



DRUG ENFORCEMENT ADMINISTRATION
DIVERSION CONTROL DIVISION

NFLIS
NATIONAL FORENSIC LABORATORY INFORMATION SYSTEM



MEC

2022 Medical Examiner and Coroner Survey Report



Highlights

The National Forensic Laboratory Information System (NFLIS) Medical Examiner and Coroner Survey was administered from September 2022 through March 2023. The survey collected information on medical examiner and coroner office (MEC) caseloads, policies, and practices for calendar year 2021. Overall, a total of 1,606 out of 2,071 MECs completed the survey, for an overall response rate of 77.5%. Of the MECs that completed the survey, 78.6% completed the full survey, and the remaining MECs provided responses to identified critical items.

In 2021, 1,440,580 human death cases were referred to responding MECs. Of these, 703,049 were accepted by MECs. On average, 923 death cases were referred to MECs, and an average of 453 cases were accepted.

MECs reported that 101,582 overdose cases were among the accepted cases in 2021; 88% of these overdose cases were classified as accidents.

More than half of MECs (62%) reported that they request toxicology testing for specific drugs based on the type of case.

The average turnaround time among responding MECs to complete a case when an autopsy was performed was 58 days.

Of MECs, 76% or more reported "routinely" requesting toxicology testing for the following drugs or drug classes: alcohol, amphetamines/methamphetamines, cocaine, fentanyl, heroin, marijuana/THC, and opiates or opioids other than heroin and fentanyl. Amphetamines/methamphetamines was the only drug or drug class for which 76% or more of MECs reported "routinely" requesting quantitative testing.

Of 1,218 responding MECs, 79% reported having an electronic records management system (solely or in combination with manual recordkeeping), and 40% of those with an electronic records management system had a networked system. Of all responding MECs, 20% reported exclusively using a manual records management system.

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Introduction

The National Forensic Laboratory Information System (NFLIS) is a program of the Drug Enforcement Administration’s (DEA’s) Diversion Control Division. DEA’s NFLIS-Drug data collection has involved systematically collecting drug identification results and associated information from drug cases submitted to and analyzed by participating Federal, State, and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the country. NFLIS-Drug data are used to support drug scheduling decisions and to inform drug policy and drug enforcement initiatives nationally and in local communities around the country.

DEA expanded the NFLIS program in 2018 to include two additional continuous drug surveillance components that collect death data from medical examiner and coroner offices (NFLIS-MEC) and drug testing results from toxicology laboratories (NFLIS-Tox) to supplement and complement the current NFLIS-Drug data. This publication presents findings from the NFLIS-MEC 2022 Survey, which was conducted to provide key information about the Nation’s medical examiner and coroner offices (MECs). Similar to the Survey of Crime Laboratory Drug

Chemistry Sections that DEA has conducted for the NFLIS-Drug program, the NFLIS-MEC 2022 Survey data will be used to update profiles of the MECs eligible to participate in NFLIS. Overall, a total of 1,606 MECs completed the survey, for an overall response rate of 77.5%. Of the responding MECs, 1,262 (78.6%) completed the full survey. Caseload and a few other items were considered critical; thus, nonresponding MECs were given the option to participate by providing only these minimal data late in the data collection effort, which led to an additional 344 completions (21.4%).

Administrative information is first presented, including jurisdiction information, use of off-site and reference toxicology laboratories (TLs), and MEC responsibilities. Caseload information (referred and accepted cases) is then presented, followed by procedures performed for accepted cases, overdose cases, toxicology testing strategies for emerging drugs, average turnaround time, toxicology request frequency and quantitative analysis frequency across several drugs and drug classes, and records management systems. Appendix A contains details on the data collection methods used for the NFLIS-MEC 2022 Survey.

Administrative Information

Geographic Distribution and Jurisdiction Size of Medical Examiner and Coroner Offices

Of the 1,605 MECs for which jurisdiction information was recorded, 45% (719) served small jurisdictions, 42% (672) served medium jurisdictions, and 13% (214) served large jurisdictions ([Table 1](#)). Jurisdiction size was determined by the total population residing in the areas MECs serve, with small jurisdictions having a population of fewer than 25,000. Medium jurisdictions had a population between 25,000 and 249,999. Large jurisdictions had a population of 250,000 or more.

Respondents were from all four U.S. census regions and 48 States, the District of Columbia, and Puerto Rico. Of the 1,605 MECs providing this information, 278 MECs were in the West, 631 were in the Midwest, 119 were in the Northeast, and 577 were in the South (including Puerto Rico). As shown in [Table 1](#), about one-third of MECs in the Northeast served large jurisdictions, whereas 19% or less of MECs in the remaining regions did.

