



U.S. Department of Justice
Office of Justice Programs

Presented by
Matthew Durose
Supervisory Statistician
January 10, 2017

Findings from the Recent Census of Publicly Funded Forensic Crime Laboratories



BUREAU OF JUSTICE STATISTICS

Project history

- National Survey of DNA Crime Laboratories
 - 1998 & 2001
- Census of Publicly Funded Forensic Crime Laboratories*
 - 2002, 2005, 2009, & 2014
- Recent findings available in two reports (www.bjs.gov)
 - *Publicly Funded Forensic Crime Laboratories: Resources and Services, 2014*
 - *Publicly Funded Forensic Crime Laboratories: Quality Assurance Practices, 2014*

*Includes agencies that employ one or more full-time scientists with a minimum of a bachelor's degree in a natural science or closely related field whose principal function is examining physical evidence in criminal matters and providing reports and testimony to courts regarding such evidence.

Census of Publicly Funded Forensic Crime Laboratories, 2014

Data collection

- Census administered to 409 federal, state, and local crime labs in 2015.
- Questions focused on workload and operations of crime labs during 2014.
- 88% (360) crime labs provided responses.
- Statistical weights developed to adjust for non-response and produce national estimates.
- Project included a separate pilot study of federal and state digital evidence labs.

Census of Publicly Funded Forensic Crime Laboratories

Resources and Services

- Staffing
- Annual operating budget
- Number of requests for forensic services received, completed, and backlogged
- Procedures used to complete work
- Outsourcing of forensic services

Census of Publicly Funded Forensic Crime Laboratories

Quality Assurance Practices

- Lab accreditations
- Analyst certifications
- Written code of ethics
- Written standards for performance expectations
- Proficiency testing

Census of Publicly Funded Forensic Crime Laboratories

Number of full-time employees

Type of jurisdiction	2002	2005	2009	2014
All labs	11,000	12,200	13,100	14,300
Federal	2,000	2,400	2,300	2,100
State	5,300	5,600	6,100	6,600
County	1,900	2,200	2,500	2,900
Municipal	1,900	2,000	2,200	2,700
Average number of employees per lab	31	31	32	35
Number of labs	351	389	411	409

Note: Estimates include both full-time and part-time employees, with a weight of 0.5 assigned to part-time employees.

Census of Publicly Funded Forensic Crime Laboratories

Staffing and Budgets

- Of the 14,300 full-time employees in 2014 –
 - 60% forensic analysts/examiners
 - 13% managers
 - 9% clerical support
 - 7% technical support
 - 6% crime scene technician
 - 5% other employees.
- Total budget for all crime labs in 2014 was \$1.7 billion, compared to \$1 billion in 2002.
- 4 in 10 crime labs charged fees for completing forensic services.

