

The Current State of Affairs and Trends in the Crime Laboratory

North Carolina State Bureau of Investigation
Deputy Assistant Director of the Crime Laboratory
Troy Hamlin

I'm Telling Ya "I DON'T GET NO RESPECT"

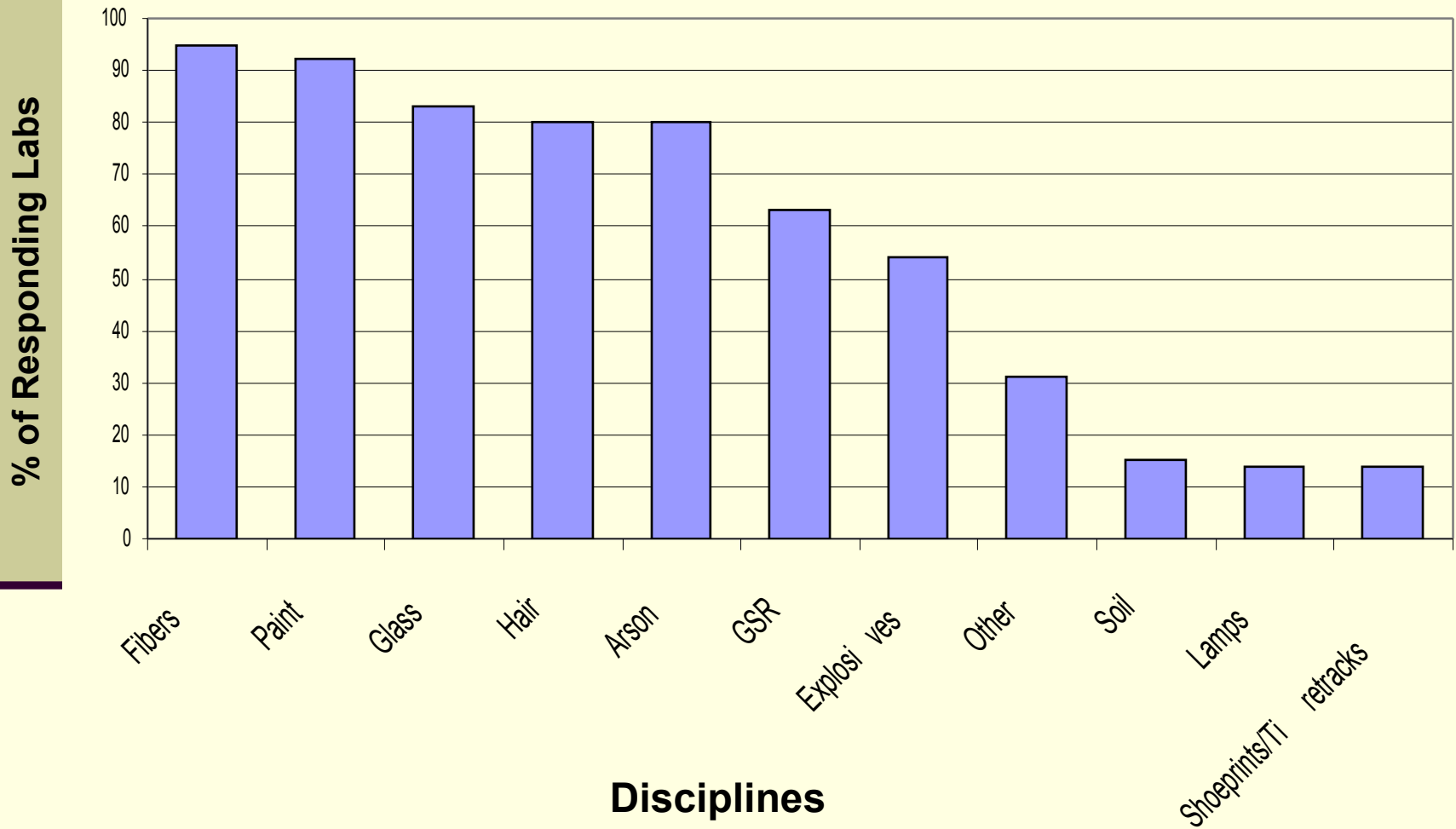


- Rodney Dangerfield

The Trace Evidence section examines a wide variety of evidence not elsewhere analyzed.

*180 day study report - ASCLD

Trace Evidence Disciplines



Status of Trace Evidence Services

- 24% Decreased services.
- 34% Increased services.
- 42% Offerings have remained the same.