Medical Examiner and Coroner Office Responsibilities

MEC respondents were asked to identify the responsibilities of their office. Of the 1,289 MECs answering this question, over 95% reported that they determine cause and manner of death (data not shown). Over 9 in 10 MECs (93%) reported that they conduct death investigations. The majority of MECs reported that they perform scene investigations (88%), order toxicology testing (74%), and transport the decedent from the location of death (68%). When examined by jurisdiction size, the percentage of MECs that performed each responsibility increased as jurisdiction size increased.

Table 1 SIZES OF JURISDICTIONS SERVED BY MECs,¹ BY REGION

Jurisdiction Size ¹	Total		West		Midwest		Northeast		South	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Large (250,000 or more)	214	13.3	52	18.7	49	7.8	40	33.6	73	12.6
Medium (25,000 to 249,999)	672	41.9	91	32.7	269	42.6	71	59.7	241	41.8
Small (fewer than 25,000)	719	44.8	135	48.6	313	49.6	8	6.7	263	45.6
Total¹	1,605	100.0	278	100.0	631	100.0	119	100.0	577	100.0

¹ Jurisdiction size is determined by the population of the jurisdiction.

Source: NFLIS-MEC 2022 Survey.

Caseload and Testing Policies

Caseload (Referred and Accepted Cases)

Caseload was determined by the number of human death cases referred to and accepted by MECs. Referred cases were defined as those referred by medical and law enforcement personnel for which MEC respondents investigated or documented referral of the case to the office. Accepted cases were defined as human death cases for which the MECs accepted jurisdiction, conducted further investigations to determine cause and manner of death, and completed the death certificate. Definitions were provided because there is much variability within the MEC community in how “referred” and “accepted” are defined. In total, 885 MECs provided information on the number of referred cases, and 1,258 MECs provided information on the number of accepted cases during calendar year 2021.

Overall, 1,440,580 death cases were referred to, and 703,049 death cases were accepted by, responding MECs, including MECs that estimated their caseloads for the year (Table 2). MECs serving large jurisdictions made up only 13% of responding MECs, but they reported over 75% of all referred cases and almost 64% of all accepted cases. MECs serving small jurisdictions reported nearly

5% of referred cases and 7% of accepted cases, but they made up almost 45% of total responding MECs.

On average, MECs reported that 923 cases were referred to them in 2021, and an average of 453 cases were accepted (Table 3). When examined by region, on average, MECs in the Northeast had more referred and accepted cases than MECs in the other three regions did.

Procedures Performed for Accepted Cases

MECs were asked to report on the procedures they performed or requested to be performed as part of their accepted cases. A total of 885 MECs provided this information. As shown in Table 4, MECs reported an average of 272 accepted cases receiving a death scene investigation, 209 receiving toxicology analysis, and 161 receiving an autopsy. The median number of cases receiving these procedures shows how much variability there is within the MEC community—all numbers are much lower than the average.

When MECs were examined by jurisdiction size served, those serving large jurisdictions averaged over 1,100 scene investigations, with 1,227 toxicology analyses and 953 autopsies. MECs serving medium and small jurisdictions averaged, respectively, 211 and 48 scene investigations, 77 and 16 toxicology analyses, and 60 and 11 autopsies.

Table 2 MECs’ TOTAL CASELOAD, BY JURISDICTION SIZE¹

Jurisdiction Size	Cases Referred		Cases Accepted	
	Number	Percentage	Number	Percentage
Large (250,000 or more)	1,083,905	75.2	449,503	63.9
Medium (25,000 to 249,999)	290,614	20.2	208,154	29.6
Small (fewer than 25,000)	66,061	4.6	45,392	6.5
Total^{2,3,4}	1,440,580	100	703,049	100.0

¹ Jurisdiction size is determined by the population of the jurisdiction.

² Respondents with unknown number of cases referred or cases accepted are excluded.

³ Among MECs that provided a valid response to Question 10 (referred cases), 40% indicated the number provided was an estimate.

⁴ Among MECs that provided a valid response to Question 11 (accepted cases), 42% indicated the number provided was an estimate.

Source: NFLIS-MEC 2022 Survey.

Table 3 MECs’ AVERAGE AND MEDIAN CASELOADS, BY REGION

Region	Average Cases		Median Cases	
	Referred	Accepted	Referred	Accepted
West	1,152	563	130	105
Midwest	528	277	85	67
Northeast	2,229	781	577	282
South	976	524	155	150
Total¹	923	453	134	110

¹ This table includes information from MECs that estimated their caseload responses.

Source: NFLIS-MEC 2022 Survey.