Census of Publicly Funded Forensic Crime Laboratories

Measuring workload

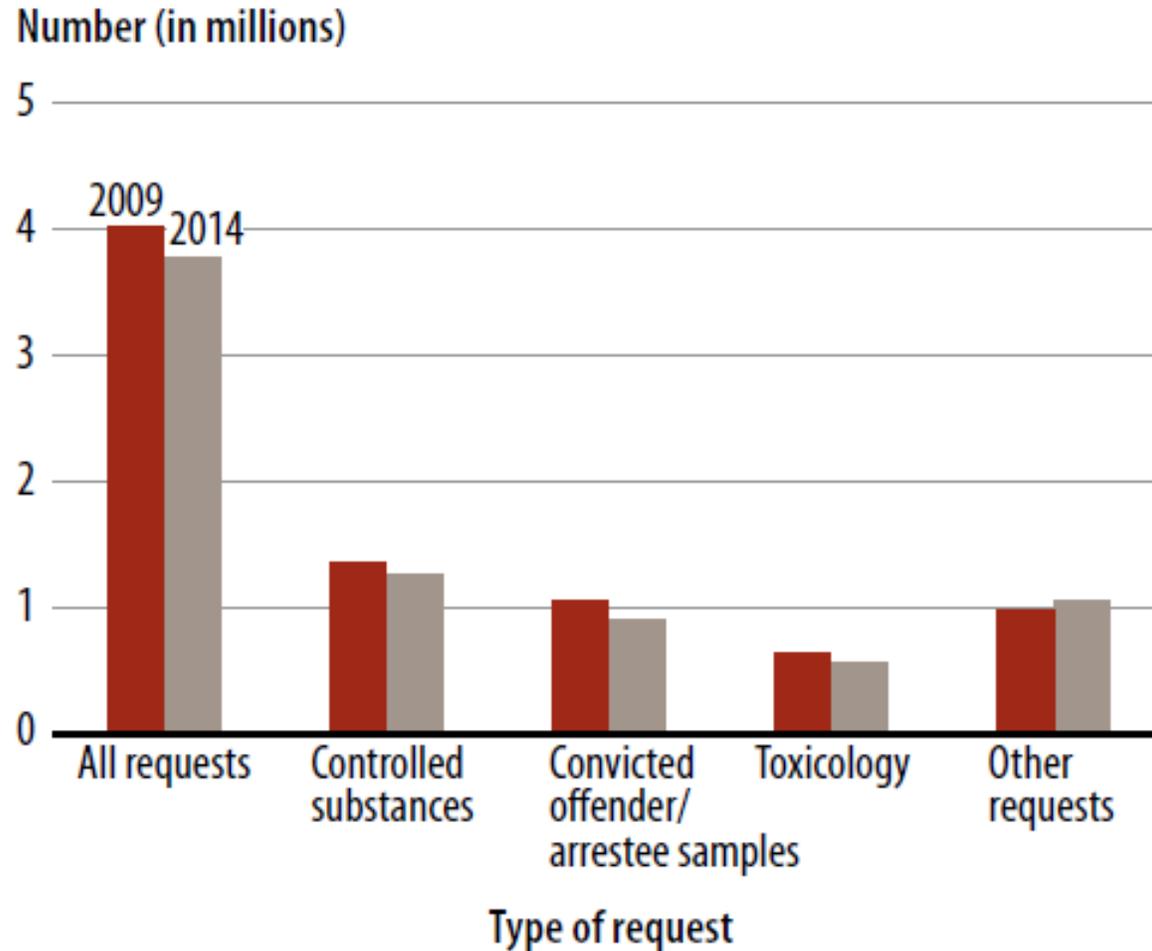
- Number of requests for forensic services
 - New requests received in 2014
 - Requests completed in 2014
 - Pending requests at yearend 2014
 - Backlogged requests at yearend 2014

Request - Submission of physical evidence from a criminal case. A case can involve multiple requests for different types of services.

Backlogged request – A pending request not completed for 30 days or more.

Census of Publicly Funded Forensic Crime Laboratories

Nearly 4 million requests for forensic services received in 2014



Note: “Other requests” include trace evidence, firearms/toolmarks, forensic biology casework, latent prints, digital evidence, questioned documents, and impressions.

Census of Publicly Funded Forensic Crime Laboratories

570,100 requests backlogged at yearend 2014, down from 895,500 at yearend 2009

Reduction in backlog of offender/arrestee DNA samples led to overall decline

Type of request	2009		2014	
	Number	Percent	Number	Percent
All requests	895,500	100%	570,100	100%
Controlled substances	139,200	16	213,700	37
Digital evidence	1,600	--	7,800	1
Firearms/toolmarks	48,300	5	51,100	9
Forensic biology casework	103,500	12	107,800	19
Forensic biology from convicted offender/arrestee samples	502,500	56	64,800	11
Impressions	6,100	1	2,400	--
Latent prints	49,500	6	69,400	12
Questioned documents	2,600	--	800	--
Toxicology	27,600	3	40,000	7
Trace evidence	14,700	2	12,200	2

-- Less than 0.5%.



