

# State Environmental Laboratories

Survey Results  
APHL Annual Meeting  
2007

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# APHL/EPA Cooperative Agreement

- Signed 3-year agreement to unite and support State Environmental Laboratories
- APHL Environmental Health Committee formed an Environmental Laboratory Sub-Committee

# Why a Survey?

- Many differences in:
  - Missions
  - Services
  - Funding
  - Capabilities and Capacities
  - Certifications
- Results will serve as a benchmark for measuring change, identifying commonalities . . .
- Survey conducted by volunteer Intern

# Survey Topics

- Demographics
- Equipment/ IT Inventory
- Accreditation/ Certification
- Policy
- Research/ Communication
- Funding
- Workforce

# Survey Summary

## Participants

72 State Environmental Laboratories  
59 respondents (80%)

## Survey field time and dates

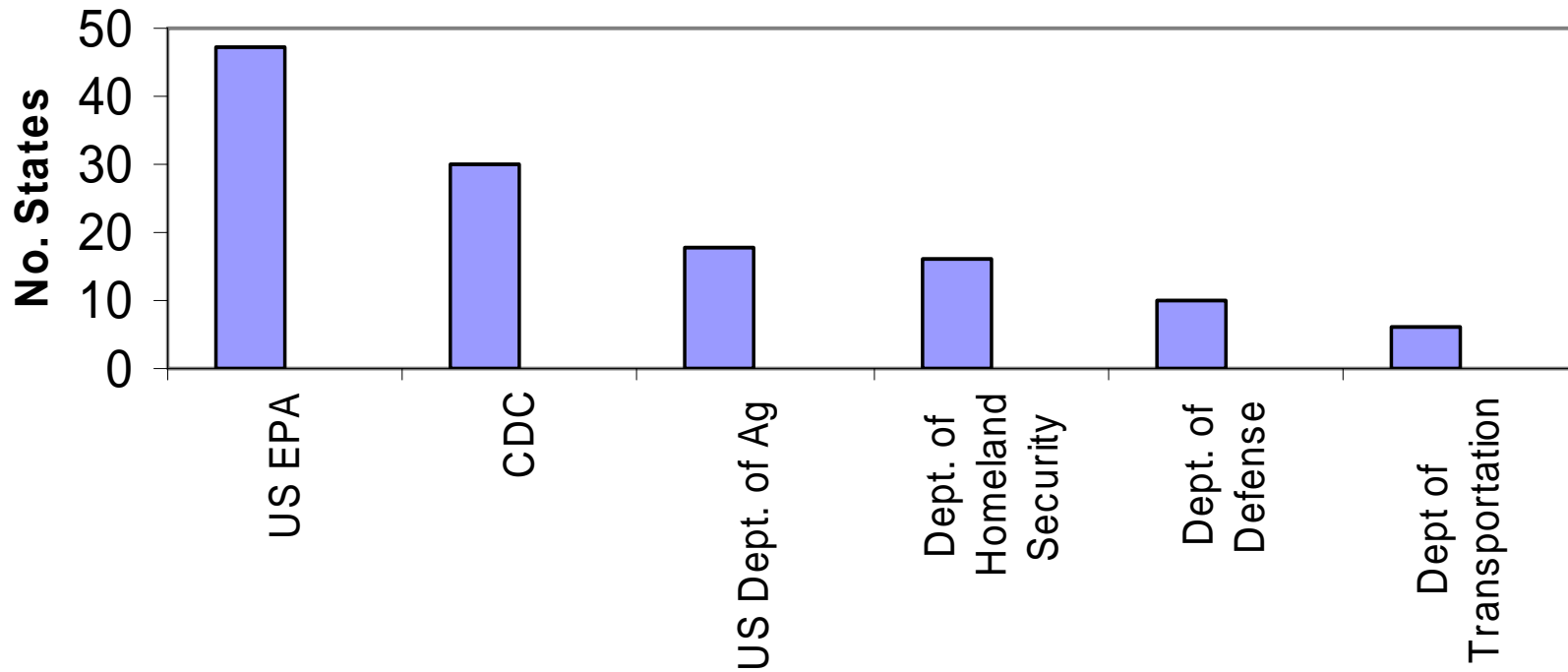
Launch Date: November 21, 2006  
Data collection period: 3 Months

