house	20		
Vacant residence	10		
Non-Residence*	86		
Unknown	5		
* non-residence includes street bus stop outside park alley/rear			

^{*} non-residence includes street, bus stop, outside, park, alley/rear of buildings, place of work, restaurant/shop

Location of Injury of Fatal Opioid Overdoses			
(Jan-Dec 2020)			
(Jani-Dec 2020)			
Residence	78%		
Decedents residence	67%		
Family members residence	3%		
Friend/aquantience residence	16%		
Hospital/Nursing Home	1%		
Hotel/Motel	2%		
Unspecified residence	2%		
Shelter/Halfway house	6%		
Vacant residence	3%		
Non-Residence*	21%		
Unknown	1%		
* non-residence includes street, bus stop, outside, park, alley/rear			

^{*} non-residence includes street, bus stop, outside, park, alley/res of buildings, place of work, restaurant/shop

Trends in Location of Fatal Opioid Overdoses (2021)

- 82% of 2021 fatal opioid overdoses took place within a residence.
- 73% of those cases were within the decedent's household.

Location of Injury of Fatal Opioid Overdoses (2021)			
Residence	348		
Decedents residence	251		
Family members residence	7		
Friend/acquaintance residence	39		
Hospital/Nursing Home	1		
Hotel/Motel	16		
Unspecified residence	13		
Shelter/Halfway house	15		
Vacant residence	6		
Non-Residence*	71		
Unknown	7		
* non-residence includes street, bus stop, outside, park,			

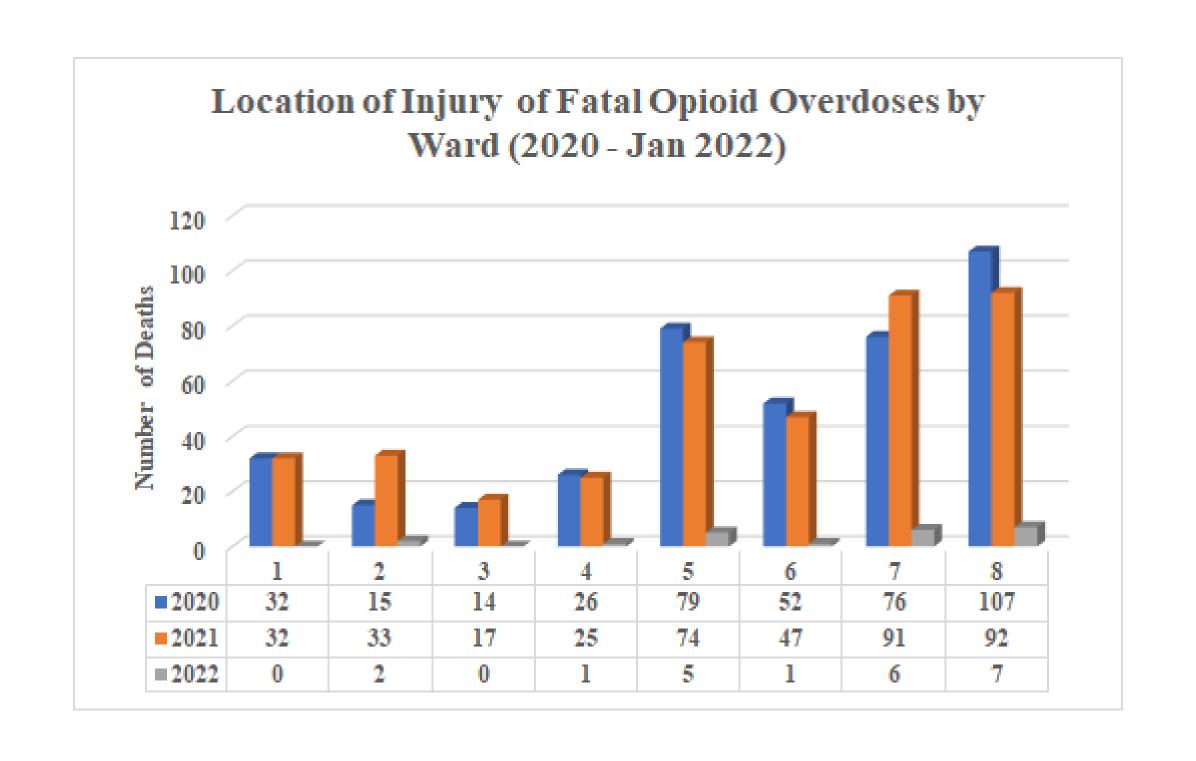
alley/rear of buildings, place of work, restaurant/shop, jail