Census of Publicly Funded Forensic Crime Laboratories

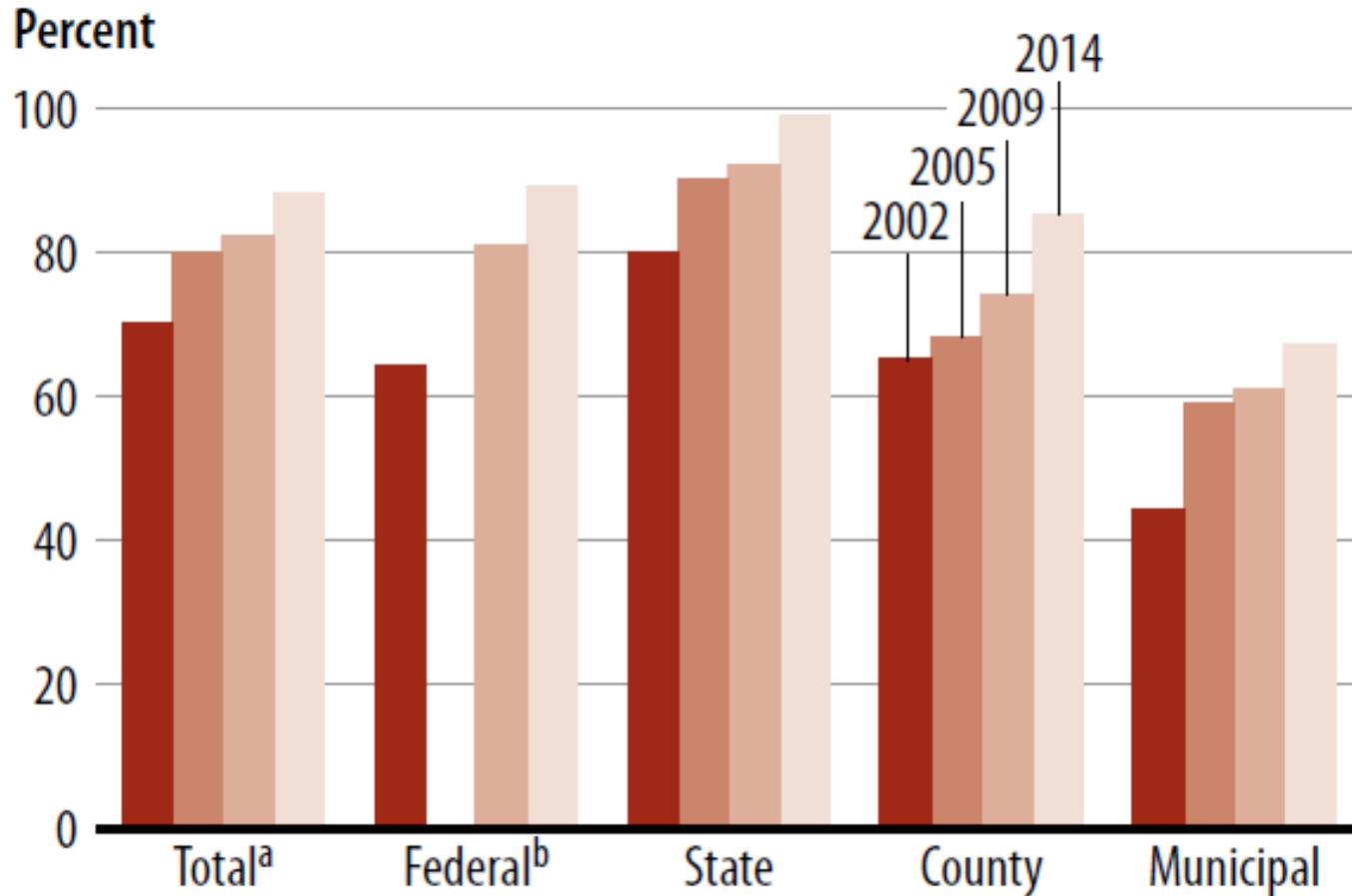
Percent of crime labs that outsourced forensic requests

Type of jurisdiction	2002	2005	2009	2014
All labs	40%	47%	28%	38%
Federal	17	--	20	28
State	31	39	23	23
County	61	68	40	54
Municipal	64	57	32	60
Number of labs	351	389	411	409

--Percentage not presented for federal labs in 2005 due to low response rate.