# Who are the Clients?

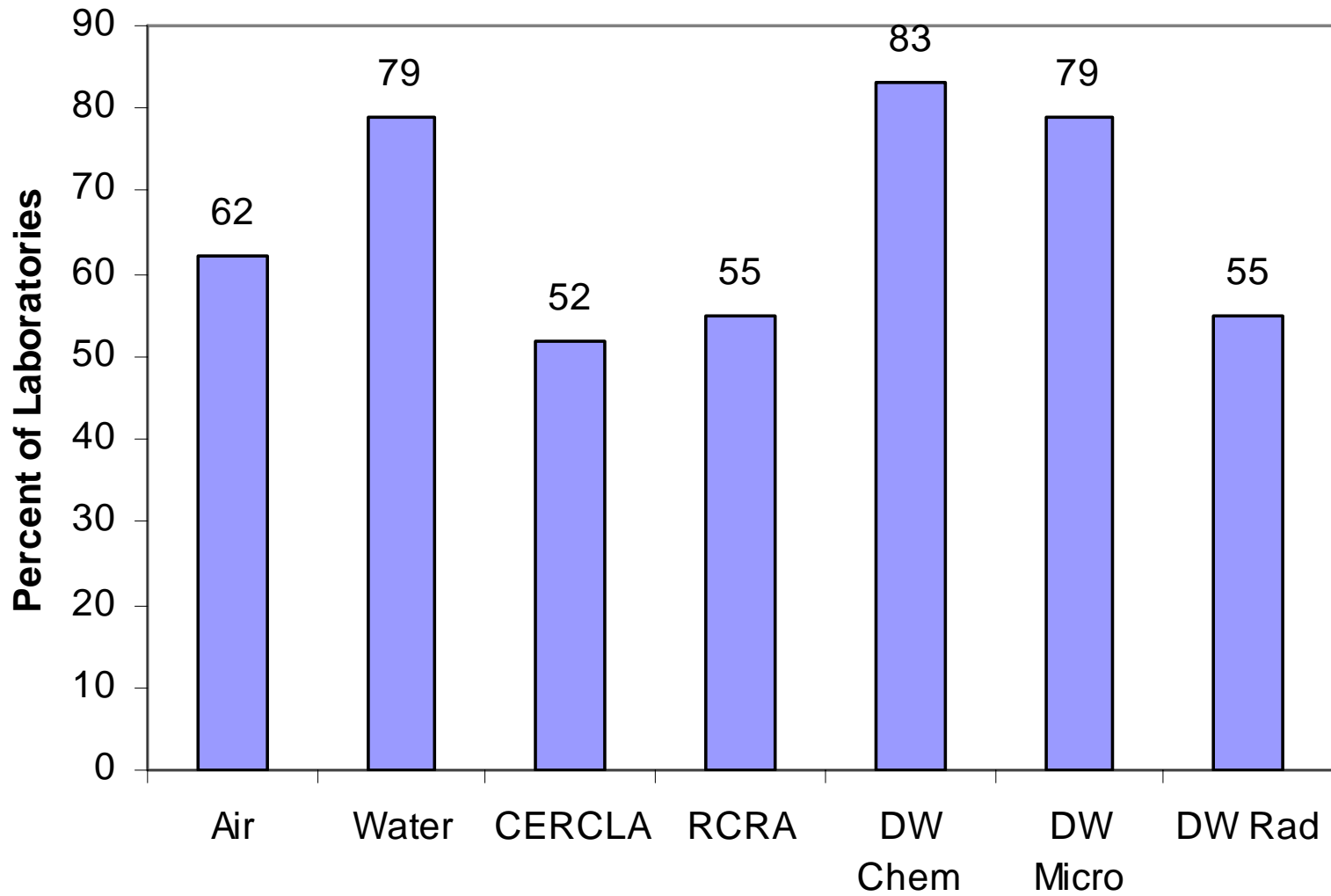
- State Agencies
- Federal Agencies
- EPA Programs