Location of Injury of Fatal Opioid Overdoses (2021)			
Residence	82%		

Residence	82%
Decedents residence	72%
Family members residence	2%
Friend/aquantience residence	11%
Hospital/Nursing Home	0%
Hotel/Motel	5%
Unspecified residence	4%
Shelter/Halfway house	4%
Vacant residence	2%
Non-Residence*	17%
Unknown	2%

^{*} non-residence includes street, bus stop, outside, park, alley/rear of buildings, place of work, restaurant/shop,jail

Trends in Location of Fatal Opioid Overdoses by Ward (2020-Jan 2022)



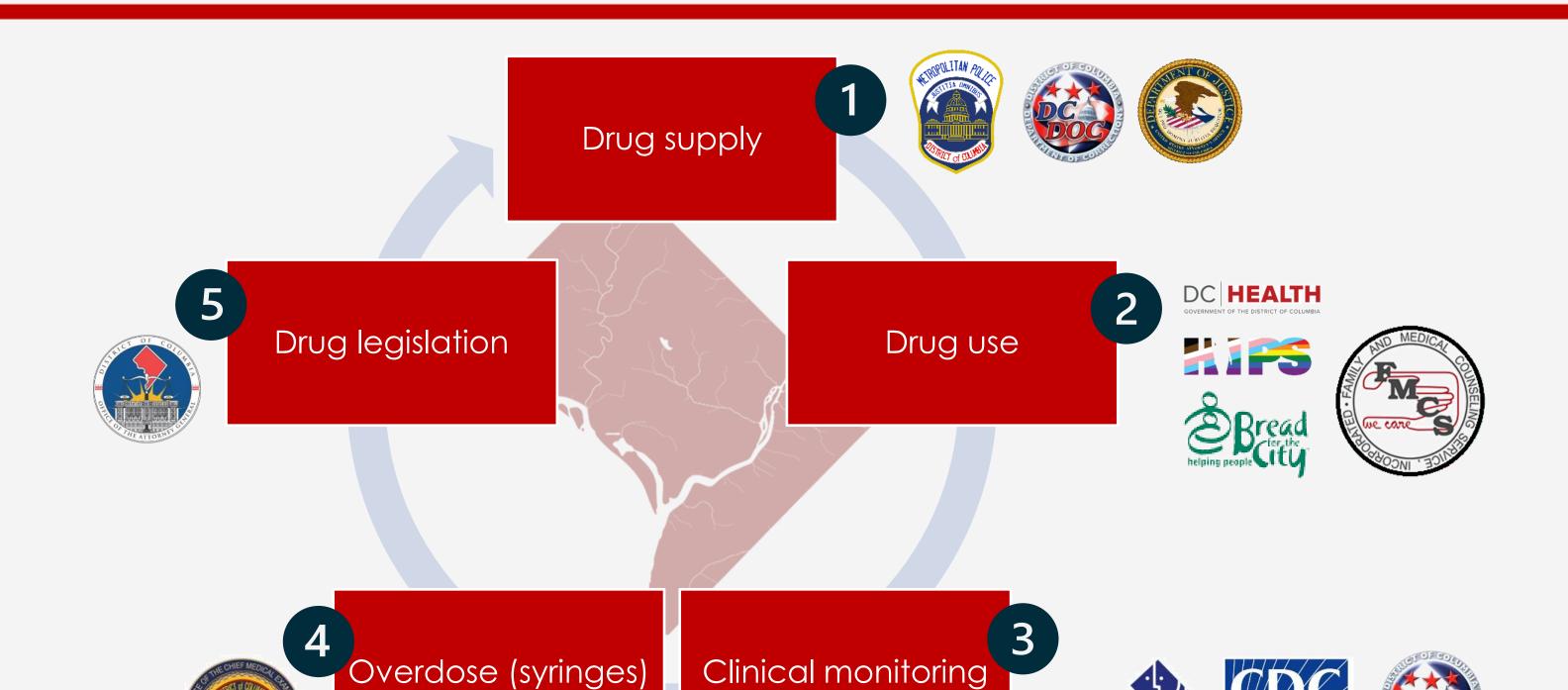