Census of Publicly Funded Forensic Crime Laboratories

88% of crime labs accredited in 2014, up from 70% in 2002



^a Percentage for 2005 includes federal labs.

^b Percentage not presented for federal labs in 2005 due to low response rate.

Census of Publicly Funded Forensic Crime Laboratories

Types of lab accreditations in 2014

Type of jurisdiction	Any accreditation	ASCLD/LAB, Legacy ^a	ASCLD/LAB, International ^a	FQS-International ^b	Other
All labs	88%	9%	73%	10%	5%
Federal	89	--	65	9	22
State	99	8	90	8	2
County	85	10	65	9	7
Municipal	67	14	43	15	1

Note: Detail does not sum to total because a lab could be accredited by more than one organization.

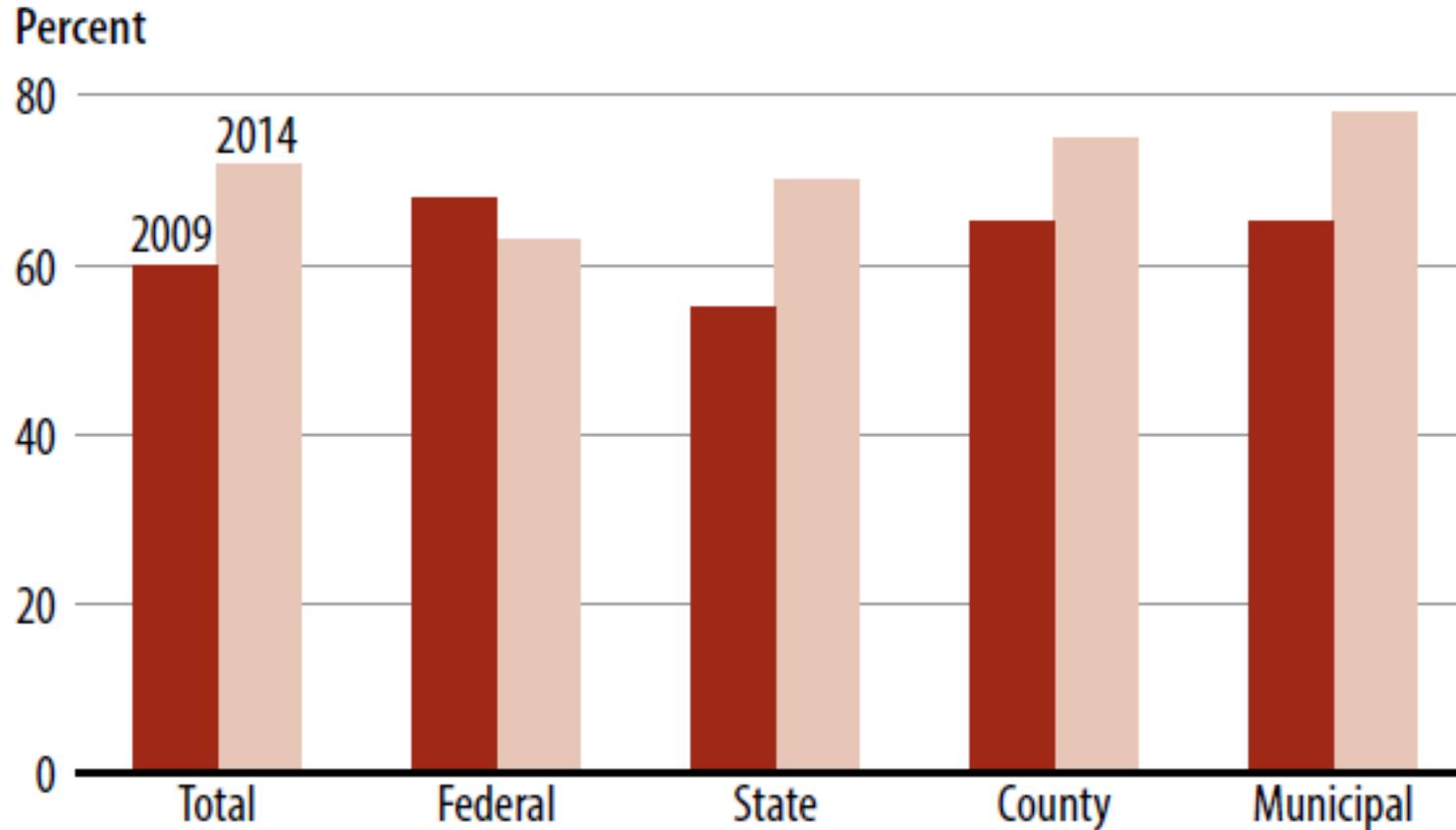
^a American Society of Crime Laboratory Directors/Laboratory Accreditation Board.