# Federal Agencies

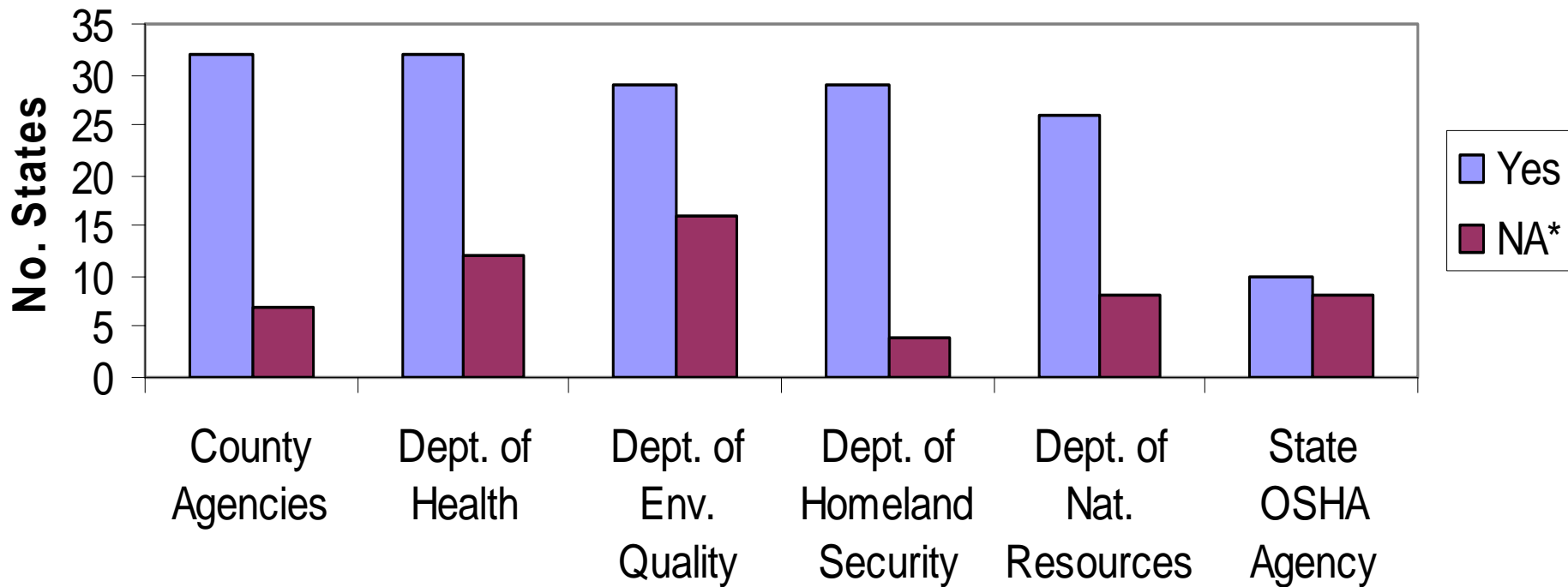
## Relationship w/ Federal Agencies



## EPA Programs

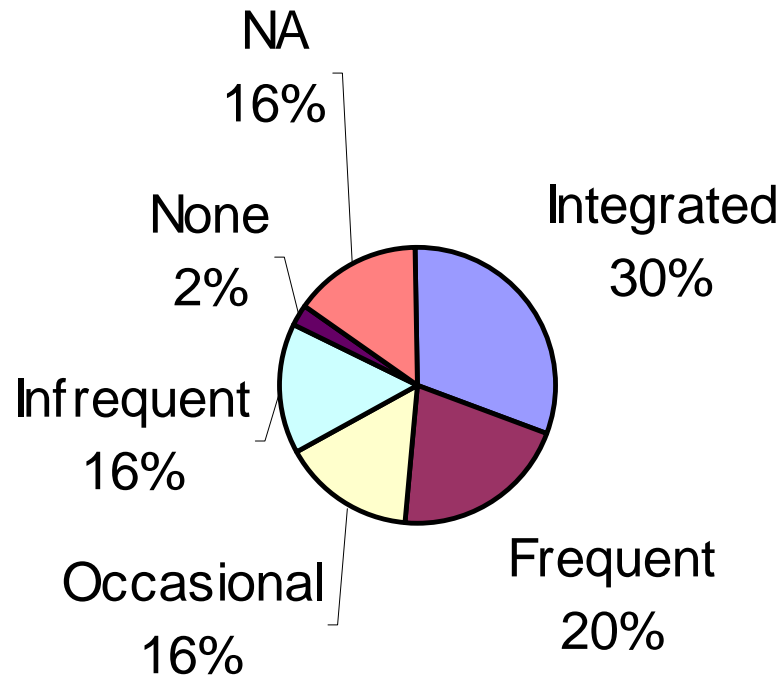


## Relationships Developed