Table 4 AVERAGE AND MEDIAN NUMBER OF MECs’ ACCEPTED CASES, BY TYPE OF PROCEDURE AND JURISDICTION SIZE¹

Type of Procedure ^{2,3}	Total		Large Jurisdiction (250,000 or More)		Medium Jurisdiction (25,000 to 249,999)		Small Jurisdiction (Fewer than 25,000)	
	Average	Median	Average	Median	Average	Median	Average	Median
Death scene investigation	273	80	1,186	730	211	150	48	30
Toxicology analysis	209	30	1,227	745	77	50	16	11
Autopsy performed	161	20	953	603	60	40	11	7

¹ Jurisdiction size is determined by the population of the jurisdiction.

² For some responding MECs, the numbers of cases receiving certain inquiries exceeded the total number of accepted cases reported by that MEC.

³ Estimated responses ranged from 42% to 52% for each inquiry.

Source: NFLIS-MEC 2022 Survey.

Overdose Cases and Type of Overdose Death

MECs were asked to report the total number of overdose cases they accepted, with an option to provide an estimate. Overall, 101,582 overdose cases were accepted by the 1,204 MECs responding to this question on the full survey ([Table 5](#)). Of these MECs, over 36% indicated that the number they provided was an estimate. MECs in the South accepted more total overdose cases than MECs in the other three regions did.

As with caseloads, the number of overdose cases increased as jurisdiction size increased, with MECs serving large jurisdictions reporting 82% of all overdose cases, MECs serving medium jurisdictions reporting 15% of all overdose cases, and MECs serving small jurisdictions reporting 3% of all overdose cases.

MECs were also asked to report the manner of death assigned to their accepted cases that were overdose deaths. Overall, the majority were classified as accidents (88%), with 5.3% classified as death by suicide, 1.2% homicide, and 5.5% undetermined ([Table 6](#)). These numbers varied by region, with percentages of overdose deaths classified as accidents ranging from 82.9% (South) to 93.7% (Northeast), suicides from 3.6% (Northeast) to 6.2% (West), and homicides from 0.6% (Northeast) to 1.6% (South). Over 10% of cases in the South were classified as undetermined; percentages of undetermined cases in the other regions ranged from 1.4% to 4.1%.

Table 5 MECs' ACCEPTED OVERDOSE CASES, BY REGION AND JURISDICTION SIZE¹

Region	Total		Large Jurisdiction (250,000 or More)		Medium Jurisdiction (25,000 to 249,999)		Small Jurisdiction (Fewer than 25,000)	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
West	23,428	23.1	21,127	20.8	1,898	1.9	403	0.4
Midwest	22,421	22.1	15,263	15.0	6,377	6.3	781	0.8
Northeast	18,054	17.7	16,209	16.0	1,813	1.8	32	<0.1
South	37,679	37.1	30,725	30.2	5,574	5.5	1,380	1.4
Total^{2,3}	101,582	100.0	83,324	82.0	15,662	15.4	2,596	2.6

¹ Jurisdiction size is determined by the population of the jurisdiction.

² Over one-third (36%) of MECs indicated that the provided number of overdose cases was an estimate.

³ Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

Table 6 MECs' ACCEPTED OVERDOSE CASES, BY MANNER OF DEATH AND REGION

Manner of Death	Total		West		Midwest		Northeast		South	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Accident	92,399	88.0	22,377	91.4	20,126	89.0	16,732	93.7	33,164	82.9
Suicide	5,520	5.3	1,525	6.2	1,330	5.9	642	3.6	2,023	5.1
Homicide	1,216	1.2	218	0.9	239	1.1	102	0.6	657	1.6
Undetermined	5,821	5.5	353	1.4	929	4.1	374	2.1	4,165	10.4
Total^{1,2}	104,956	100.0	24,473	100.0	22,624	100.0	17,850	100.0	40,009	100.0

¹ MECs with an unknown number of overdose cases accepted or manner of death were excluded.

² Over one-third (36%) of MECs indicated that the provided number of overdose cases was an estimate.

Source: NFLIS-MEC 2022 Survey.

Toxicology Testing Strategies

MECs were asked to describe instances in which they requested toxicology testing for specific drugs based on the type of case, such as more extensive testing for homicides than for suicides or more extensive testing for a gunshot wound than for a vehicle crash. Of the 1,249 MECs responding to this question on the full survey, 773 (62%) requested toxicology testing for specific drugs based on case type, and another 135 (11%) reported that someone else made the decision. The most common instances that warranted specific testing were a history of drug use, with 85% of cases warranting specific testing for drugs; a suspected

overdose (92%); a case with a drug connection (85%) (e.g., drug paraphernalia found with the body); motor vehicle–related cases (77%); suicides (69%); homicides or cases suspected of criminal involvement (66%); child or infant deaths (65%); and fire-related deaths (56%) ([Table 7](#)). For MECs serving small and medium jurisdictions, the three least common instances that warranted specific testing were other acute accidents, fire-related deaths, and police-involved deaths. Other acute accidents, suicides, and fire-related deaths were the least common instances for MECs serving large jurisdictions.

