

# 2013 Ohio Coroner Survey: Fatal Drug Overdose Investigation

## 1. Did you conduct an investigation of a suspected overdose death in your county in 2012?

		Response Percent	Response Count
Yes		83.7%	41
No		16.3%	8
answered question			49
skipped question			0

## 2. Do you have a standard protocol for investigating suspected overdose deaths?

		Response Percent	Response Count
Yes		59.5%	22
No		40.5%	15
answered question			37
skipped question			12

**3. What types of information do you use when investigating a suspected overdose death?  
Select all that apply.**

		<b>Response Percent</b>	<b>Response Count</b>
Family Interviews (if relevant)		97.5%	39
Other Witness Interviews (if relevant)		92.5%	37
Body inspection		97.5%	39
Death scene evaluation and documentation		97.5%	39
Death scene photographs		75.0%	30
OARRS (Ohio Automated Rx Reporting System) Report from the Ohio Board of Pharmacy		57.5%	23
Medical history		95.0%	38
Mental Health History		82.5%	33
<b>Toxicology Testing</b>		<b>100.0%</b>	<b>40</b>
Autopsy		87.5%	35
Collaboration/discussion with law enforcement (if relevant)		87.5%	35
Other (please specify)		12.5%	5
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

**4. In overdose cases involving prescription drugs, do you collect the name of the medication prescriber in your records when this information is available to you (e.g., from OARRS report, medication bottles found at scene, discussions with family members, etc.)?**

		Response Percent	Response Count
Yes		72.5%	29
Sometimes		15.0%	6
No		12.5%	5
	Comments		5
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

**5. What information is used to determine the cause of death for a suspected overdose?  
Select all that apply.**

		Response Percent	Response Count
Toxicology results		100.0%	40
Body inspection (e.g., drugs found on person)		85.0%	34
Prescription medication bottles (e.g., fill date, pill count and dosage instructions)		87.5%	35
Family and/or witness interview (e.g., known heroin addict)		85.0%	34
History of treatment for drug or alcohol addiction		67.5%	27
Other (please specify)		27.5%	11
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

## 6. Are autopsies conducted on suspected overdose deaths in your county?

		Response Percent	Response Count
Always (100%)		35.0%	14
Most of the time (75-99%)		27.5%	11
Some of the time (45-75%)		15.0%	6
Occasionally (1-44%)		22.5%	9
Never (0%)		0.0%	0
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

## 7. How do you conduct autopsies on drug overdose deaths?

		Response Percent	Response Count
We only do them internally.		27.5%	11
<b>We contract with other coroners/counties.</b>		<b>67.5%</b>	<b>27</b>
Some of the autopsies are conducted internally, others are conducted by contracting with other counties. (please estimate the average cost of an in-house autopsy or indicate not known)		5.0%	2
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

**8. With whom do you contract to conduct autopsies? Select all that apply.**

		Response Percent	Response Count
Cuyahoga County Medical Examiner		10.3%	3
Franklin County Coroner's Office		20.7%	6
Hamilton County Coroner's Office		3.4%	1
Licking County Coroner's Office		13.8%	4
Lorain County Coroner's Office		0.0%	0
Lucas County Coroner's Office		27.6%	8
Mahoning County Coroner's Office		0.0%	0
<b>Montgomery County Coroner's Office</b>		<b>31.0%</b>	<b>9</b>
Stark County Coroner's Office		3.4%	1
Summit County Medical Examiner		10.3%	3
Trumbull County Coroner's Office		0.0%	0
Other (please specify)		0.0%	0
<b>answered question</b>			<b>29</b>
<b>skipped question</b>			<b>20</b>

### 9. What is the average cost paid by your county to another agency for an autopsy?

		Response Percent	Response Count
\$800 - \$1,000		0.0%	0
<b>\$1,001 - \$1,300</b>		<b>82.8%</b>	<b>24</b>
\$1,301- \$1,600		10.3%	3
more than \$1,600		3.4%	1
Not sure		3.4%	1
<b>answered question</b>			<b>29</b>
<b>skipped question</b>			<b>20</b>

### 10. What is your average cost to transport for an autopsy?

		Response Percent	Response Count
\$0 - \$150		31.0%	9
<b>\$151 - \$300</b>		<b>58.6%</b>	<b>17</b>
\$301 - \$450		3.4%	1
\$451 - \$600		3.4%	1
more than \$600		3.4%	1
<b>answered question</b>			<b>29</b>
<b>skipped question</b>			<b>20</b>