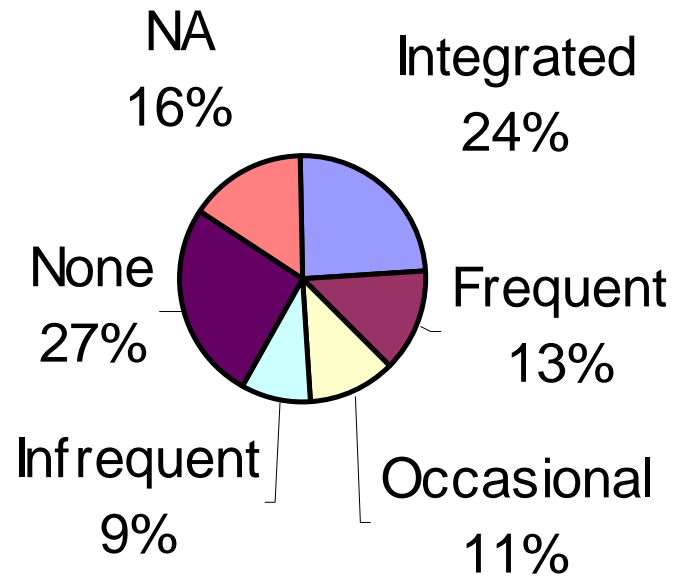
# State Agency Interaction

## Drinking Water



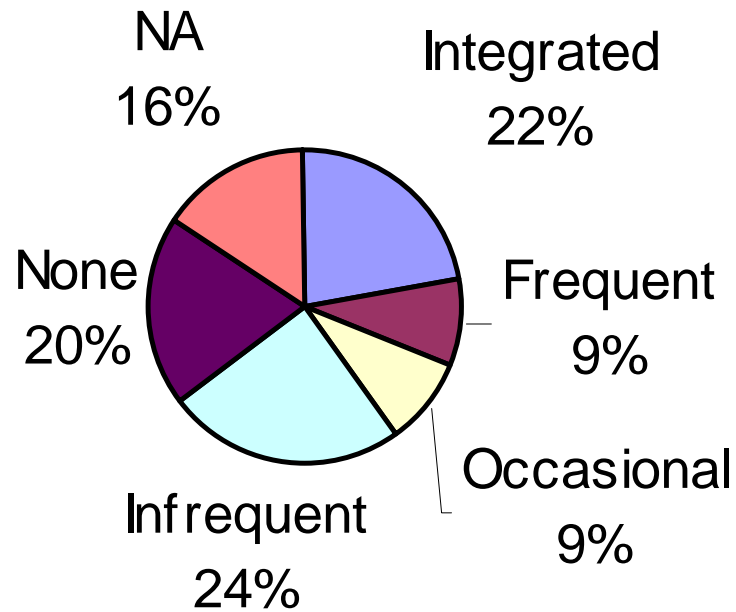
# State Agency Interaction

## Clinical Laboratory



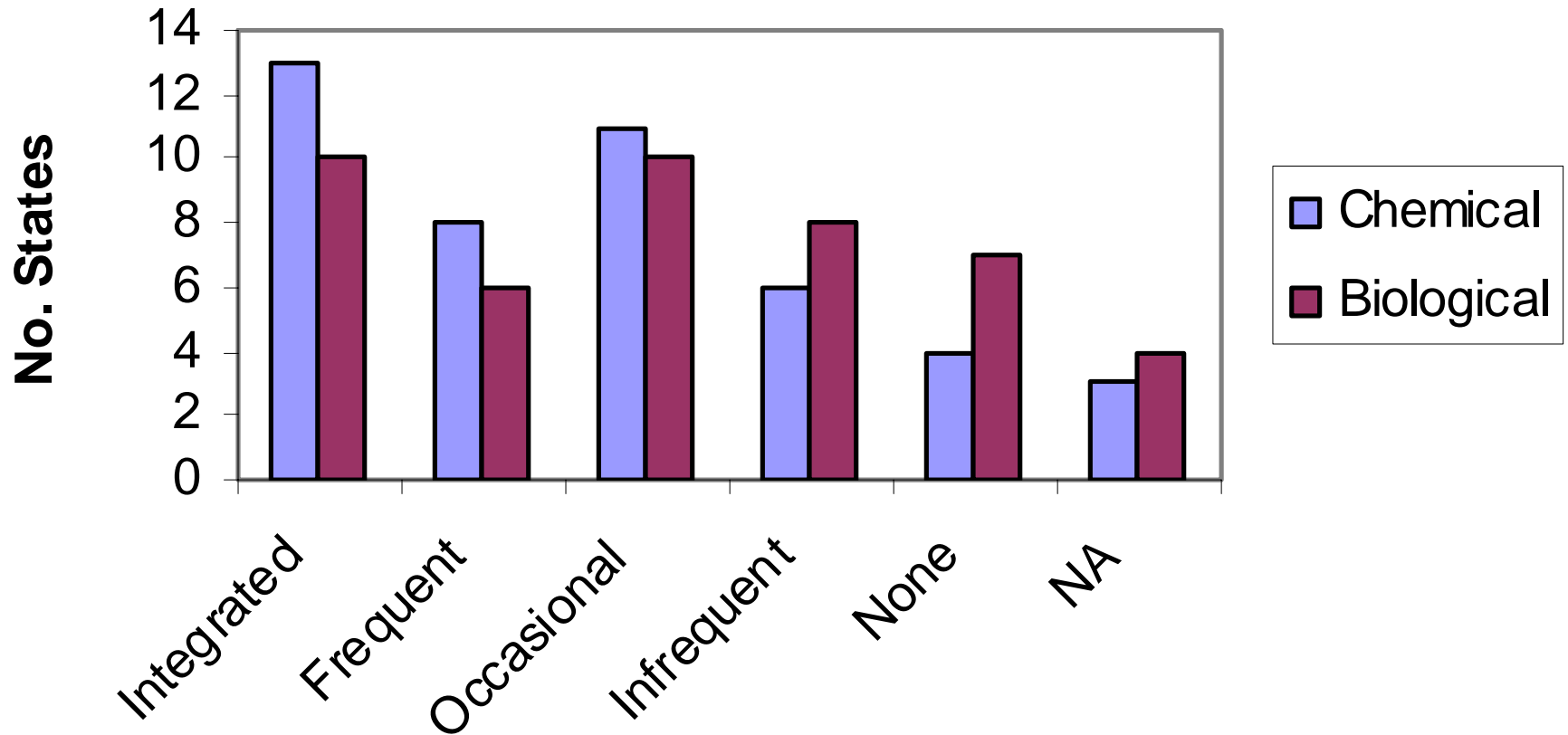
