Montgomery County Poisoning Death Review, 2016: Quarter II Updated September 29, 2016

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The Poisoning Death Review (PDR) is conducted by the WSU Boonshoft School of Medicine Center for Interventions, Treatment & Addictions Research (CITAR), in collaboration with the Montgomery County Coroner's Office, under contract with Public Health - Dayton & Montgomery County.

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Highlights of Quarter II Findings

<u>Introduction</u>: This 2016 Quarter II Report presents the Poison Death Review data on unintentional drug overdose deaths based on reports provided by the Montgomery County Coroner's office. One hundred and eighty-one overdose deaths that occurred in Montgomery County between January through June, 2016, were analyzed for this report.

Methods: The attached tables provide data on: 1) Demographics; 2) Health; 3) History of Substance Abuse; 4) Location of Death; and 5) Toxicology. The toxicology tables indicate mentions of drugs found in decedents' bodies as identified by the Coroner's office. Drug Mentions: A drug "mention" means that a specific drug was found in a bodily system or fluid of a decedent, not that the drug was necessarily the sole cause of death. The presence of more than one drug can result in more than one mention from a single decedent. Limitations: The highlights below describe comparisons of Quarter II 2016 findings with findings from all of 2015. The comparison of percentages are very preliminary indicators of trends in 2016. Importantly, the number of drug overdose deaths in Quarter II is likely higher than the total reported here. The reason for this is because transmission of data from the Montgomery Coroner's Office to the Center for Interventions, Treatment, and Addictions Research for data analyses is sometimes lagged.

Highlights

- There was a large increase in the number of unintentional drug overdose deaths for the first half of 2016, compared to 2015. In the first half of 2016, 181 drug overdose deaths were available for analysis to date, compared to 100 overdose deaths in the first half of 2015, an 81% increase.
- In 2016, 96 unintentional drug overdose deaths were reported in Quarter I, compared to 37 in Quarter I in 2015, a 159% increase. In Quarter II, 2016, 85 overdose death datasets were available for analysis to date, compared to 63 in Quarter II 2015, a 35% increase.
- In 2016, 34% of all decedents were between the ages of 25 34 years, compared to 26% in 2015, an increase of 31%.
- Montgomery County Residents: Of the 181 unintentional drug overdose deaths in the first half of 2016, 159 were Montgomery County residents.
- Mentions of illicit fentanyl (non-prescription fentanyl) continued to increase from 41% in 2015 to 71% in the first half of 2016, a 73% increase.
- Mentions of heroin indicate a decreasing trend from 45% in 2015, compared to 23% in the first half of 2016, a 49% decrease.

- Any prescription opioid mentions indicate a decreasing trend from 31% in 2015, compared to 18% in the first half of 2016, a 42% decrease.
- Any benzodiazepine mentions indicate a decrease from 43% in 2015, compared to 31% in the first half of 2016.
- The trend in drug overdose deaths with Illicit fentanyl mentions, but no other central nervous system depressant (CNS) mentions, is increasing. In 2015, 13% of overdose deaths had mentions of illicit fentanyl and no other CNS depressants, compared to 28% in the first half of 2016, a 115% increase.
- The trend in overdose deaths with illicit fentanyl mentions, plus no heroin mentions, is also increasing. In 2015 31% of overdose deaths had illicit fentanyl mentions, plus no heroin mentions, compared to 59% in the first half of 2016.
- The data continue to indicate the increasing impact of illicit fentanyl on the community. Decedent demographics, histories of substance abuse, locations of death and toxicology reports reinforce Montgomery County's county-wide collective impact approach to stabilizing the continuing upward trend in unintentional drug overdose deaths. That approach includes reducing the supply of illegal opioids, preventing drug use before it begins, education and outreach, promoting best practice prescribing guidelines for pain, expanding Naloxone and syringe exchange and expanding pathways to treatment and recovery.

