Montgomery County Poisoning Death Review, 2016: Quarter I Updated July 7, 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 I Findings

Introduction: This 2016 Quarter I Report presents the Poison Death Review data on unintentional drug overdose deaths based on reports provided by the Montgomery County Coroner's office. Eighty-five overdose deaths that occurred in Montgomery County between January through March, 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 I 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 I may be 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 in addition to data analyses is sometimes lagged.

Highlights

- There was a large increase in the number of unintentional drug overdose deaths for the first quarter of 2016 compared to 2015. In 2016, there were 85 deaths compared to 37 deaths in 2015, a 130% increase.

- Montgomery County Residents: Of the 85 drug overdose deaths, 78 were Montgomery County residents. Comparison of all overdose death data in Montgomery County (n=85) and all overdose death data among Montgomery County residents (n=78) suggest no substantial differences.

- Mentions of illicit fentanyl (non-prescription fentanyl) increased from 41% in 2015 to 67% in Quarter I, 2016.

- Mentions of heroin indicate a decreasing trend from 45% in 2015, compared to 31% in Quarter I, 2016.

- Any prescription opioid mentions indicate a decreasing trend from 31% in 2015, compared to 22% in Quarter I, 2016.

- Any benzodiazepine mentions indicate a decreasing trend from 43% in 2015, compared to 32% in Quarter I, 2016.

- Increasing trend in deaths with Illicit fentanyl but no other central nervous system depressant mentions (13% in 2015, compared to 21% in Quarter I, 2016).

- Increasing trend in deaths with illicit fentanyl plus no heroin mentions (31% 2015; 49% Q I, 2016).

- **Overall, the findings indicate an increase in the impact of illicit fentanyl on the community. The findings indicate that increases in naloxone distribution (including increased provision to opioid users), and linkage of opioid dependent drug users with a continuum of care for treatment are urgently needed.**

POISONING DEATH REVIEW SUMMARY REPORT, 2016. Jan 1 – Mar 31

	Total Cases Jan 1- March 31 (estimate)	**N= 85**		2015 Cases : 259	2014 Cases: 264	2013 Cases: 226	2012 Cases: 162	2011 Cases: 130	2010 Cases: 127
DEMOGRAPHICS									
Characteristic									
	Category	**Freq**	%	2015 %	2014 %	2013 %	2012 %	2011 %	2010 %
Average Age			**40.6**	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	4	**5%**	7%	6%	4%	4%	5%	14%
	25-34 years	24	**28%**	26%	28%	26%	28%	22%	22%
	35-44 years	22	**26%**	29%	26%	28%	19%	26%	28%
	45-54 years	23	**27%**	22%	23%	27%	33%	32%	18%
	55-64 years	11	**13%**	14%	14%	13%	14%	14%	16%
	65-74 years	1	**1%**	2%	2%	3%	2%	1%	2%
	75+ years	0	**0%**	0%	0%	0%	0%	0%	0%
Gender	Male	53	**62%**	68%	62%	67%	60%	59%	57%
	Female	32	**38%**	32%	38%	33%	40%	41%	43%
Race	White	70	**82%**	86%	89%	87%	85%	87%	90%
	Black	12	**14%**	14%	11%	11%	14%	13%	10%
	Other	3	**4%**	1%	0%	2%	1%	0%	0%
Education	<High School	27	**32%**	26%	23%	29%	27%	28%	20%
	HS graduate	54	**64%**	67%	73%	65%	69%	69%	76%
	College graduate	4	**5%**	6%	3%	4%	2%	2%	2%
	Post-graduate	0	**0%**	0%	0%	1%	1%	1%	1%
	Unknown	0	**0%**	1%	0%	2%	1%	0%	0%
Marital Status	Single	47	**55%**	51%	44%	43%	47%	39%	41%
	Married	8	**9%**	20%	21%	21%	15%	31%	29%
	Divorced	24	**28%**	25%	31%	32%	30%	25%	26%
	Separated	1	**1%**	1%	0%	2%	0%	3%	2%
	Widowed	5	**6%**	2%	2%	3%	7%	2%	2%
	Unknown	0	**0%**	1%	0%	0%	0%	0%	0%
Military	Ever in Military	6	**7%**	7%	8%	7%	9%	4%	13%
Residence	Montgomery Co	78	**92%**	88%	90%	87%	90%	91%	92%
HEALTH									
Characteristic									
		Freq	%	2015 %	2014 %	2013 %	2012 %	2011 %	2010 %
Physical Disability/Illness		61	**72%**	66%	68%	78%	81%	74%	79%
Heart Disease		34	**40%**	42%	52%	58%	58%	56%	65%

