2011 Poisoning Death Review Narrative Summary

There were 130 unintentional drug overdose deaths in Montgomery County in 2011. The designation of unintentional (accident), as compared to intentional (suicide), is made by the Montgomery County Coroner's Office. The Poison Death Review (PDR) is the compilation, presentation, and interpretation of data from multiple data streams within the Montgomery County Coroner's Office. This is the second year a PDR has been completed for Montgomery County. The first time was in 2010.

Of the 130 deaths in 2011, 116 were residents of Montgomery County, 6 were residents of other Ohio counties, 6 were out-of-state residents, and 2 individuals had no known address. As in 2010, the age groups most represented were 35-44 year olds and 44-55 year olds, accounting for 58% of the decedents compared to 46% in 2010. Persons aged 25-34 years old accounted for 22% of the decedents. The majority of the decedents were male (59%) and white (87%). In terms of education, about 97% had a high school education or less.

Most decedents, 74%, had a history of physical illness or disability, and 56% had a history of some form of heart disease. A large majority (82%) had a history of substance abuse. Most of the deaths occurred in the decedent's home (53%).

Opioids (prescription or illicit) were the drugs most frequently mentioned in toxicology reports. They were present in 114 cases (88%), down slightly from 2010. Prescription opioids were found in 62% of the cases, down sharply from 2010. Those most frequently mentioned in toxicology reports were: methadone (33%), essentially the same as 2010, followed by oxycodone (19%), and hydrocodone (15%), both down from 2010. (National studies suggest the methadone deaths result from methadone originally prescribed for pain, *not* methadone diverted from drug abuse treatment programs.) Heroin was present in 35% of the cases, an increase from 31% from 2010. There were 6 deaths where heroin was present in the absence of other central nervous system depressant drugs.

Sedatives, such as benzodiazepines, were the second most frequently mentioned drug in the toxicology reports, with about 75% of decedents having one or more in their systems at the time of death.

Cocaine was present in 41% of the cases, a sharp increase from 30% in 2010.

Alcohol was mentioned in 23% of the cases, the same as in 2010.

Nearly half of the decedents (49%) had *both* a benzodiazepine *and* a prescription opioid in their system, down slightly from 57% in 2010; 106 (82%) had two or more central nervous system depressants in their systems when they died. It is well-established that the concurrent use of drugs that depress the central nervous system can be extremely hazardous and result in death.

The PDR is conducted by the Center for Interventions, Treatment & Addictions Research under contract with Public Health – Dayton & Montgomery County (PHDMC) with support from the Ohio Department of Health (ODH). The PDR is part of the Preventing Unintentional Drug Poisoning Project, which is funded by PHDMC and the ODH with injury prevention block funds from the Centers for Disease Control (CDC).

POISONING DEATH REVIEW SUMMARY REPORT, 2011

Total Cases	**Jan. 1 - Dec. 31, 2011**		**130**		**2010 Cases: 127**

DEMOGRAPHICS

Characteristic	**Data Source**				
		Category	**Freq**	**Percent**	**2010 Percent**
Age	Death Certificate	<15 years	0	**0%**	**0%**
		15-24 years	7	**5%**	**14%**
		25-34 years	29	**22%**	**22%**
		35-44 years	34	**26%**	**28%**
		45-54 years	41	**32%**	**18%**
		55-64 years	18	**14%**	**16%**
		65-74 years	1	**1%**	**2%**
		75+ years	0	**0%**	**0%**
Gender	Death Certificate	Male	77	**59%**	**57%**
		Female	53	**41%**	**43%**
Race	Death Certificate	White	113	**87%**	**90%**
		Black	17	**13%**	**10%**
		Other	0	**0%**	**0%**
Hispanic	Death Certificate	Hispanic/Latino	0	**0%**	**0%**
Education *	Death Certificate	<High School	36	**28%**	**20%**
		HS graduate	89	**69%**	**76%**
		College graduate	3	**2%**	**2%**
		Post-graduate	1	**1%**	**1%**
Marital Status*	Death Certificate	Single	50	**39%**	**41%**
		Married	40	**31%**	**29%**
		Divorced	32	**25%**	**26%**
		Separated	4	**3%**	**2%**
		Widowed	3	**2%**	**2%**
Military	Death Certificate	Ever in US Armed Forces	5	**4%**	**13%**