POISONING DEATH REVIEW SUMMARY REPORT, 2016. All DEATHS												
POISONING DEATH F	REVIEW SUMMAI	RY REP	ORT,	2016. <i>i</i>	All DEA	THS						
	Total Cases			2015	2014	2013	2012	2011	2010			
	Jan 1- Jun 29			Cases	Cases:	Cases:	Cases:	Cases:	Cases:			
	(estimate)	181		: 259	264	226	162	130	127			
DEMOGRAPHICS												
					1		1					
Characteristic												
				2015	2014	2013	2012	2011	2010			
	Category	Freq	%	%	%	%	%	%	%			
Average Age			39.5	40.7	41.2	42.5	42.8	42.1	40.0			
Age Group	<15 years	0	0%	0%	0%	0%	0%	0%	0%			
	15-24 years	11	6%	7%	6%	4%	4%	5%	14%			
	25-34 years	61	34%	26%	28%	26%	28%	22%	22%			
	35-44 years	47	26%	29%	26%	28%	19%	26%	28%			
	45-54 years	36	20%	22%	23%	27%	33%	32%	18%			
	55-64 years	23	13%	14%	14%	13%	14%	14%	16%			
	65-74 years	3	2%	2%	2%	3%	2%	1%	2%			
	75+ years	0	0%	0%	0%	0%	0%	0%	0%			
Gender	Male	121	67%	68%	62%	67%	60%	59%	57%			
	Female	60	33%	32%	38%	33%	40%	41%	43%			
Race	White	149	82%	86%	89%	87%	85%	87%	90%			
	Black	28	16%	14%	11%	11%	14%	13%	10%			
	Other	4	2%	1%	0%	2%	1%	0%	0%			
Education	<high school<="" td=""><td>51</td><td>28%</td><td>26%</td><td>23%</td><td>29%</td><td>27%</td><td>28%</td><td>20%</td></high>	51	28%	26%	23%	29%	27%	28%	20%			
	HS graduate	116	64%	67%	73%	65%	69%	69%	76%			
	College graduate	12	7%	6%	3%	4%	2%	2%	2%			
	Post-graduate	0	0%	0%	0%	1%	1%	1%	1%			
	Unknown	2	1%	1%	0%	2%	1%	0%	0%			
Marital Status	Single	103	58%	57%	44%	43%	47%	39%	41%			
	Married	22	12%	20%	21%	21%	15%	31%	29%			
	Divorced	48	27%	25%	31%	32%	30%	25%	26%			
	Separated	1	1%	1%	0%	2%	0%	3%	2%			
	Widowed	7	4%	2%	2%	3%	7%	2%	2%			
	Unknown	0	0%	1%	0%	0%	0%	0%	0%			
Military	Ever in Military	15	8%	7%	8%	7%	9%	4%	13%			
Residence	Montgomery Co	159	88%	88%	90%	87%	90%	91%	92%			
HEALTH												
Characteristic												
				2015	2014	2013	2012	2011	2010			
		Freq	%	%	%	%	%	%	%			
Physical Disability/Illness		122	67%	66%	68%	78%	81%	74%	79%			
•												
Heart Disease		79	44%	42%	52%	58%	58%	56%	65%			

HISTORY OF SUBSTANCE ABUSE												
	Total Cases	181		2015 Cases : 259	2014 Cases: 264	2013 Cases: 226	2012 Cases: 162	2011 Cases: 130	2010 Cases: 127			
Substance Abuse												
		Freq	%	2015 %	2014 %	2013 %	2012 %	2011 %	2010 %			
Any history		171	95%	89%	76%	78%	78%	82%	75%			
DEATH INVESTIGATION												
Characteristic	Category											
				2015	2014	2013	2012	2011	2010			
		Freq	%	%	%	%	%	%	%			
Location of death	Home	97	54%	57%	55%	58%	50%	53%	68%			
	Relative's home	3	2%	2%	1%	1%	1%	0%	2%			
	Friend's home	16	9%	8%	12%	15%	11%	16%	14%			
	Hospital	34	19%	20%	22%	15%	30%	22%	9%			
	Drug Trt facility	0	0%	<1%	0%	0%	0%	0%	0%			
	Public area	0	0%	1%	3%	4%	2%	2%	2%			
	Other	31	17%	11%	6%	8%	4%	6%	4%			