Table 7

REQUESTS FOR SPECIFIC TOXICOLOGY TESTING, BY CASE TYPE AND JURISDICTION SIZE¹

Case Type	Total		Large Jurisdiction (250,000 or More)		Medium Jurisdiction (25,000 to 249,999)		Small Jurisdiction (Fewer than 25,000)	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Suspected overdose case	711	92.1	130	89.7	292	93.3	289	92.0
Decedent has history of drug use	658	85.2	125	86.2	272	86.9	261	83.1
Case with any other drug connections (e.g., drug paraphernalia found with body)	652	84.5	131	90.3	275	87.9	246	78.3
Motor vehicle–related death	592	76.7	105	72.4	241	77.0	246	78.3
Suicide	529	68.5	96	66.2	209	66.8	224	71.3
Homicide/suspicious for criminal involvement	509	65.9	105	72.4	201	64.2	203	64.6
Child/infant death	499	64.6	119	82.1	200	63.9	180	57.3
Death in custody	492	63.7	109	75.2	203	64.9	180	57.3
Police-involved death	461	59.7	108	74.5	188	60.1	165	52.5
Fire-related death	434	56.2	99	68.3	193	61.7	142	45.2
Other acute accident	384	49.7	91	62.8	169	54.0	124	39.5
Other	58	7.5	25	17.2	22	7.0	11	3.5
Total^{2,3}	773	100.0	145	100.0	314	100.0	314	100.0

¹ Jurisdiction size is determined by the population of the jurisdiction.

² Respondents could select all that apply. Categories are not mutually exclusive.

³ Respondents with unknown toxicology testing for specific drugs and those that did not select any testing practices are excluded.

Source: NFLIS-MEC 2022 Survey.

Average Turnaround Time

Case completion was defined as finalizing cause of death. Of the MECs that provided case completion information, the average turnaround time to complete a case if no autopsy was performed was 20 days. The average turnaround time to complete a case was longer when an autopsy was performed (58 days) ([Table 8](#)). MECs were allowed to estimate responses to the questions about turnaround time. Case completion times increased with jurisdiction size when an autopsy was performed (from 47 days to 68 days) and when no autopsy was performed (from 12 days to 41 days). MECs in the South had longer turnaround times to complete cases when an autopsy was performed than the other regions did (over 66 days), but when no autopsy was performed, the MECs in the South had the second fastest turnaround time on average.

Additionally, MECs were asked the average number of days it took to receive toxicology results for their cases, both when an autopsy was performed and when one was not. Of the responding MECs, the average turnaround time to receive toxicology results without autopsy was 39 days, with MECs serving medium jurisdictions taking the longest at 44 days and those serving small and large jurisdictions both taking 36 days. The average turnaround time to receive toxicology results was longer when an autopsy was performed (51 days); again, MECs serving medium jurisdictions took the longest (59 days), and those serving large jurisdictions took the shortest (40 days). MECs in the South reported longer times to receive toxicology results than the other regions did.

Of responses to the questions about turnaround times, between 67% and 76% of responses (depending on which question) were indicated to be estimates.

Table 8

AVERAGE TURNAROUND TIMES FOR TOXICOLOGY RESULTS AND CASE COMPLETION, BY REGION AND JURISDICTION SIZE¹

Average Turnaround Time (Days)	Total	Large Jurisdiction (250,000 or More)	Medium Jurisdiction (25,000 to 249,999)	Small Jurisdiction (Fewer than 25,000)	West	Midwest	Northeast	South
Receive toxicology results if autopsy performed ²	50.8	40.4	58.5	47.0	46.7	46.6	47.9	58.6
Receive toxicology results if no autopsy performed ³	39.1	35.9	43.6	35.8	38.6	31.1	32.8	50.5
Finalize cause of death if autopsy performed ⁴	58.0	67.9	65.2	46.9	58.9	50.5	58.7	66.2
Finalize cause of death if no autopsy performed ⁵	20.4	40.9	20.9	12.1	25.7	14.5	29.1	22.8

¹ Jurisdiction size is determined by the population of the jurisdiction.

² MECs with unknown turnaround time to receive toxicology results if autopsy performed were excluded. Among MECs providing valid responses, 76% indicated the number provided was an estimate.

³ MECs with unknown turnaround time to receive toxicology results if no autopsy performed were excluded. Among MECs providing valid responses, 68% indicated the number provided was an estimate.