# State Agency Interaction

## Food Protection



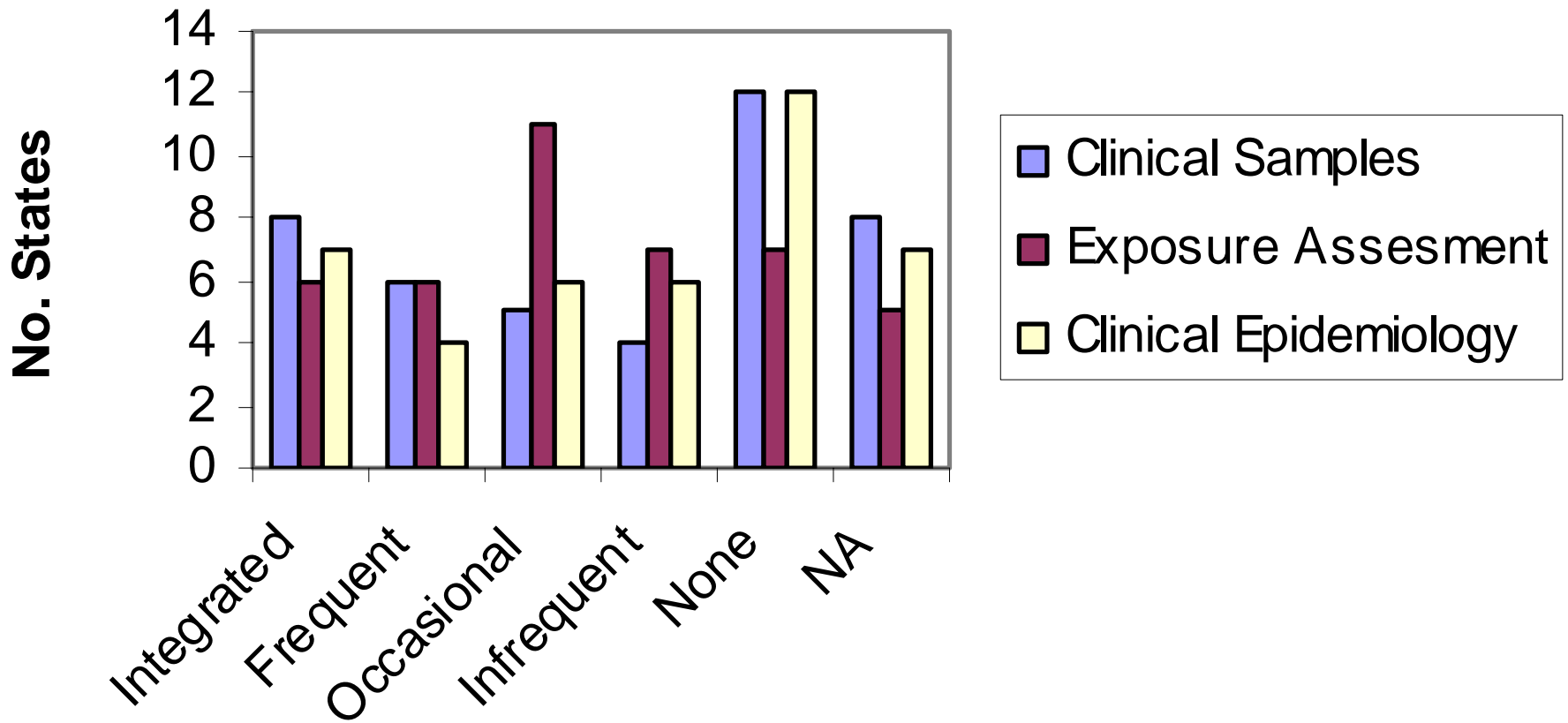
# State Agency Interaction

## Emergency Preparedness



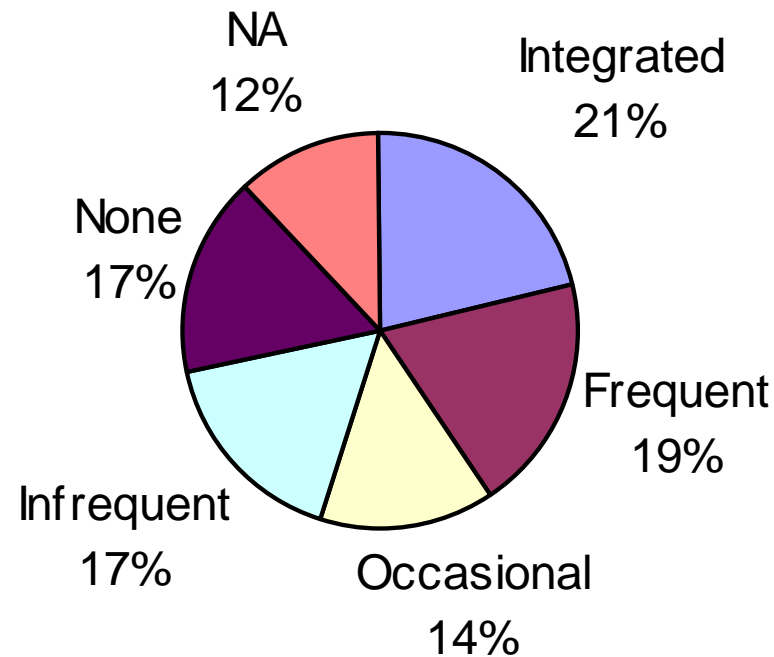