### 11. What is the average cost of an in-house autopsy in 2012?

		Response Percent	Response Count
\$800 - \$1,000		18.2%	2
<b>\$1,001 - \$1,300</b>		<b>63.6%</b>	<b>7</b>
\$1,301 - \$1,600		9.1%	1
More than \$1,600		9.1%	1
Not sure		0.0%	0
		<b>answered question</b>	<b>11</b>
		<b>skipped question</b>	<b>38</b>

### 12. What percentage of suspected overdose deaths received an autopsy in 2012?

		Response Percent	Response Count
1-24 percent		17.5%	7
25-49 percent		17.5%	7
50-74 percent		5.0%	2
<b>75-99 percent</b>		<b>32.5%</b>	<b>13</b>
Autopsies are conducted on all suspected overdoses		27.5%	11
		<b>answered question</b>	<b>40</b>
		<b>skipped question</b>	<b>9</b>

**13. Why aren't autopsies conducted for every suspected overdose death in your county?  
(select all that apply)**

		Response Percent	Response Count
Lack of funding to meet demands		44.8%	13
Autopsy transportation costs		10.3%	3
Limited staffing or personnel resources		13.8%	4
Political concerns as an elected official (e.g., Pressure to work with level or decreasing budget, difficulty with high profile cases)		10.3%	3
Family concerns or pressure in ruling on cause of death (e.g., stigma of drug addiction in a small community)		0.0%	0
Community concerns about ruling on cause of death (e.g., rural county where everyone is closely connected)		0.0%	0
<b>Autopsies not necessary for every suspected overdose</b>		<b>75.9%</b>	<b>22</b>
Other (please specify)		31.0%	9
<b>answered question</b>			<b>29</b>
<b>skipped question</b>			<b>20</b>

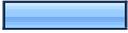
**15. Are toxicology tests run on suspected overdose deaths in your county (whether autopsied or not)?**

		Response Percent	Response Count
Yes		92.5%	37
No		7.5%	3
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

**16. How do you conduct toxicology tests on drug overdose deaths?**

		Response Percent	Response Count
We only do them internally.		10.8%	4
We contract with commercial labs		35.1%	13
<b>We contract with other coroner (s) offices</b>		<b>40.5%</b>	<b>15</b>
Some of the toxicology tests are conducted internally, others are conducted by contracting with other coroners/labs (please estimate the average cost of an in-house toxicology test below)		13.5%	5
<b>answered question</b>			<b>37</b>
<b>skipped question</b>			<b>12</b>

**17. With whom do you contract for toxicology testing services? Select all that apply.**

		Response Percent	Response Count
Not applicable. We do them internally.		0.0%	0
AIT Laboratories		27.3%	9
BCI (Bureau of Criminal Investigation)		3.0%	1
Cuyahoga County Coroner's Office		3.0%	1
Franklin County Coroner's Office		9.1%	3
Hamilton County Coroner's Office		3.0%	1
Lake County Regional Forensic Lab		0.0%	0
Mansfield Police Department Crime Lab		0.0%	0
Miami Valley Crime Lab/ Montgomery County Coroner		18.2%	6
State Highway Patrol Crime Lab		6.1%	2
Toledo Crime Lab		6.1%	2
<b>Other (please specify and include commercial labs)</b>		<b>54.5%</b>	<b>18</b>
<b>answered question</b>			<b>33</b>
<b>skipped question</b>			<b>16</b>

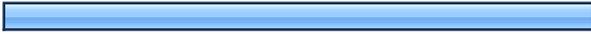
**18. What is the average cost paid by your county to another agency for a toxicology screen?**

		Response Percent	Response Count
\$0 - \$250		48.5%	16
\$251 - \$500		18.2%	6
\$501 - \$750		0.0%	0
\$751 - \$1,000		0.0%	0
more than \$1,000		0.0%	0
Not sure		33.3%	11
<b>answered question</b>			<b>33</b>
<b>skipped question</b>			<b>16</b>

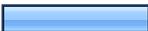
**19. What is the average cost (estimated) of an in-house toxicology screen in 2012?**

		Response Percent	Response Count
\$0 - \$250		25.0%	1
<b>\$251 - \$500</b>		<b>75.0%</b>	<b>3</b>
\$501 - \$750		0.0%	0
\$751 - \$1,000		0.0%	0
More than \$1,000		0.0%	0
Not sure		0.0%	0
<b>answered question</b>			<b>4</b>
<b>skipped question</b>			<b>45</b>

**20. What type of toxicology panel do you typically order when investigating a suspected overdose? Check all that apply?**