^b Forensic Quality Services.

-- Less than 0.5%.

Census of Publicly Funded Forensic Crime Laboratories

7 in 10 crime labs employed at least one externally certified analyst in 2014



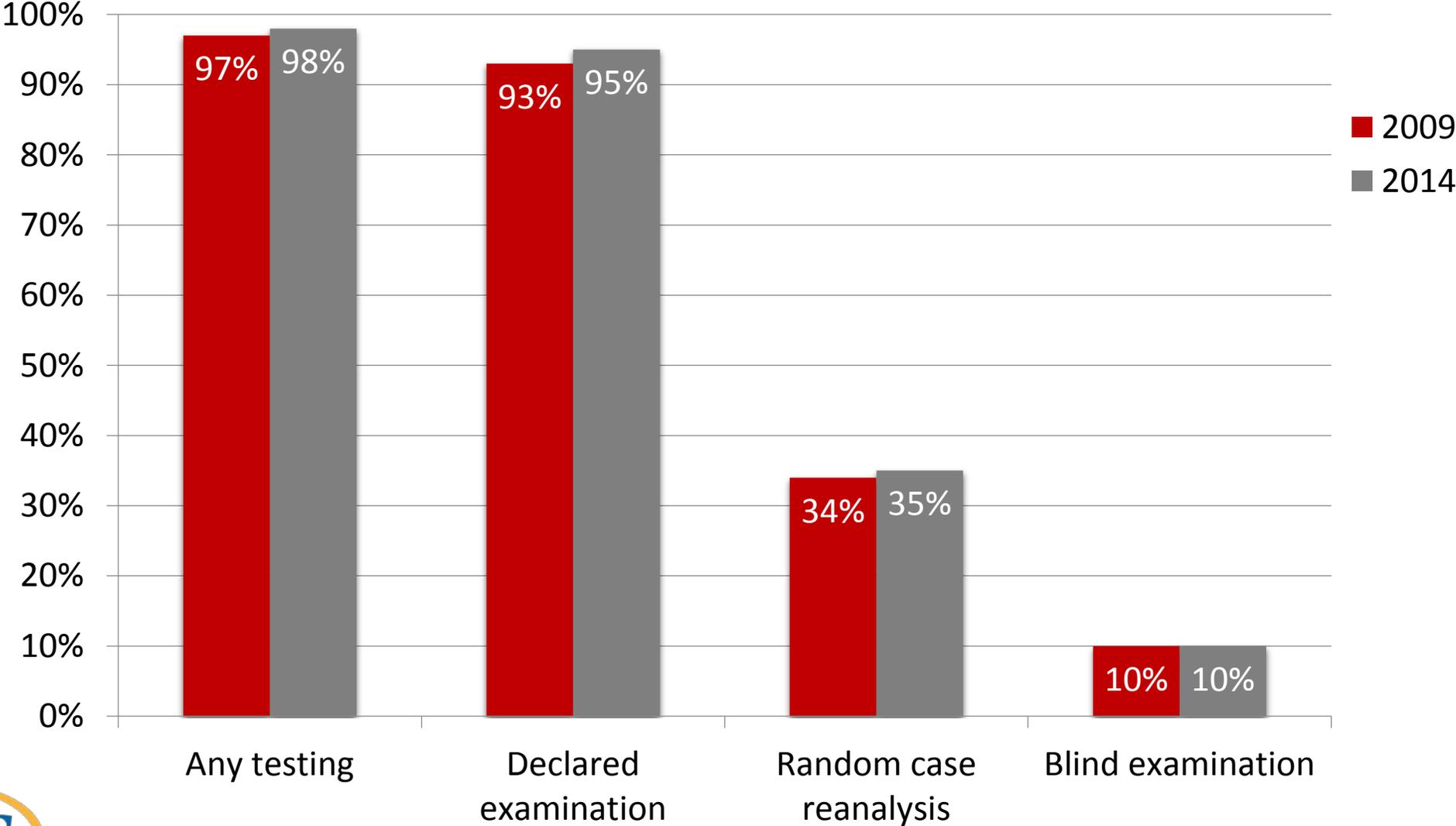
Census of Publicly Funded Forensic Crime Laboratories