Status of Trace Evidence Submissions

44% Decreased submissions

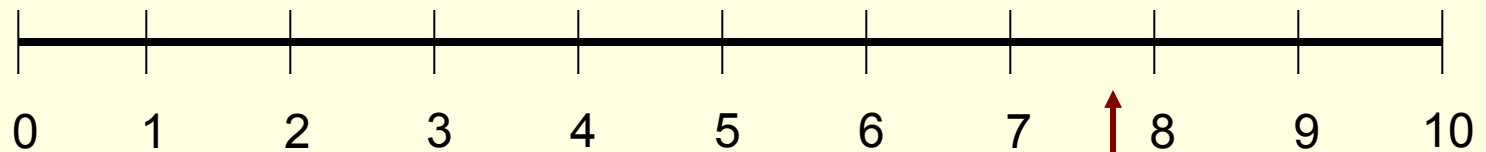
40% Increased submissions

16% Submissions remained the same

Impact of DNA on Trace Evidence

Little Impact

Great Impact



3-10
Range of Impact

7.7
Average Impact

The Role of Trace Evidence

Is it diminishing in the eyes of law enforcement?

62% Yes 38% No

Reasons:

- They are not aware of what we can do
- They are not familiar with collection techniques and what to collect
- Collection is time consuming

Other Factors Impacting Trace

80% Other impacting factors, to include:

- Decreasing Budgets
- Lack of trained personnel
- Lack of availability of training and continuing education classes

20% No other impacting Factors

Strength of Conclusions

| | Increased | Decreased | Remained the Same |
|-------|-----------|-----------|-------------------|
| Hair | 0 | 46% | 54% |
| Fiber | 5% | 0 | 95% |
| Paint | 6% | 0 | 94% |
| Glass | 6% | 0 | 94% |

Availability of Resources

Do you have sufficient instrumentation?

62% Yes

38% No

Do you have sufficient training opportunities?

52% Yes

48% No



Challenges...

THE DECATUR DAILY

online edition **News**

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Forensics to cut trace analysis due to budget

“Trace requests make up less than one percent of the total cases.”

“Authorities say cases usually are not solved on trace evidence alone.”

“More than \$500,000 in new equipment would be needed to continue the trace program.”

“Is it wise to the tax payers of the state to continue with this when we have rapes, murders, and burglaries that can be solved by DNA?”

Typical Equipment Needs (Costs)

| Section | Estimated Cost |
|-------------------------------|----------------|
| Controlled Substances | \$454,000 |
| Trace | 750,000 |
| Firearms | 74,350 |
| Questioned Documents | 90,000 |
| Latent Prints (without laser) | 116,625 |
| Toxicology | 153,800 |
| Arson | 200,500 |

ASCLD
180 Day Study

The Curse of Numbers

Cases vs. Items

“All administrators want is numbers”

“Many trace analysts are notoriously slow”



Leadership...

Lab Management

City and county laboratories are often under the control of Law Enforcement. The agency head may be a sheriff or police chief who may not be fully aware of the needs of the forensic laboratory.

-Public Forensic Laboratory Budget Issues

Federal DNA Grants





Issues to Ponder...

The Future of Trace Evidence:

Increasing Significance

“Could Have”

The Future of Trace Evidence:

Databases

- PDQ
- Glass
- Fibers

The Future of Trace Evidence:

Statistics:

“The Tyranny of Numbers”

‘If statistics are to be applied to trace evidence they must be applied in a way appropriate to the discipline, unbiased in interpretations and accessible to the trier of fact.’

-- Max Houck

The Future of Trace Evidence:

Improved Analysis / Collection Techniques

- LA - ICP-MS of glass
- Static Secondary Ion Mass Spectrometry (SIMS)
- Teflon Wipes
- micro – XRF
- micro - XRD

The Future of Trace Evidence...

- SWGMAT Guidelines
- High Throughput
- Consolidation of Trace
- Trace Evidence Web Site
- Take advantage of Management Opportunities

The Future of Trace Evidence: Raising Awareness – Advertising!

- Police

- Attorneys

- Laboratory Administrators

**** 62% of labs reported that Trace Evidence has diminished in the eyes of law enforcement!**

Final Thought...

Trace Evidence should be viewed as a complimentary aspect of evidence analysis – it shouldn't be regarded as “last resort evidence.”

Contact Information:

Troy Hamlin

919-662-4500

thamlin@ncdoj.gov



Long Live Trace!