		Response Percent	Response Count
Urine test		62.2%	23
<b>Blood test</b>		<b>89.2%</b>	<b>33</b>
Saliva test		0.0%	0
Vitreous humor test		45.9%	17
Do not order toxicology tests for suspected overdoses		0.0%	0
Other (please specify)		21.6%	8
		<b>answered question</b>	<b>37</b>
		<b>skipped question</b>	<b>12</b>

**21. What types of drugs or substances can be detected on the toxicology panel that you usually order? (check all that apply)**

		Response Percent	Response Count
This is determined by the agency conducting the autopsy		40.5%	15
Alcohol (methanol, ethanol)		64.9%	24
Antihistamines (e.g., diphenhydramine)		43.2%	16
Antipyretics/Salicylates (e.g., aspirin, acetaminophen, NSAIDs, etc.)		45.9%	17
Antitussives (e.g., dextromethorphan)		45.9%	17
Barbiturates (e.g., secobarbital, pentobarbital )		67.6%	25
<b>Benzodiazepines (e.g., lorazepam, alprazolam)</b>		<b>70.3%</b>	<b>26</b>
Cocaine		67.6%	25
Inhalants		21.6%	8
Hallucinogens (e.g. LSD, PCP, or psilocybin)		40.5%	15
<b>Heroin</b>		<b>70.3%</b>	<b>26</b>
Household substances (e.g. antifreeze, heavy metals, or cleaning products)		16.2%	6
Cannabinoids (e.g., marijuana)		67.6%	25
Prescription opioids (e.g. codeine, hydrocodone, oxycodone, morphine, methadone, fentanyl, etc.)		62.2%	23
Tricyclic Antidepressants		59.5%	22

Other over the counter medications		32.4%	12
Other Stimulants (e.g. amphetamines, methamphetamines, methylphenidates, etc.)		56.8%	21
Other (please specify) or Comment		35.1%	13
<b>answered question</b>			<b>37</b>
<b>skipped question</b>			<b>12</b>

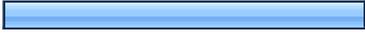
**22. Do toxic substances identified through screening tests receive confirmatory testing through either Mass Spectrometry or Gas Chromatography?**

		Response Percent	Response Count
Yes		64.9%	24
No		5.4%	2
Not sure		29.7%	11
Comments:			1
<b>answered question</b>			<b>37</b>
<b>skipped question</b>			<b>12</b>

**23. What percentage of your suspected overdose death cases received a toxicology test in 2012?**

		Response Percent	Response Count
1-24 percent		5.4%	2
25-49 percent		0.0%	0
50-74 percent		5.4%	2
75-99 percent		10.8%	4
<b>Toxicology tests are conducted on all suspected overdoses</b>		<b>78.4%</b>	<b>29</b>
<b>answered question</b>			<b>37</b>
<b>skipped question</b>			<b>12</b>

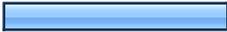
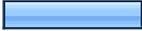
## 24. Why aren't toxicology tests performed for all suspected overdose deaths in your county?

		Response Percent	Response Count
Lack of funding to meet demands		9.1%	1
Limited staffing or personnel resources		0.0%	0
Political concerns as an elected official (e.g., Pressure to work with level or decreasing budget, difficulty with high profile cases)		0.0%	0
Family concerns or pressure in ruling on cause of death (e.g., stigma of drug addiction in a small community)		0.0%	0
Community concerns about ruling on cause of death (e.g., rural county where everyone is closely connected)		0.0%	0
<b>Toxicology testing is not necessary for investigating suspected overdoses</b>		<b>54.5%</b>	<b>6</b>
Other, please specify:		45.5%	5
<b>answered question</b>			<b>11</b>
<b>skipped question</b>			<b>38</b>

**25. In your county, have you established toxic and lethal concentrations for specific substances (e.g., alcohol, opioids) based on peer-reviewed standards or guidelines which are used to assign responsibility for death in overdose cases?**

		Response Percent	Response Count
Yes, please comment below		35.0%	14
No		65.0%	26
	Comments:		17
		<b>answered question</b>	<b>40</b>
		<b>skipped question</b>	<b>9</b>

**26. In determining the cause of an overdose death, what levels of responsibility do you assign to the drugs or substances involved? (Select any that apply)**

		Response Percent	Response Count
Therapeutic		33.3%	13
Toxic		56.4%	22
Lethal		56.4%	22
Additive/Synergistic/Antagonistic (in cases with multiple substances)		56.4%	22
Do not assign levels of responsibility; use only "Present"/"Not Present"		20.5%	8
Other (please specify) or Comment		15.4%	6
		<b>answered question</b>	<b>39</b>
		<b>skipped question</b>	<b>10</b>