⁴ MECs with unknown turnaround time to finalize cause of death if autopsy performed were excluded. Among MECs providing valid responses, 72% indicated the number provided was an estimate.

⁵ MECs with unknown turnaround time to finalize cause of death if no autopsy performed were excluded. Among MECs providing valid responses, 67% indicated the number provided was an estimate.

Source: NFLIS-MEC 2022 Survey.

Toxicology Request Frequency and Quantitative Analysis Frequency, by Drug or Drug Class

The NFLIS-MEC 2022 Survey also gathered information on toxicology testing frequency (routinely, sometimes, rarely/never) of specific drugs and drug classes and their frequency (routinely, sometimes, rarely/never) of quantitating these analytes. The number of MECs responding to these survey items ranged from 1,097 to 1,165 across the drug or drug class testing frequency and ranged from 997 to 1,029 across the drug or drug class quantitation frequency.

Testing results are presented based on the percentage (≤50%, 51%–75%, and ≥76%) of MECs that “routinely” tested for specific

drugs or drug classes. In each testing frequency section, the frequency of quantitative analysis is also discussed. Providing results in this manner shows the most frequently tested drugs across MECs. [Table 9](#) summarizes the percentage of MECs “routinely” requesting toxicology testing on specific drugs or drug classes.

[Table 10](#) summarizes the percentage of MECs “routinely” requesting quantitative analysis of specific drugs or drug classes.

[Figures 1](#) through [4](#) show the frequency of toxicology testing and quantitative analysis testing for fentanyl and fentanyl-related compounds.

Table 9

PERCENTAGE OF MECs REPORTING “ROUTINELY” REQUESTING TOXICOLOGY TESTING, BY DRUG AND DRUG CLASS

≤50%	51%–75%		≥76%
Anticonvulsants	Antidepressants	Emerging synthetic opioids	Alcohol
Inhalants or volatiles	Antipsychotics	Fentanyl-related compounds (excluding fentanyl)	Amphetamines/methamphetamines
Over-the-counter medications	Barbiturates	Gabapentin	Cocaine
Piperazines	Benzodiazepines (excluding designer benzodiazepines)	Muscle relaxants	Fentanyl
Synthetic cannabinoids	Buprenorphine	Phencyclidine (PCP)	Heroin
Synthetic cathinones	Designer benzodiazepines (e.g., clonazolam, flualprazolam)	Phenethylamines	Marijuana/THC
Z-drugs			Opiates or opioids other than heroin and fentanyl

THC = tetrahydrocannabinol.

Source: NFLIS-MEC 2022 Survey.

Table 10

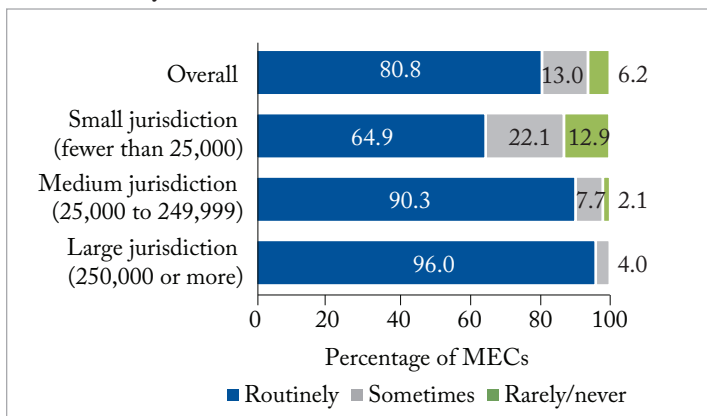
PERCENTAGE OF MECs REPORTING "ROUTINELY" REQUESTING QUANTITATIVE TESTING, BY DRUG AND DRUG CLASS

≤50%	51%–75%		≥76%
Anticonvulsants	Alcohol	Designer benzodiazepines	Muscle relaxants
Emerging synthetic opioids	Antidepressants	Fentanyl	Opiates or opioids
Inhalants or volatiles	Antipsychotics	Fentanyl-related compounds	Phencyclidine (PCP)
Over-the-counter medications	Barbiturates	Gabapentin	Phenethylamines
Piperazines	Benzodiazepines	Heroin	
Synthetic cannabinoids	Buprenorphine	Marijuana/THC	
Synthetic cathinones	Cocaine		
Z-drugs			

THC = tetrahydrocannabinol.

Source: NFLIS-MEC 2022 Survey.