D.C. DEPARTMENT OF FORENSIC SCIENCES

APRIL 2022

UPDATE ON OPIOIDS IN THE DISTRICT

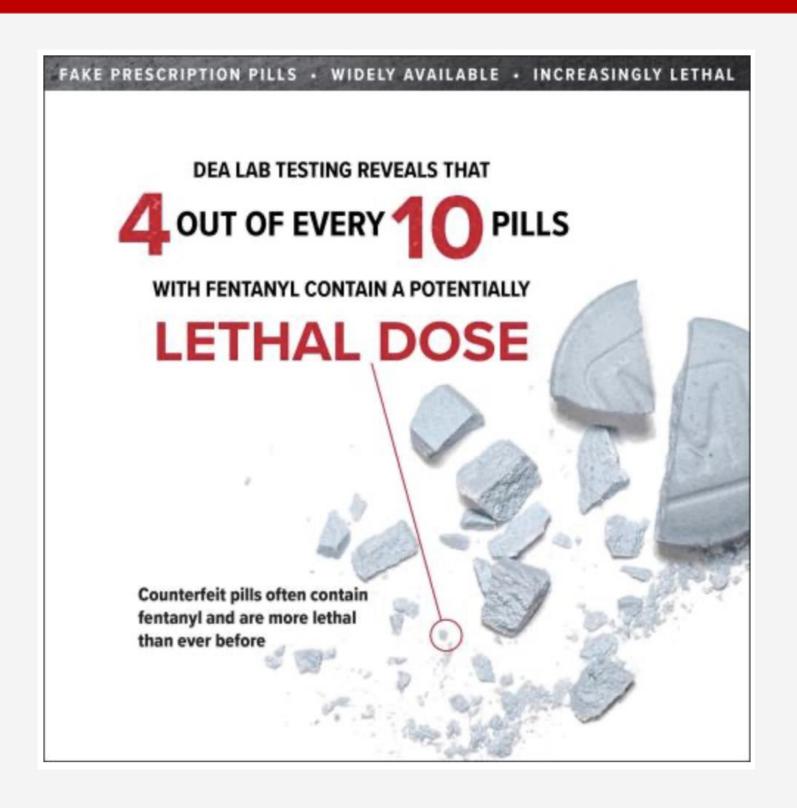


DFS DRUG SURVEILLANCE PROGRAM





OPIOID SURVEILLANCE - COUNTERFEIT PILLS

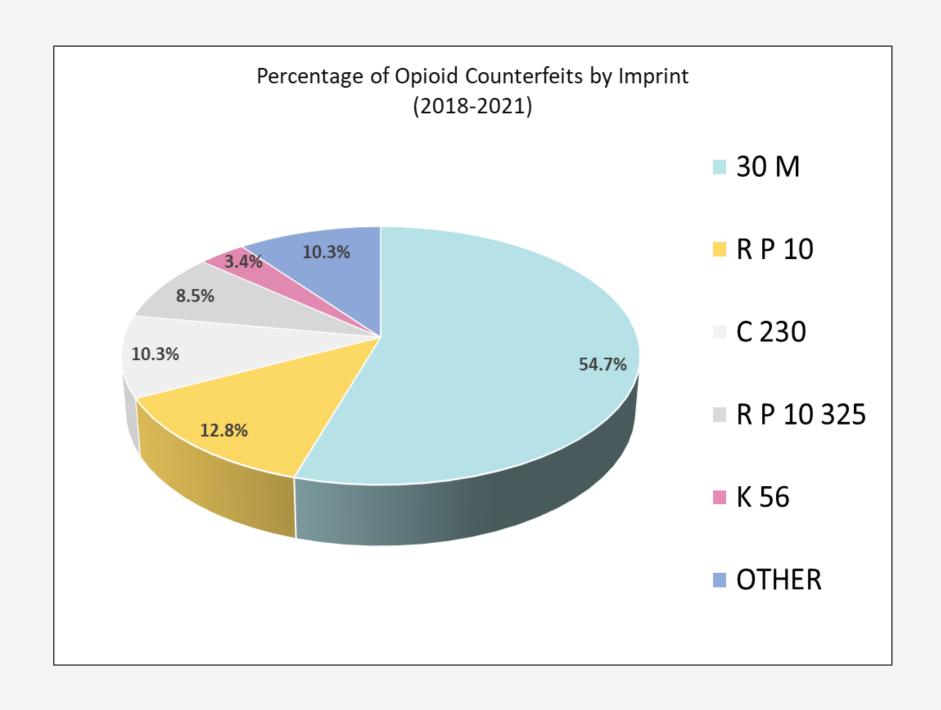


 2021 - DEA issued warning of increasing amounts of fake prescription pills were responsible for a spike in overdoses in unsuspecting users

www.dea.gov/onepill



OPIOID SURVEILLANCE – COUNTERFEIT PILLS



Counterfeit Oxycodone pills detected in our laboratory:

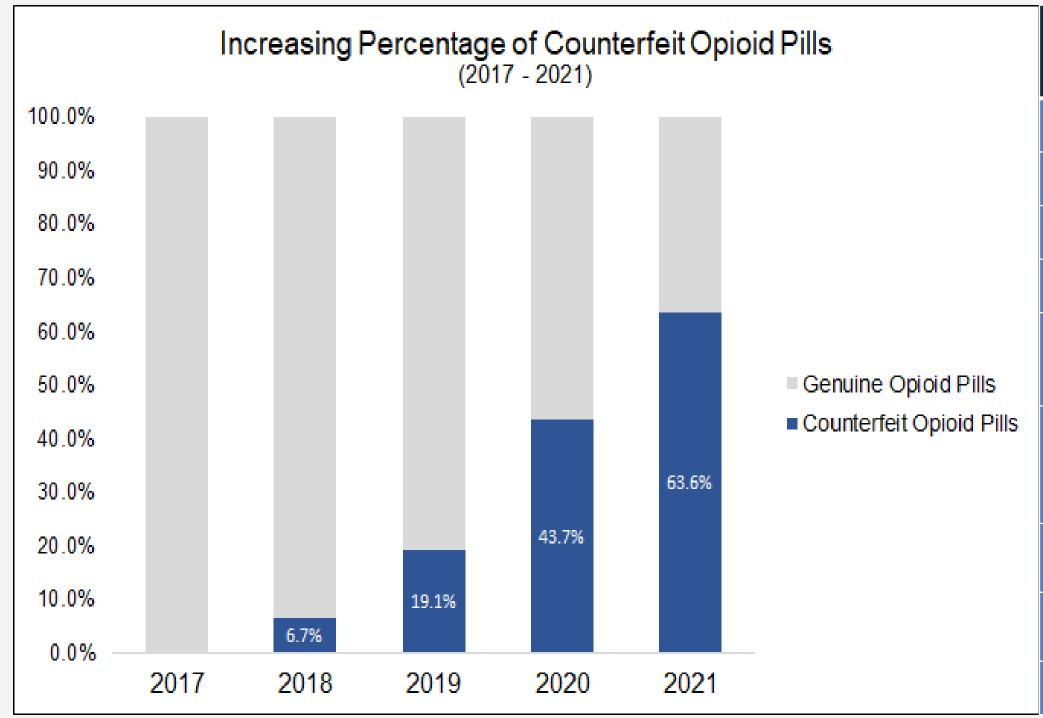








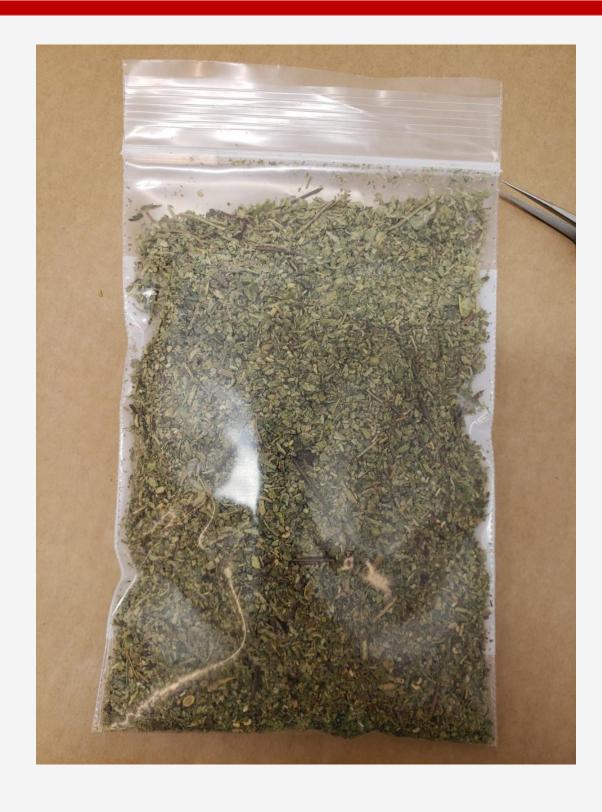
OPIOID SURVEILLANCE – COUNTERFEIT PILLS

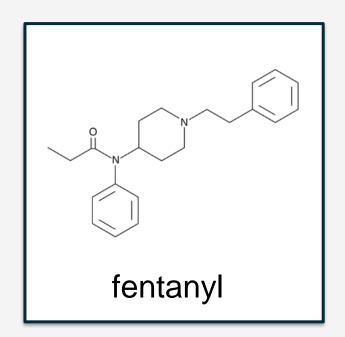


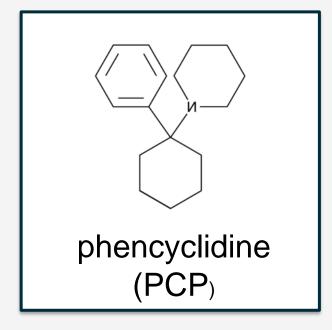
Psychoactive Compound	Percentage of All Counterfeit Opioid Pills
Fentanyl	72.6%
4-ANPP	18.8%
Tramadol	3.4%
Etizolam	3.4%
<i>Para</i> -fluorofentanyl	1.7%
Despropionyl para- fluorofentanyl	1.7%