# State Agency Interaction

## Environmental Epidemiology

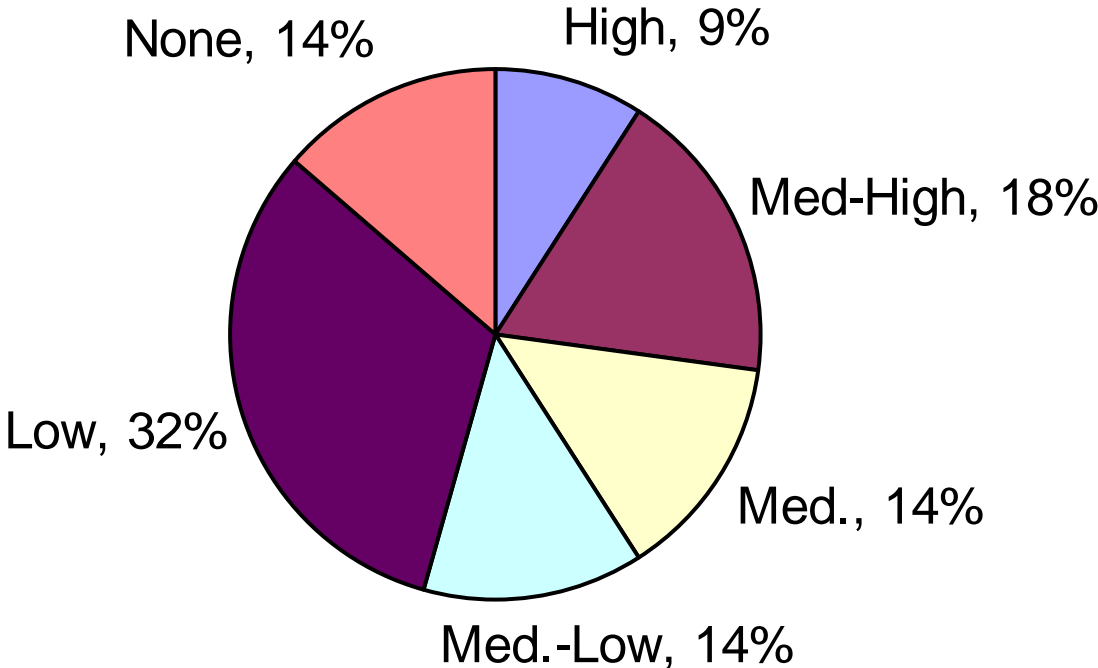


# State Agency Interaction

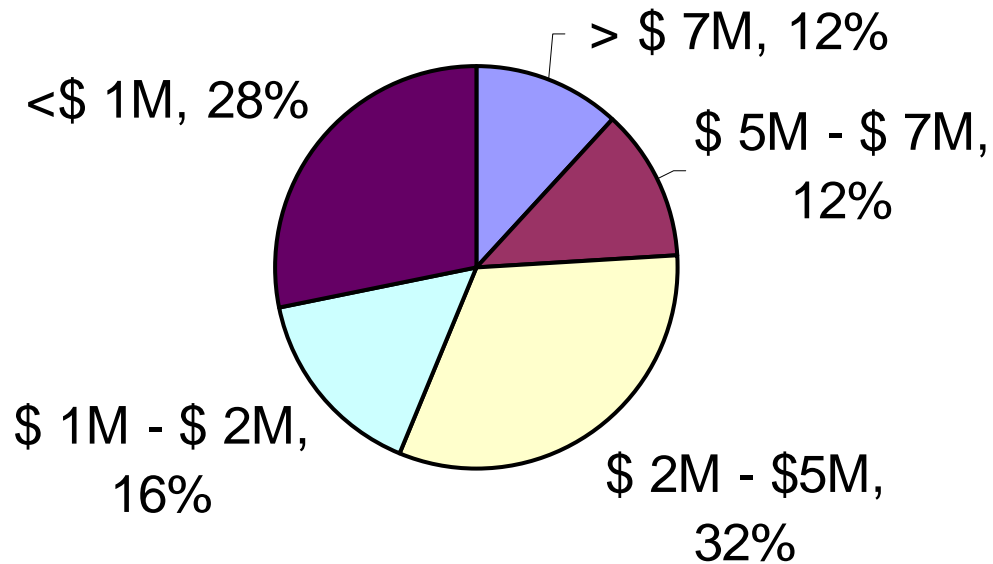
