

Issues in the Laboratory



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Topics

- LIMS and Data Management
- Prioritization
- Technology Implementation

- Research questions and implications for future social science research

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LIMS and Data Sharing

75% (2002) → 84% (2009)

2009

State Labs → 97%

Municipal → 56%

Source: Bureau of Justice Statistics, Census of Publicly Funded Forensic Crime Laboratories, 2009.

LIMS and Data Sharing

Functions performed by laboratory information management systems (LIMS) within publicly funded forensic crime labs, 2009

LIMS function	Percent of labs with function
Generating reports	92%
Tracking by—	
Item	89%
Request	90
Law enforcement case number	95
Lab case number	97
Chain of custody	90%
Monitoring backlog	88%
Calculating turnaround time	84%
Tracking criminal case status	31%
Interfacing with lab instrumentation	24%

Note: Percentages are based on labs that reported having a LIMS.

Source: Bureau of Justice Statistics, Census of Publicly Funded Forensic Crime Laboratories, 2009.

Case Management

How lab analysts learn if a case has been closed or resolved prior to DNA evidence testing:

- 53.8% I do not obtain information on case status prior to DNA typing
- 36.5% I will contact investigators to check case status before DNA typing
- 26.9% Lab is contacted by submitting agency when case is closed
- 21.5% I can access system to find out is case is closed
- 15.4% I will contact prosecutor's office to check case status before DNA typing
- 5.8% I do not know how lab learns that a case has been closed
- 0% I know case is closed automatically through system

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Prioritization

- Blueprint Survey
 - 20 based on trial date
 - 13 seriousness of the crime
 - 4 probative value
 - 7 suspect/no suspect
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- Data Perspective
 - Fidelity
 - Documented

Prioritization

- Lack of discretion, written policy
- Violent crime high priority – LEA and Lab
- Role of context

Topics

- LIMS and Data Management
- Prioritization
- Division of Labor
- Technology Implementation

Technology Implementation

- Individual Pieces
 - Purchasing
 - Installation
 - Integration
 - Training
 - Validation
 - Maintenance
 - Performance
- System Changes
 - Multi-level buy-in
 - Personnel Changes
 - Broad Institutional Knowledge

Research Issues

- How will current LIMS configuration impact ability to do research?
- Evaluate the innovators?
- How does implementation timing impact the effectiveness of social science in forensic science research?