Phenethyl 4-ANPP	1.7%
Acetyl Fentanyl	0.9%
Codeine	0.9%



OPIOID SURVEILLANCE - FENTANYL LACED PLANT MATERIAL







 Fentanyl and PCP laced plantlike material discovered March 2022

- Associated Dangers:
 - Toxic pyrolytic products
 - Fentanyl inhalation
 - Fentanyl + PCP combination
 - Made to look like synthetic cannabinoids

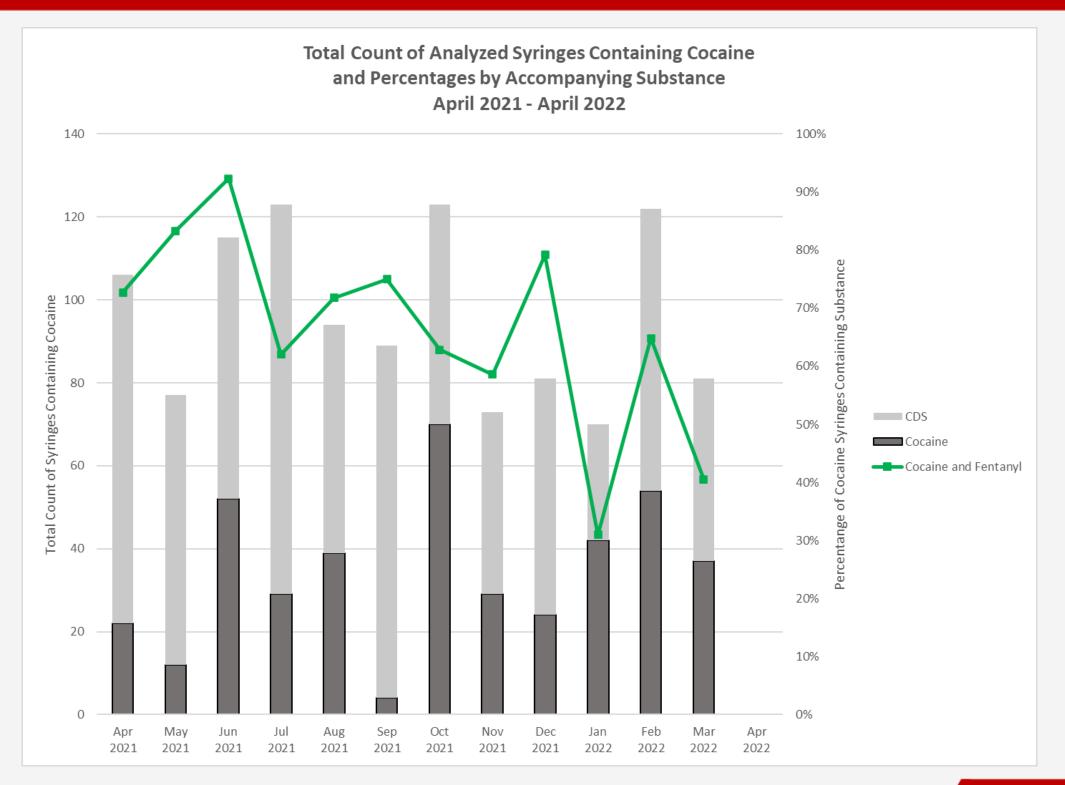
DC SYRINGE SURVEILLANCE PROGRAM – 2585 Syringes