HEALTH

Characteristic	**Data Source**				
			Freq	**Percent**	**2010 Percent**
Physical Disability/Illness	Case Synopsis and Postmortem Report		96	**74%**	**79%**
Heart Disease			73	**56%**	**65%**
Mental Disability/Illness			30	**23%**	**27%**

HISTORY OF SUBSTANCE ABUSE					
		Total Cases	**130**		**2010 Cases: 127**
Substance Abuse	**Data Source**				
	Case Synopsis and Postmortem Report		**Freq**	**Percent**	**2010 Percent**
Any history			107	**82%**	**75%**
Alcohol			23	**18%**	**13%**
Cocaine			22	**17%**	**12%**
Marijuana			2	**2%**	**5%**
Heroin			34	**26%**	**26%**
Prescription opioids			35	**27%**	**27%**
Benzodiazepines			21	**16%**	**15%**
Other Prescription Medications			7	**5%**	**3%**
Over-the-Counter Medications			0	**0%**	**0%**
DEATH INVESTIGATION					
Characteristic	**Data Source**	**Category**			
			Freq	**Percent**	**2010 Percent**
Location of death	Case Synopsis	Decedent's home	69	**53%**	**68%**
		Relative's home	0	**0%**	**2%**
		Friend's home	21	**16%**	**14%**
		Place of work	1	**1%**	**0%**
		School	0	**0%**	**0%**
		Hospital	29	**22%**	**9%**
		Drug tx facility	0	**0%**	**0%**
		Jail/detention area	0	**0%**	**0%**
		Public area	2	**2%**	**2%**
		Other	8	**6%**	**4%**
911 called	Case Synopsis	Yes	127	**98%**	**96%**
Person reporting death*	Case Synopsis	Coroner	0	**0%**	**1%**
		Hospital physician	30	**23%**	**17%**
		Mortician	0	**0%**	**0%**
		EMS/Police	99	**75%**	**82%**
Possible prevention by use of opioid antagonist?	Case Synopsis Postmortem Report Toxicology Report		18	**14%**	**11%**
TOXICOLOGY REPORT					
		Total Cases	**130**		**2010 Cases: 127**

Characteristic	Data Source	Category	Freq	Percent	2010 Percent
	Toxicology Report	Alcohol	30	**23%**	**23%**
		Cocaine	53	**41%**	**30%**
		Methamphetamine	2	**2%**	**1%**
		Heroin	46	**35%**	**31%**
Prescription Opioids		**Any**	81	**62%**	**74%**
		Oxycodone	25	**19%**	**23%**
		Hydrocodone	19	**15%**	**24%**
		Methadone	43	**33%**	**32%**
		Fentanyl	8	**6%**	**7%**
		Tramadol	5	**4%**	**6%**
		Hydromorphone	0	**0%**	**1%**
		Morphine	10	**8%**	**9%**
		Other	4	**3%**	**4%**
Anti-Depressants		**Any**	41	**32%**	**38%**
Opioids		**Any**	114	**88%**	**92%**
Sedatives (including benzodiazepines)		**Any**	96	**74%**	**76%**
Benzodiazepines		**Any**	84	**65%**	**70%**
Any Prescription Opioid + Any Benzodiazepine			64	**49%**	**57%**
Two or more of the following CNS depressants: alcohol, heroin, prescription opioids, and/or sedatives			107	**82%**	**85%**
Heroin + any other CNS depressant			40	**31%**	**27%**
Heroin without any other CNS depressant			6	**5%**	**4%**
Other Prescription		**Any**	48	**37%**	**39%**
Over-The-Counter		**Any**	25	**19%**	**20%**
Verifiable Valid Prescription for Controlled Drugs in Toxicology Report	Investigator's Report			**37%**	**33%**

***Total may not equal 130 because of missing data**