**27. What, if any, standards or guidelines are used to determine toxic and lethal drug concentrations in suspected overdose cases? (Select all that apply)**

		Response Percent	Response Count
None used currently		2.6%	1
National Association of Medical Examiners (NAME)		5.1%	2
Peer-reviewed journals or texts (e.g., Basalt. Lab Interpretation)		41.0%	16
<b>Toxicologist/pathologist provides recommendations based on unique case findings</b>		<b>74.4%</b>	<b>29</b>
I use my own clinical expertise and experience.		17.9%	7
State standards, please specify below		5.1%	2
Other, please specify:		10.3%	4
		<b>answered question</b>	<b>39</b>
		<b>skipped question</b>	<b>10</b>

**28. Do you currently document specific drugs responsible for overdose deaths in Part 1 (Cause of Death/Underlying Cause of Death) of the death certificate?**

		<b>Response Percent</b>	<b>Response Count</b>
<b>Yes, I list specific drugs involved on Part 1 of the death certificate</b>		<b>57.5%</b>	<b>23</b>
No, I document them elsewhere on the death certificate.		15.0%	6
No, I document them elsewhere in my coroner records.		17.5%	7
No, I document "multiple drug use" (e.g., polysubstance use, multiple drug intoxication, etc.) but do not list the drugs individually		35.0%	14
	Other (please specify) or Comment		11
		<b>answered question</b>	<b>40</b>
		<b>skipped question</b>	<b>9</b>

**29. What are the barriers to listing specific drugs involved in overdose deaths in Part 1 (Cause of Death/Underlying Cause of Death) of the death certificate (DC)? Select any that apply.**

		Response Percent	Response Count
Unaware that this was necessary or that ODH used this information.		33.3%	8
Do not have the toxicology results available at the time of DC completion.		25.0%	6
Do not have the funding to confirm the specific drugs involved through toxicology.		8.3%	2
<b>Are not able to ascertain the specific drugs involved in many poly-substance overdoses.</b>		<b>37.5%</b>	<b>9</b>
Do not have time to list the drugs responsible; information is available in coroner records.		12.5%	3
DC is a legal document and we do not feel comfortable assigning responsibility for death to any specific drugs when multiple drugs were involved.		33.3%	8
	Other, please specify		12
		<b>answered question</b>	<b>24</b>
		<b>skipped question</b>	<b>25</b>

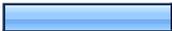
**30. What are the 4 biggest challenges that you face when investigating a suspected overdose death? (Select top 4).**

		Response Percent	Response Count
<b>Lack of funding to respond to growing number of deaths</b>		47.5%	19
Limited staffing or personnel resources		30.0%	12
Lack of guidance on death investigation for drug overdose cases		10.0%	4
Lack of guidance from the State on how to document drug overdose cases on death certificate		22.5%	9
Lack of guidance on determining drugs responsible for deaths		12.5%	5
Lack of continuing education on death investigation for drug overdose cases		7.5%	3
Timeliness of toxicology or autopsy results		32.5%	13
Political concerns as an elected official (e.g., Pressure to work with level or decreasing budget, difficulty with high profile cases)		7.5%	3
Family concerns or pressure in ruling on cause of death (e.g., stigma of drug addiction in a small community)		10.0%	4
Community concerns about ruling on cause of death (e.g., rural county where everyone is closely connected)		2.5%	1
<b>I do not encounter any challenges or barriers to investigating suspected overdoses</b>		47.5%	19

My county did not have any overdose deaths recently		0.0%	0
Other, please specify or comment on any of the above		15.0%	6
<b>answered question</b>			<b>40</b>
<b>skipped question</b>			<b>9</b>

### 31. Why didn't you investigate a suspected overdose death in your county in 2012? (check all that apply)

		Response Percent	Response Count
Lack of funding to investigate deaths		0.0%	0
Lack of staffing or personnel to investigate deaths		0.0%	0
Political concerns as an elected official (e.g., Pressure to work with level or decreasing budget, difficulty with high profile cases)		12.5%	1
Family concerns or pressure in ruling on cause of death (e.g., stigma of drug addiction in a small community)		0.0%	0
Community concerns about ruling on cause of death (e.g., rural county where everyone is closely connected)		0.0%	0
Lack of coroner reporting software		0.0%	0
<b>My county did not have an overdose death in 2012</b>		<b>37.5%</b>	<b>3</b>
<b>I am a new coroner</b>		<b>37.5%</b>	<b>3</b>
Investigating overdose deaths is not a priority for my county		12.5%	1

Other, please specify		25.0%	2
		<b>answered question</b>	<b>8</b>
		<b>skipped question</b>	<b>41</b>

### 32. Do you use an electronic system for recording and storing coroner files?

		Response Percent	Response Count
Yes		58.3%	28
No		41.7%	20
		<b>answered question</b>	<b>48</b>
		<b>skipped question</b>	<b>1</b>

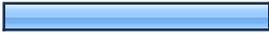
### 33. What type of computer program or software do you use to enter and store coroner records and files?