Figure 1 Toxicology Testing Frequency for Fentanyl, by Jurisdiction Size^{1,2}

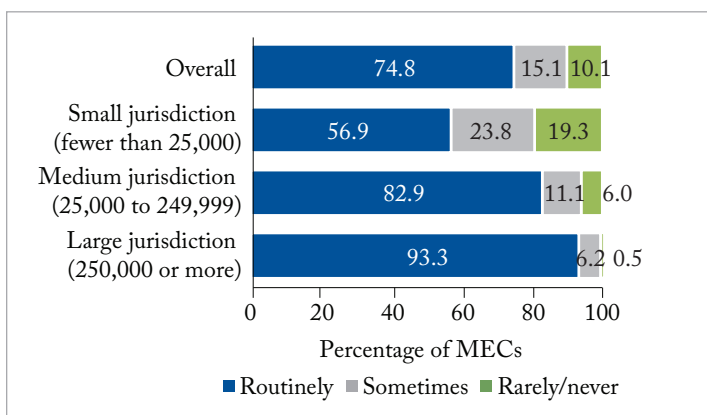


¹ Jurisdiction size is determined by the population of the jurisdiction.

² Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

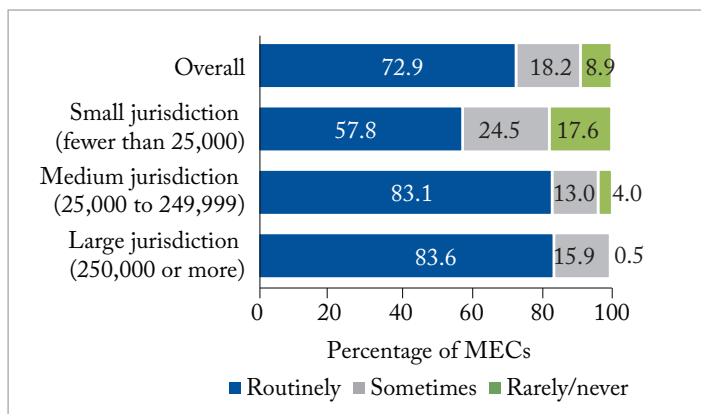
Figure 2 Quantitative Analysis Frequency for Fentanyl, by Jurisdiction Size¹



¹ Jurisdiction size is determined by the population of the jurisdiction.

Source: NFLIS-MEC 2022 Survey.

Figure 3 Toxicology Testing Frequency for Fentanyl-Related Compounds, by Jurisdiction Size^{1,2}

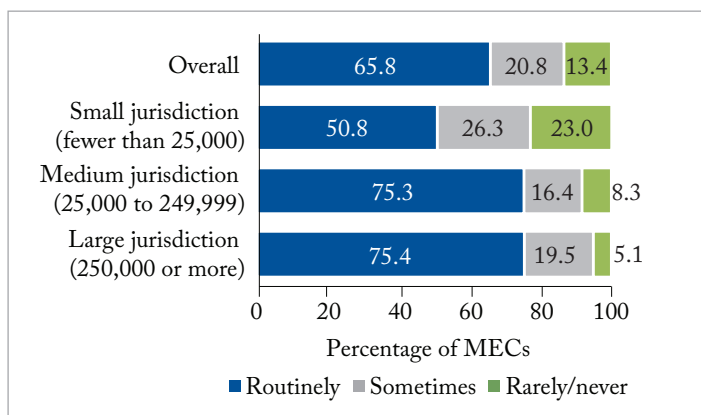


¹ Jurisdiction size is determined by the population of the jurisdiction.

² Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

Figure 4 Quantitative Analysis Frequency for Fentanyl-Related Compounds, by Jurisdiction Size^{1,2}



¹ Jurisdiction size is determined by the population of the jurisdiction.

² Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

Death Certificate Completion Practices

MECs were asked about death certificate completion practices for drug-related deaths, specifically about what they would list as the cause of death. Of MECs responding to this question, 42% reported that all specific drugs are listed on the death certificate, 16% indicated that all drug classes are listed, 15% indicated that a mixture of specific drugs and drug classes are

listed, 13% said that some specific drugs are listed, 11% indicated that no specific drugs or drug classes are listed or that the death certificate would reflect overdose only, and 4% indicated that some drug classes are listed ([Table 11](#)). When examined by jurisdiction size, the percentage of MECs reporting that all the specific drugs are listed on a death certificate increased with jurisdiction size, whereas the percentage that reported that all the drug classes are listed decreased with size.