HISTORY OF SUBSTANCE ABUSE									
	Total Cases	**N= 85**		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		80	**94%**	89%	76%	78%	78%	82%	75%

DEATH INVESTIGATION									
Characteristic	**Category**								
		Freq	%	2015 %	2014 %	2013 %	2012 %	2011 %	2010 %
Location of death	Home	48	**56%**	57%	55%	58%	50%	53%	68%
	Relative's home	1	**1%**	2%	1%	1%	1%	0%	2%
	Friend's home	6	**7%**	8%	12%	15%	11%	16%	14%
	Hospital	15	**18%**	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	15	**18%**	11%	6%	8%	4%	6%	4%

TOXICOLOGY REPORT															
This section of the summary includes all substances found in the decedent's body or bodily fluids. There may be multiple drug mentions for each case.	**Total Cases 2016**	**N= 85**		2015 Cases: 259		2014 Cases: 264		2013 Cases: 226		2012 Cases: 162		2011 Cases: 130		2010 Cases: 127	
Characteristic	**Category**	**Freq**	**%**	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
	Alcohol	17	**20%**	67	26%	77	29%	63	28%	46	28%	30	23%	29	23%
	Cocaine	29	**34%**	92	36%	83	31%	59	26%	49	30%	53	41%	38	30%
	Methamphetamine	3	**4%**	14	5%	11	4%	6	3%	4	2%	2	2%	1	1%
	Heroin	26	**31%**	117	45%	127	48%	132	58%	95	59%	46	35%	39	31%
	Illicit Fentanyl	57	**67%**	107	41%	107	41%	20	9%	0	0%	0	0%	0	0%
Prescription Opioids	**Any**	19	**22%**	79	31%	98	37%	100	44%	75	46%	81	62%	94	74%
	Oxycodone	7	**8%**	22	9%	28	11%	24	11%	25	15%	25	19%	29	23%
	Hydrocodone	5	**6%**	20	8%	43	16%	22	10%	15	9%	19	15%	31	24%
	Methadone	2	**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	**2%**	5	2%	5	2%	15	7%	9	6%	5	4%	8	6%
	Hydromorphone	0	**0%**	5	2%	4	2%	1	0%	0	0%	0	0%	1	1%
	Morphine	4	**5%**	30	12%	28	11%	16	7%	10	6%	10	8%	11	9%
Anti-Depressants	**Any**	6	**7%**	16	6%	41	16%	61	27%	88	54%	41	32%	48	38%
Sedatives (Including Benzos)	**Any**	31	**36%**	112	43%	146	55%	133	59%	88	54%	96	74%	96	76%
Benzodiazepines	**Any**	27	**32%**	111	43%	134	51%	118	52%	70	43%	84	65%	87	69%
Any Rx Opioid + Any Benzo		14	**16%**	48	19%	61	23%	67	30%	43	27%	64	49%	73	57%
Two or more CNS Depressants		53	**62%**	164	63%	181	72%	167	74%	107	66%	107	82%	108	85%
Heroin with No Other CNS Depressant		6	**7%**	30	12%	20	8%	21	9%	30	19%	6	5%	5	4%
Illicit Fentanyl with No Other CNS Depressant		18	**21%**	34	13%	19	8%								
Heroin + Any Rx Opioid		5	**6%**	15	6%	29	11%	25	11%	22	14%	13	10%	16	13%
Any Opiate (Heroin/Rx Opioid/Illicit Fentanyl)		78	**92%**	239	92%	245	93%	204	90%	148	90%	114	88%	117	92%
Any Rx Opiate + No Heroin		14	**16%**	64	25%	65	25%	74	33%	50	31%	66	51%	77	61%

Illicit Fentanyl + Heroin		14	**16%**	24	9%	36	14%								
Illicit Fentanyl + No Heroin		42	**49%**	81	31%	71	27%								
Methamphetamine + (Heroin or Illicit Fentanyl)		3	**4%**	11	4%	9	3%								
Cocaine + (Heroin or Illicit Fentanyl)		27	**32%**	77	30%	72	27%								
Heroin + No Illicit Fentanyl		12	**14%**	90	35%	89	34%								
Any Benzo + Heroin		7	**8%**	53	20%										
Any Benzo + Illicit Fentanyl		16	**19%**	39	15%										
Any Benzo + Any Opioid		27	**32%**	110	42%										
Cocaine + Heroin		10	**12%**	47	18%										
Cocaine + Illicit Fentanyl		21	**25%**	38	15%										
Other Prescription	Any	0	**0%**	3	1%	36	14%	62	27%	49	30%	48	37%	49	39%
Over-The-Counter	Any	6	**7%**	13	5%	19	7%	32	14%	32	20%	25	19%	26	20%