CATEGORY	TOTAL SYRINGES	% of CDS Syringes
CONTROLLED DANGEROUS SUBSTANCE (CDS)	1707 (66%)	_
OPIOIDS	1357	79.4%
FENTANYL and/or FENTANYL ANALOGS	1088	63.7%
COCAINE	518	30.3%
AMPHETAMINE TYPE STIMULANTS (ATS)	301	17.6%
BENZODIAZEPINES	33	2.0%
HALLUCINOGENS	13	0.8%





SYRINGE EXCHANGE - COCAINE



- Cocaine confirmed in 518 syringes
 30.3% of CDS Syringes
- Cocaine + Fentanyl combination is in 63.3% of cocaine-containing syringes
- Stimulant + Depressant combination increases the likelihood of an overdose.



CFSRE Collaboration

- Collaborated with Center for Forensic Science Research & Education (CFSRE) on their Survey of Toxic Adulterants in 2021
- One of nine states, we donated 91 samples
- Washington D.C. had the highest amount of toxic adulterants present in each sample on average (22 in one sample)
- Toxic adulterants include (but not limited to): xylazine, phenacetin, levamisole, aminopyrine, diphenhydramine, lidocaine, quinine, strychnine, adrafinil etc.

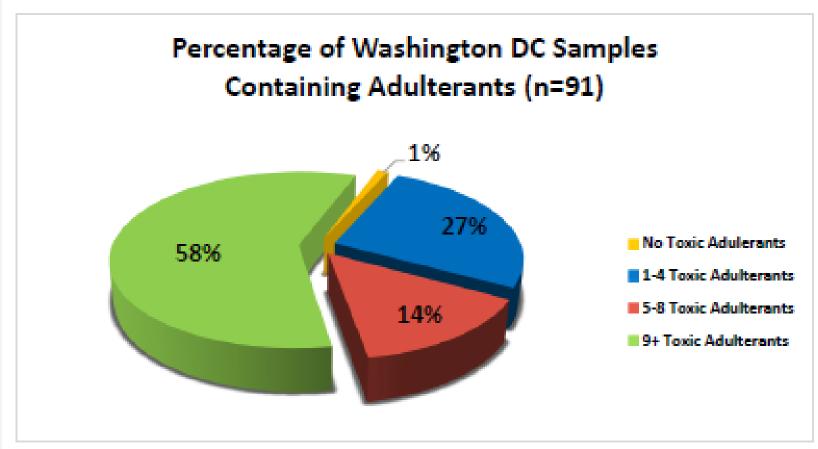


Figure 13. Percentage of Washington DC samples (n=91) containing 1 – 4, 5 – 8 and 9 or more adulterants.

STIMULANT OVERDOSES

Stimulants:

 Methamphetamine, amphetamines (Ritalin/Adderall), MDMA, cocaine, synthetic cathinones, some nootropics (i.e., adrafinil, modafinil)

Signs of Stimulant Overdose:

- Rigid jerking arms/legs
- Chest pains/fast heartbeat
- Sweating or severe headache
- Anxiety, paranoia, agitation
- In-and-out of consciousness

Overdose Reversal:

No antidote for stimulant overdose, but naloxone can still help if a person has taken a mix of drugs.

Photos of stimulants taken from our laboratory:









DC PUBLIC HEALTH LABORATORY

THANK YOU!