Written code of ethics and standards

- Among the 409 publicly funded crime labs in 2014 –
 - 94% maintained a written code of ethics
 - 75% had written standards for performance expectations.

Census of Publicly Funded Forensic Crime Laboratories

Percent of crime labs that conducted proficiency testing



Contact Information

Matthew Durose
Supervisory Statistician
Bureau of Justice Statistics
Matt.Durose@usdoj.gov
202-307-0765

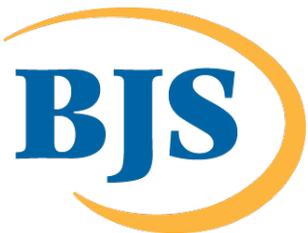


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Presented by
Anthony Whyde
Statistician
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Upcoming Data Collections:

2017 LEMAS Forensic Science Supplement
and
Census of Medical Examiner and Coroner Offices



BUREAU OF JUSTICE STATISTICS

Overview

2017 LEMAS Forensic Science Supplement (FSS)

- Purpose
- Key estimates
- Schedule

Census of Medical Examiner and Coroner Offices (CMEC)

- Purpose
- Key estimates
- Schedule

2017 LEMAS Forensic Science Supplement (FSS)- Purpose

- Understand the scope of forensic activity carried out by law enforcement agencies.
- Explore staffing and agency resources committed to forensic services.
- Learn about the accreditation and certification standards for those engaged in providing forensics services.

2017 LEMAS Forensic Science Supplement (FSS)- Key estimates

- Agency characteristics
- Scope of forensic activity undertaken within the agency
- Staffing
 - Number
 - The use of sworn and non-sworn personnel
- Standards
 - General - agency accreditation
 - Individual - training, certifications, continuing education
- Process for submitting forensic evidence
 - Identify crime labs used for analysis
- For agencies that do not have any forensics units
 - Who handles collecting and analyzing forensic evidence

2017 LEMAS Forensic Science Supplement (FSS)- Schedule

- Pretesting
 - Feasibility – January 2017
 - Cognitive interviews – February 2017
- OMB
 - Clearance - August 2017
- Data collection
 - October 2017 to April 2018
- Data processing
 - April 2018 to June 2018
- Analysis and reporting
 - June 2018 to November 2018

Census of Medical Examiners and Coroner Offices (CMEC)- Purpose

- 2,400 ME/C Offices are responsible for determining the cause and manner of death and operate at the State and Local level (e.g. county, city).
- ME/C offices investigate deaths that are sudden and unexpected, and all suspicious/violent deaths.
- 2009 NAS report ***Strengthening Forensic Science in the U.S.: A Path Forward***
 - Several recommendations to improve the quality and practice of ME/C activities.
- Survey will provide updated ME/C data for national MDI activities that will inform policy and decision-making at the Federal, State, Local, Tribal, and Territorial levels.