Table 11 DEATH CERTIFICATE LISTING PRACTICES OF MECs, BY JURISDICTION SIZE¹

Death Certificate Listing Practice	Total		Large Jurisdiction (250,000 or More)		Medium Jurisdiction (25,000 to 249,999)		Small Jurisdiction (Fewer than 25,000)	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
All specific drugs are listed	511	41.8	120	59.7	233	45.0	158	31.3
All drug classes are listed	190	15.5	12	6.0	83	16.0	95	18.8
A mixture of specific drugs and drug classes are listed	185	15.1	28	13.9	86	16.6	71	14.1
Some specific drugs are listed	160	13.1	35	17.4	64	12.4	61	12.1
No specific drugs or drug classes are listed or only overdose	132	10.8	4	2.0	34	6.6	94	18.7
Some drug classes are listed	45	3.7	2	1.0	18	3.5	25	5.0
Total²	1,223	100.0	201	100.0	518	100.0	504	100.0

¹ Jurisdiction size is determined by the population of the jurisdiction.

² Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

Records Management Systems

Overview of Records Management Systems

MECs were asked to characterize their records management system as a computerized or manual system. Of the MECs responding to this question, 64% reported using manual recordkeeping for all records, some records, or manual records as a duplicated process. Of MECs using some variation of manual recordkeeping, 32% reported exclusively using a manual recordkeeping system, which is 20% of all responding MECs. Of all MECs that responded about their records management system, 52% reported having a fully electronic records management system (solely or with backup manual recordkeeping). Of those with an electronic records management system, 40% reported having a computerized system that is networked, which represents 31% of total responding MECs.

The percentage of MECs that reported having a computerized, networked system increased with jurisdiction size served. Similarly, the percentage of MECs that reported having a manual recordkeeping system decreased with jurisdiction size,

from 32% of MECs serving small jurisdictions to just 1% of those serving large jurisdictions. Overall, most MECs serving small and medium jurisdictions reported manual recordkeeping as their only type of recordkeeping system or used in conjunction with a computerized system ([Table 12](#)).

Of the 957 MECs with an electronic records management system (solely or in combination with manual recordkeeping) that described their system, 33% used an in-house system (data not shown). When compared by jurisdiction size served, the percentage of MECs with an in-house system varied only from 30% (large jurisdictions) to 35% (medium jurisdictions).

MECs that reported having a manual recordkeeping system were asked about plans to upgrade to computerized systems in the next three years (data not shown). Of those, a little more than one-quarter (29%) reported that they had plans to upgrade, including 37% of MECs serving medium jurisdictions and 25% of MECs serving small jurisdictions. Of MECs with fewer than 35 referred cases in 2021, 79% had no plans to upgrade in the next three years.

Off-Site Toxicology Laboratory Data Integration

MECs that had a partially or fully computerized system were asked about integration of toxicology results from off-site TLs into that system (data not shown). Of these 960 responding MECs, 25% reported incorporating these results via direct data input into their system, whereas 46% of MECs reported adding

only PDF or scanned images of results. In addition, 24% of MECs reported that they do not incorporate any results from off-site TLs into their system, and 5% reported that they do not send samples to an off-site TL at all. When examined by jurisdiction size, the percentage of MECs reporting that they do not incorporate off-site toxicology results increased as the size of the jurisdiction served decreased.

Table 12

CHARACTERIZATION OF MECs' RECORDS MANAGEMENT SYSTEMS, BY JURISDICTION SIZE¹

Characterization of Records Management System	Total		Large Jurisdiction (250,000 or More)		Medium Jurisdiction (25,000 to 249,999)		Small Jurisdiction (Fewer than 25,000)	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Computerized, networked system	383	31.4	113	56.8	169	32.6	101	20.2
Partially computerized system, some manual recordkeeping	329	27.0	35	17.6	129	24.9	165	32.9
Manual recordkeeping system	248	20.4	2	1.0	86	16.6	160	31.9
Fully computerized system with duplicated manual reports	196	16.1	44	22.1	103	19.9	49	9.8
Computerized, non-networked system	49	4.0	4	2.0	26	5.0	19	3.8
Other	13	1.1	1	0.5	5	1.0	7	1.4
Total²	1,218	100.0	199	100.0	518	100.0	501	100.0

¹ Jurisdiction size is determined by the population of the jurisdiction.

² Percentages may not add to totals because of rounding.

Source: NFLIS-MEC 2022 Survey.

Appendix A

The 2022 National Forensic Laboratory Information System (NFLIS) Medical Examiner and Coroner (MEC) Survey gathered information from all State and local MECs in the United States. RTI International¹ identified 2,152 MECs that were responsible for medicolegal death investigations. This number includes MECs that are owned by State, county, and municipal governments and those owned and operated by regional entities. This appendix describes the data collection and methodology used to collect survey data from these MECs.