TOXICOLOGY REPORT															
This section of the summary includes															
all substances found in the							4								
decedent's body or bodily fluids.	Total Cases		2015		2014		2013		2012		2011		20	10	
There may be multiple drug mentions for each case.	2016	181		Cases: 259		Cases: 264 Cases: 22					Cases: 130		Cases		
Characteristic	Category	Freq	%	Freq			%			Cases: 162 Freq %		Freq %		Freq %	
end determine	Alcohol	37	20%	67	26%	Freq 77	29%	63	28%	46	28%	30	23%	29	23%
	Cocaine	69	38%	92	36%	83	31%	59	26%	49	30%	53	41%	38	30%
	Methamphetamine	19	10%	14	5%	11	4%	6	3%	4	2%	2	2%	1	1%
	Heroin	42	23%	117	45%	127	48%	132	58%	95	59%	46	35%	39	31%
	Illicit Fentanyl	128	71%	107	41%	107	41%	20	9%	0	0%	0	0%	0	0%
Prescription Opioids	Any	32	18%	79	31%	98	37%	100	44%	75	46%	81	62%	94	74%
	Oxycodone	14	8%	22	9%	28	11%	24	11%	25	15%	25	19%	29	23%
	Hydrocodone	9	5%	20	8%	43	16%	22	10%	15	9%	19	15%	31	24%
	Methadone	3	2%	11	4%	13	5%	31	14%	20	12%	43	33%	41	32%
	Fentanyl	0	0%	3	1%	7	3%	14	6%	9	6%	8	6%	9	7%
	Tramadol	2	1%	5	2%	5	2%	15	7%	9	6%	5	4%	8	6%
	Hydromorphone	1	1%	5	2%	4	2%	1	0%	0	0%	0	0%	1	1%
	Morphine	8	4%	30	12%	28	11%	16	7%	10	6%	10	8%	11	9%
Anti-Depressants	Any	13	7%	16	6%	41	16%	61	27%	88	54%	41	32%	48	38%
Sedatives (Including Benzos)	Any	61	34%	112	43%	146	55%	133	59%	88	54%	96	74%	96	76%
Benzodiazepines	Any	56	31%	111	43%	134	51%	118	52%	70	43%	84	65%	87	69%
Any Rx Opioid + Any Benzo		19	10%	48	19%	61	23%	67	30%	43	27%	64	49%	73	57%
Two or more CNS Depressants		102	56%	164	63%	181	72%	167	74%	107	66%	107	82%	108	85%
Heroin with No Other CNS															
Depressant		9	5%	30	12%	20	8%	21	9%	30	19%	6	5%	5	4%
Illicit Fentanyl with No Other															
CNS Depressant		51	28%	34	13%	19	8%								
Heroin + Any Rx Opioid		5	3%	15	6%	29	11%	25	11%	22	14%	13	10%	16	13%
Any Opiate (Heroin/Rx															
Opioid/Illicit Fentanyl)		170	94%	239	92%	245	93%	204	90%	148	90%	114	88%	117	92%
Any Rx Opiate + No Heroin		27	15%	64	25%	65	25%	74	33%	50	31%	66	51%	77	61%
Illicit Fentanyl + Heroin		20	11%	24	9%	36	14%								
Illicit Fentanyl + No Heroin		107	59%	81	31%	71	27%								

Methamphetamine + (Heroin or Illicit Fentanyl)		16	9%	11	4%	9	3%								
Cocaine + (Heroin or Illicit															
Fentanyl)		66	36%	77	30%	72	27%								
Heroin + No Illicit Fentanyl		22	12%	90	35%	89	34%								
Any Benzo + Heroin		13	7%	53	20%										
Any Benzo + Illicit Fentanyl		37	20%	39	15%										
Any Benzo + Any Opioid		54	30%	110	42%										
Cocaine + Heroin		18	10%	47	18%										
Cocaine + Illicit Fentanyl		54	30%	38	15%										
Other Prescription	Any	7	4%	3	1%	36	14%	62	27%	49	30%	48	37%	49	39%
Over-The-Counter	Any	13	7%	13	5%	19	7%	32	14%	32	20%	25	19%	26	20%