Bureau of Justice Statistics Special Report

June 2007, NCJ 216756

Medical Examiners and Coroners' Offices, 2004

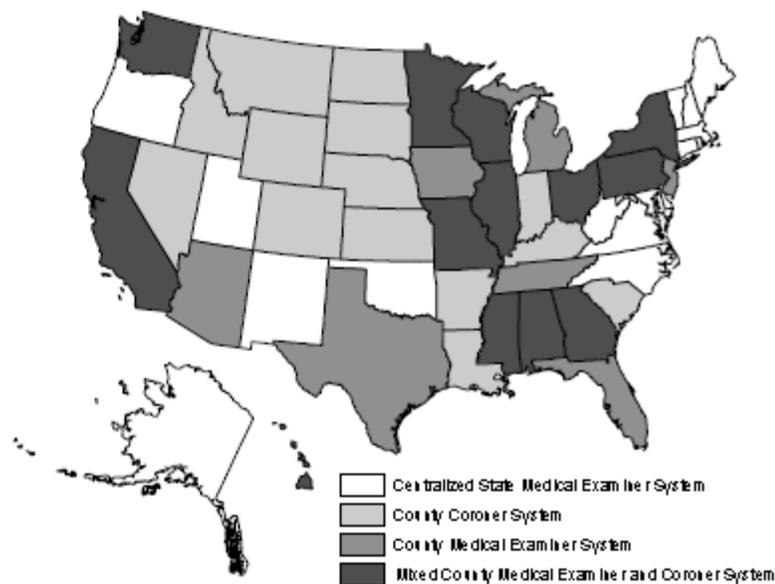
Matthew J. Hickman, Ph.D.
Kristen A. Hughes, MPA
Bureau of Justice Statistics

Kevin J. Strom, Ph.D.
Jeri D. Roper-Miller, Ph.D., DABFT
RTI International

About 2,000 medical examiners and coroners' (ME/C) offices provided death investigation services across the United States in 2004. These offices were responsible for the medicolegal investigation of death. They may conduct death scene investigations, perform autopsies, and determine the cause and manner of death when a person has died as a result of violence, under suspicious circumstances, without a physician in attendance, or for other reasons.

As of 2004, 16 States had a centralized statewide medical examiner system (see map). Fourteen States had a county coroner system, 7 had a county medical examiner system,

Death investigation systems in the United States, 2004



BJS conducted a Census of 2,000 ME/C offices in 2004.

- ME/C systems
- Workload
- Personnel
- Types of deaths investigated

Census of Medical Examiners and Coroner Offices (CMEC)- **Key estimates**

- Collecting data similar to the 2004 BJS census- trends analysis
 - Personnel
 - Budgets
 - Workload
 - Number of unidentified human decedents handled by ME/C offices
- Number of examinations performed and autopsies conducted, and the number of cremations.
- Forensic capabilities: DNA testing, toxicology, fingerprinting, advanced imaging techniques
- Functions outsourced
- Frequency of testing and case circumstances
- National Missing and Unidentified Persons System (NamUs)

Census of Medical Examiners and Coroner Offices (CMEC)- **Key estimates**

- Distance to nearest autopsy facility
- Rationale regarding why certain deaths were referred to ME/C offices, but were not accepted, investigated or autopsied
- Number of certified personnel
- Accredited and whether non-accredited offices will pursue accreditation
- Co-located with medical schools/other agencies and whether resources are shared regionally
- Records and evidence retention policies

Census of Medical Examiners and Coroner Offices (CMEC)- **Schedule**

- Publish solicitation
 - Winter 2017
- Award Grant
 - Spring 2017
- Develop information collection materials
 - Summer 2017
- Data collection
 - Summer – Winter 2017
- Data Processing
 - Winter 2018 – Spring 2018
- Analysis and reporting
 - Spring 2018 – Fall 2018

Contact Information

Anthony Whyde

Statistician

Bureau of Justice Statistics

Anthony.Whyde@usdoj.gov

202-307-0765