		Response Percent	Response Count
Microsoft Office (e.g. Excel or Access)		21.4%	6
Commercial - Forensic Filer		25.0%	7
Commercial - CoronerME		10.7%	3
Commercial - Coroner Base		0.0%	0
Commercial - Justice Trax		7.1%	2
Other commercial or proprietary software (specify below)		7.1%	2
<b>Database developed in-house</b>		<b>35.7%</b>	<b>10</b>
Other, please specify		17.9%	5
		<b>answered question</b>	<b>28</b>
		<b>skipped question</b>	<b>21</b>

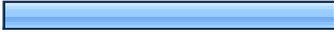
### 34. If software was provided to your county initially at no cost, would you be willing to use an electronic record system?

		Response Percent	Response Count
Yes		45.0%	9
No		15.0%	3
Don't know		40.0%	8
		Comments:	2
		<b>answered question</b>	<b>20</b>
		<b>skipped question</b>	<b>29</b>

**35. If this system required annual maintenance fees, would your county be able to cover the cost?**

		Response Percent	Response Count
No, we do not have the budget for this.		40.0%	8
No, but perhaps could be absorbed by the county's information technology support budget.		10.0%	2
Yes, up to \$250		0.0%	0
Yes, up to \$500		5.0%	1
Yes, up to \$1,000		5.0%	1
Yes, up to \$5,000		0.0%	0
Don't know		40.0%	8
Other (please specify) or Comment			2
answered question			20
skipped question			29

**36. Would you like to receive more information about the OH-VDRS or learn more about participating in the OH-VDRS?**

		Response Percent	Response Count
Yes		50.0%	24
No		50.0%	24
answered question			48
skipped question			1

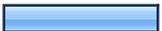
**37. Please provide the following information if you would like to be contacted about OH-VDRS:**

		Response Percent	Response Count
Name		100.0%	23
County		100.0%	23
Email		100.0%	23
Phone		91.3%	21
Fax		78.3%	18
<b>answered question</b>			<b>23</b>
<b>skipped question</b>			<b>26</b>

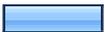
**38. How many overdose deaths did you have in your county in 2012?**

		Response Percent	Response Count
0 to 9 deaths		39.1%	18
10 to 24 deaths		28.3%	13
25 to 49 deaths		13.0%	6
50 to 99 deaths		6.5%	3
100 or more deaths		13.0%	6
<b>answered question</b>			<b>46</b>
<b>skipped question</b>			<b>3</b>

### 39. To what extent are overdose deaths a public health problem in your county?

		Response Percent	Response Count
Not a problem		8.3%	4
Small problem		22.9%	11
Moderate problem		29.2%	14
<b>Widespread problem</b>		<b>39.6%</b>	<b>19</b>
<b>answered question</b>			<b>48</b>
<b>skipped question</b>			<b>1</b>

### 40. What coroner region of the state is your county located in?

		Response Percent	Response Count
<b>Northeast</b>		<b>27.1%</b>	<b>13</b>
Northwest		22.9%	11
Central		14.6%	7
Southeast		12.5%	6
Southwest		22.9%	11
<b>answered question</b>			<b>48</b>
<b>skipped question</b>			<b>1</b>

### 41. How would you characterize your county?

		Response Percent	Response Count
Urban		10.4%	5
Suburban		25.0%	12
<b>Rural</b>		<b>50.0%</b>	<b>24</b>
Appalachian		14.6%	7
<b>answered question</b>			<b>48</b>
<b>skipped question</b>			<b>1</b>

### 42. How long have you worked as a coroner in Ohio?

		Response Percent	Response Count
Less than 1 year		10.9%	5
1-5 years		19.6%	9
<b>5-9 years</b>		<b>28.3%</b>	<b>13</b>
10-19 years		21.7%	10
20 or more years		19.6%	9
<b>answered question</b>			<b>46</b>
<b>skipped question</b>			<b>3</b>

**43. Have you completed any continuing education or inservice training on drug overdose investigation in the last 2 years?**

		Response Percent	Response Count
No		36.2%	17
Yes (please specify)		63.8%	30
answered question			47
skipped question			2