## Environmental Lead



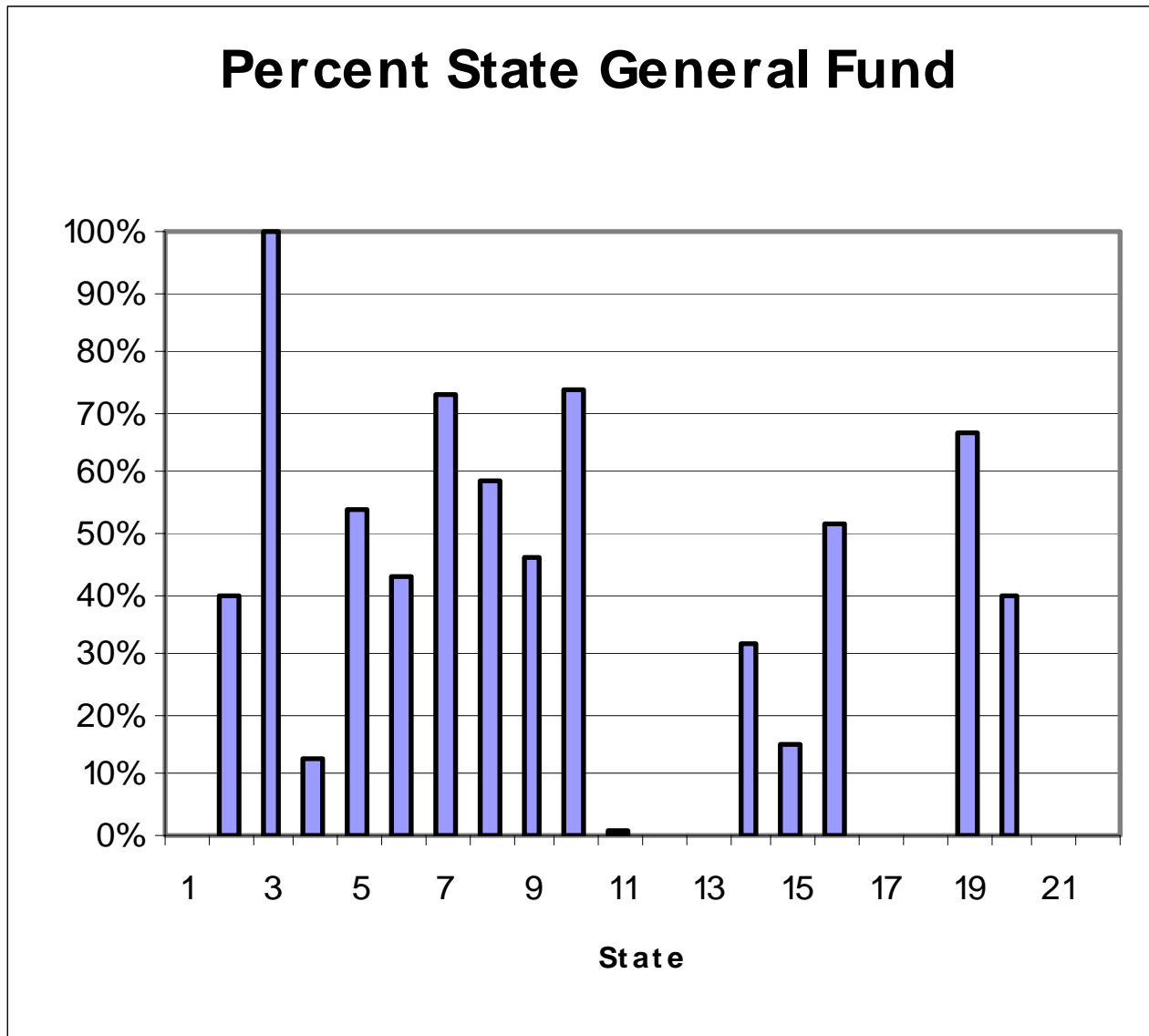
# Involvement in Environmental Policy



# Environmental Laboratory Budget

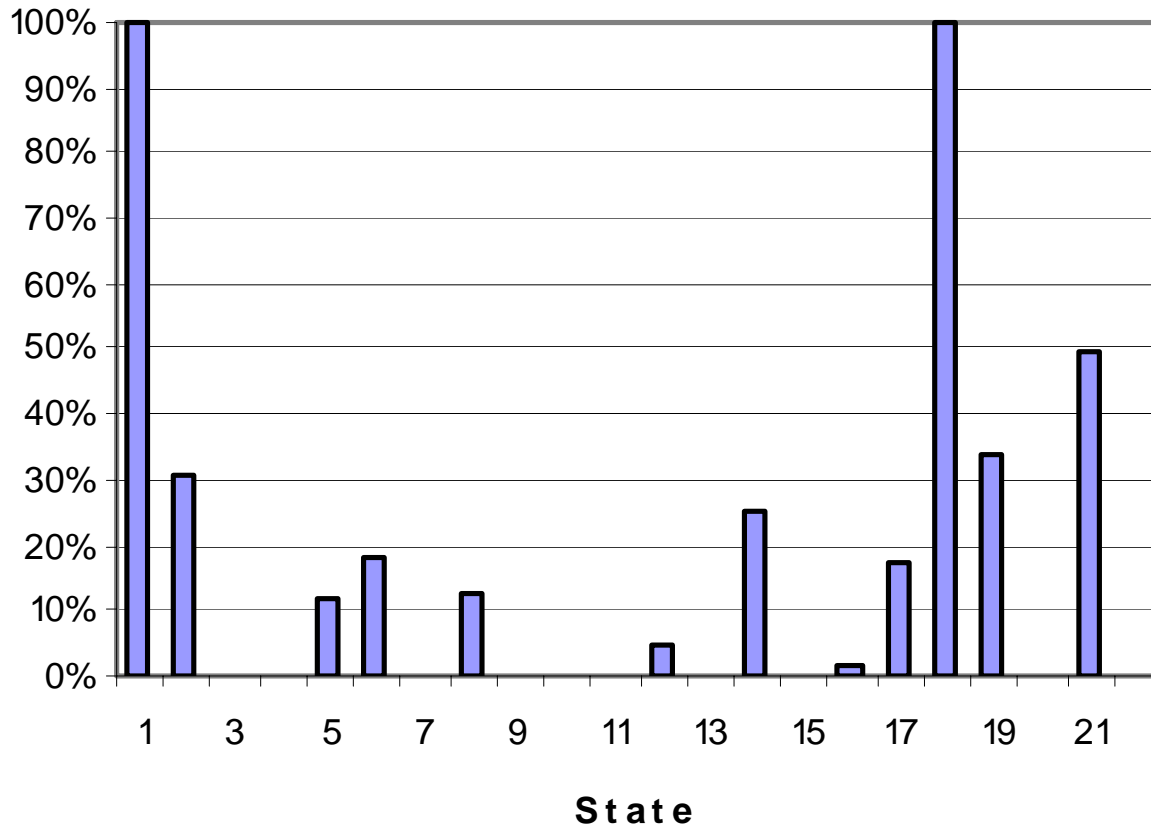


# Budgets



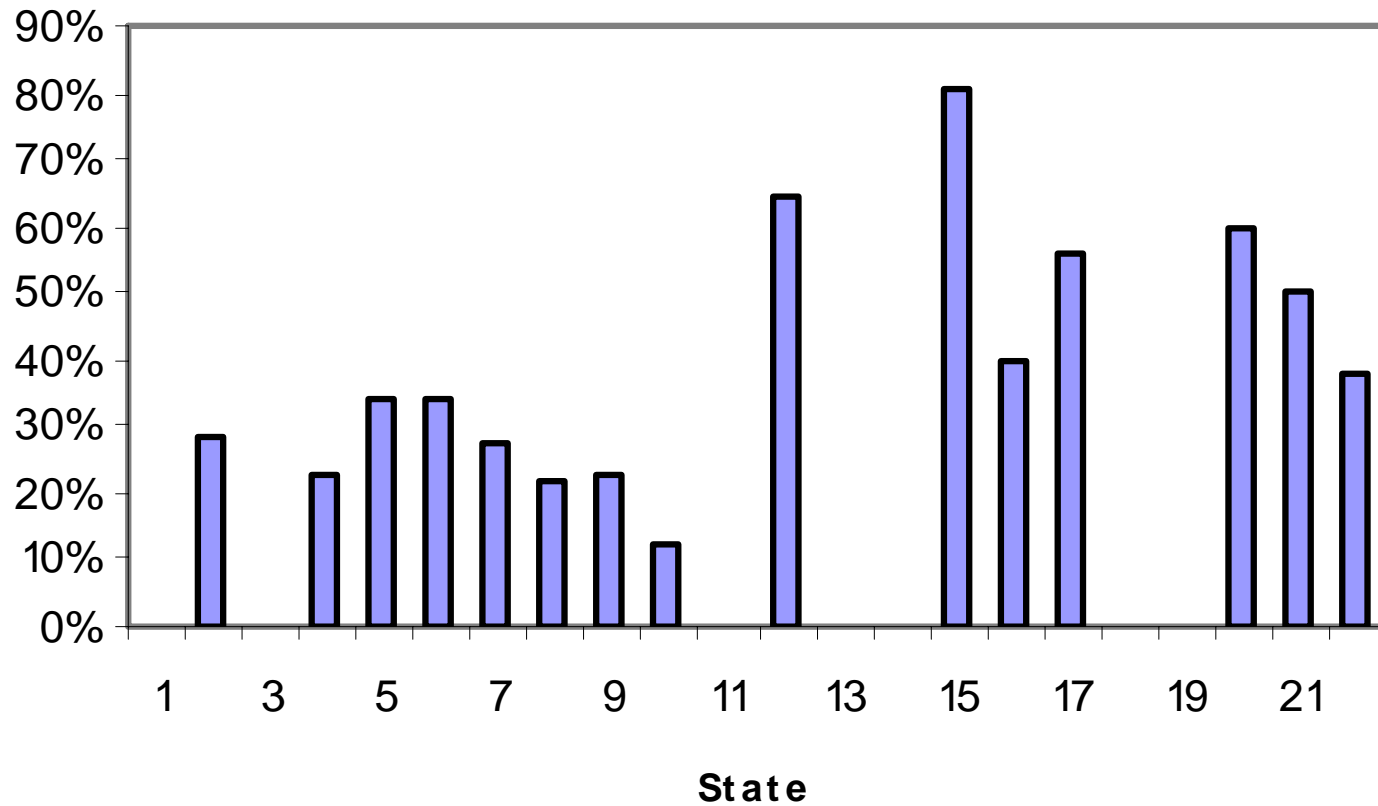