Instrumentation

The NFLIS-MEC Survey was last fielded in 2017 and referenced data from 2016. As part of the instrument development and design process, DEA asked RTI to hold an expert panel and conduct cognitive testing for the NFLIS-MEC 2022 Survey instrument, requesting data from 2021. Two panels, totaling seven MEC personnel, were convened in June 2021 to discuss changes to the field of medicolegal death investigation and topics important to MECs. The instrument was then updated based on the panel's recommendations and conversations between RTI and DEA.

Cognitive interviews were then conducted with seven additional MEC employees using the revised instrument to identify potential issues with respondent comprehension and to ensure capture of all pertinent information. Diversity of participants in this testing was considered, with county and State MECs representing the four U.S. census regions.

Data Collection Strategy

A multimode approach was implemented that allowed for web, paper, and telephone options for MECs responding to the survey. Each survey had a unique identifier that linked it to the appropriate responding MEC. To access the web survey, login credentials and passwords were created and included in the lead and follow-up letters sent to the MEC primary contacts.

Data collection began in August 2022 with the verification calling effort to ensure that appropriate contacts were documented before the September mailing and were eligible for the survey. The active survey data collection period lasted from October 2022, when the 2,120 survey packets were mailed, and ended when the web survey portal closed in March 2023. Surveys received through the survey website or via mail through March 31, 2023, were included in the final report data set.

¹RTI International is a registered trademark and a trade name of Research Triangle Institute. RTI is the DEA contractor for NFLIS.

The initial survey packets were sent to the primary contacts identified after the verification call effort on October 4, 2022, and included lead letters from DEA and RTI printed on the appropriate letterhead. The RTI letter contained directions for survey completion (including username and login ID) and information for whom to contact with questions. The DEA letter included information about the NFLIS program and encouraged respondents to complete the survey. The two lead letters, along with the paper survey and a prepaid reply envelope for MECs that requested them, were mailed together. Included in the initial mailing was a token of appreciation: a multi-tool key chain with the NFLIS logo.

Two weeks after mailing the lead materials, RTI mailed reminder letters to nonresponding MECs' primary points of contact to encourage response. Two weeks after the reminder letters were mailed, an email was sent to nonresponding MECs. The second mailed reminder on November 9 included a paper survey with a prepaid reply envelope for all nonrespondents. One additional mailed (via USPS) reminder letter and accompanying reminder email were sent before the start of nonresponse prompting calls to reduce the number of nonrespondents requiring a phone call.

In November 2022, a first wave of survey prompting calls was made to MECs that were being actively recruited for participation in NFLIS-MEC. These MECs received a single prompting call during this period. From November 29 to December 16, 2022, a second wave of survey prompting calls occurred for all partial completers (i.e., started the survey but did not complete it) and nonrespondents. A team of trained interviewers contacted MECs (1) to encourage nonresponding MECs to complete a survey via mail or the web, (2) to provide a survey link via email to the primary points of contact so that they could immediately complete the survey via the web, and (3) to address any challenges or issues regarding survey completion. MECs with nonworking phone numbers were searched online for updated contact information. MECs that refused were not further contacted by phone.

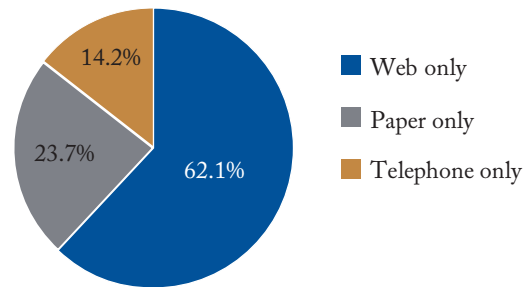
Response Rates and Survey Mode

Of the 2,071 MECs determined to be eligible for the survey, a total of 1,606 or 77.5% responded. Of those, 78.6% (n=1,262) completed the full survey, and 21.4% (n=344) completed only items identified as critical.

Figure A.1 presents all MEC response rates by survey mode (i.e., web only, mail only, telephone only, or some combination), including MECs that completed the full survey and MECs that completed the critical item survey. Of all survey respondents, 62% provided web-only responses, 24% provided paper-only responses, and 14% provided phone-only responses.

Of respondents that completed the *full* survey, 75% provided web-only responses, and 25% provided paper-only responses. No MECs that completed the full survey provided responses via phone. Of all respondents that completed the *critical item* survey, 66% provided phone-only responses, 20% provided paper-only responses, and 15% provided web-only responses.

Figure A.1 Response Rates, by Survey Mode



Source: NFLIS-MEC 2022 Survey.

Administrative Information Results

When responding MECs were assessed by region, more than three in four MECs in the West and Northeast responded to the survey (87.4% and 84.4%, respectively). Nearly equal proportions of MECs in the Midwest and South participated (74.5% and 75.5%, respectively).

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2022 Medical Examiner and Coroner Survey Report



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