# Budgets

## Percent Fees From State Agencies



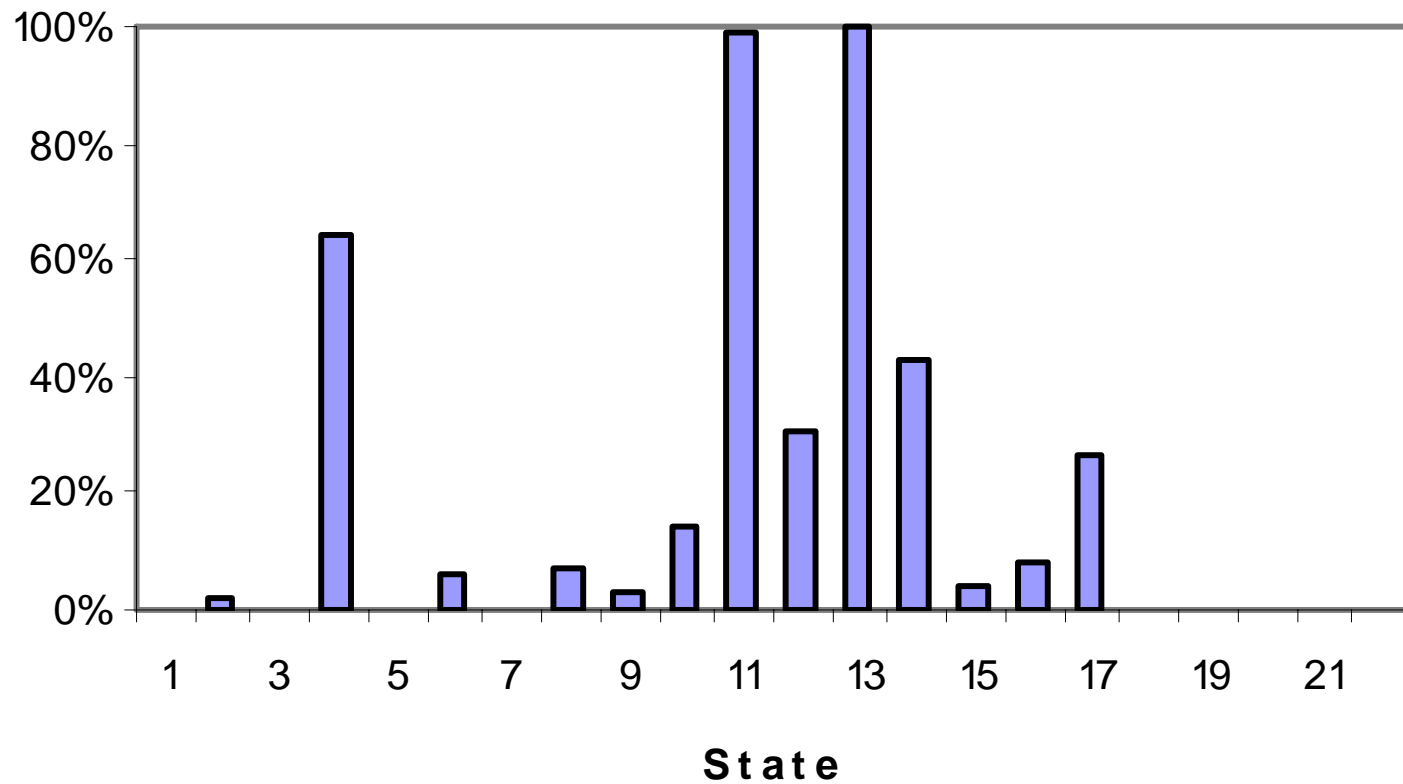
# Budgets

## Percentage Federal Funds

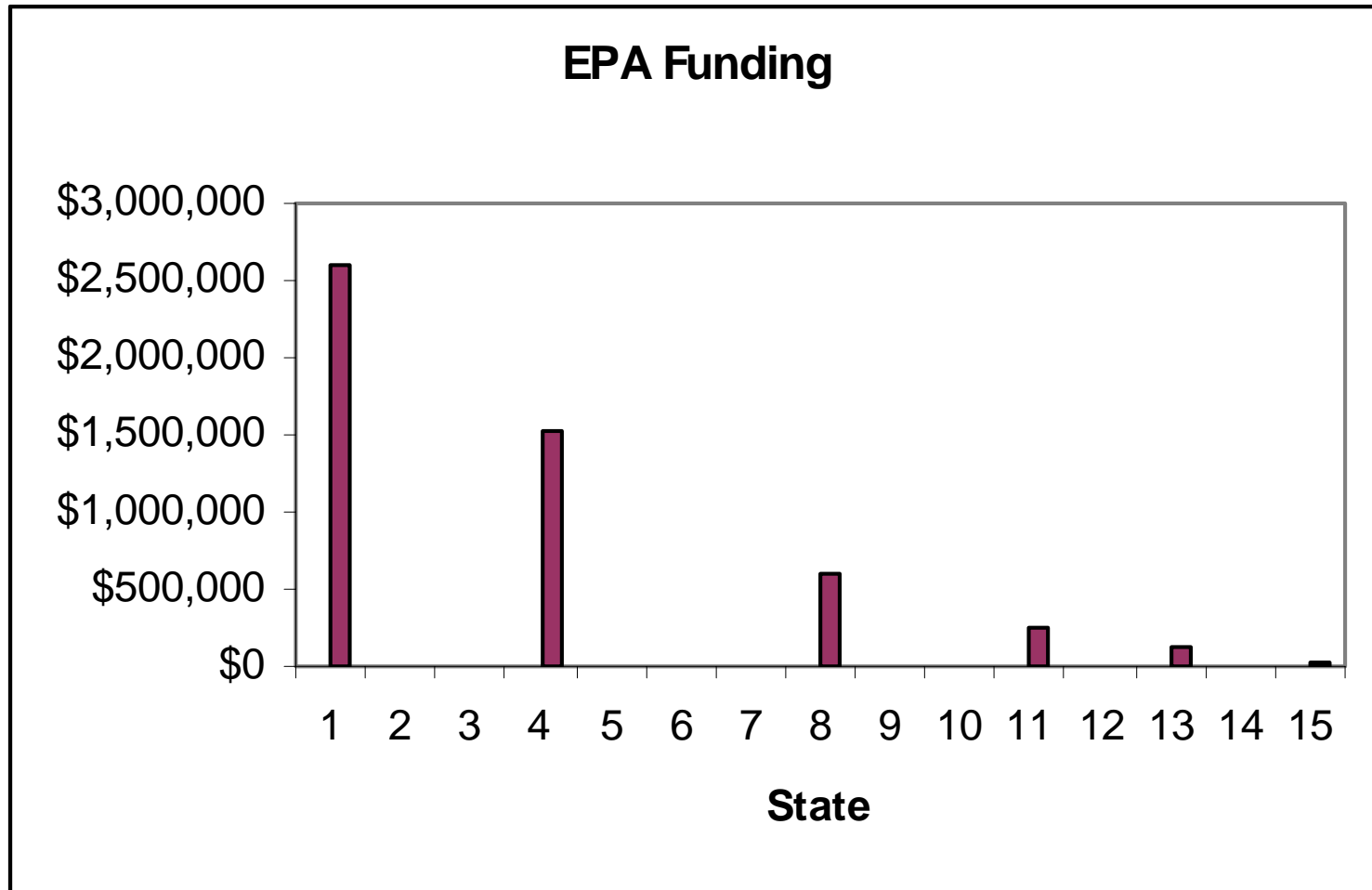


# Budgets

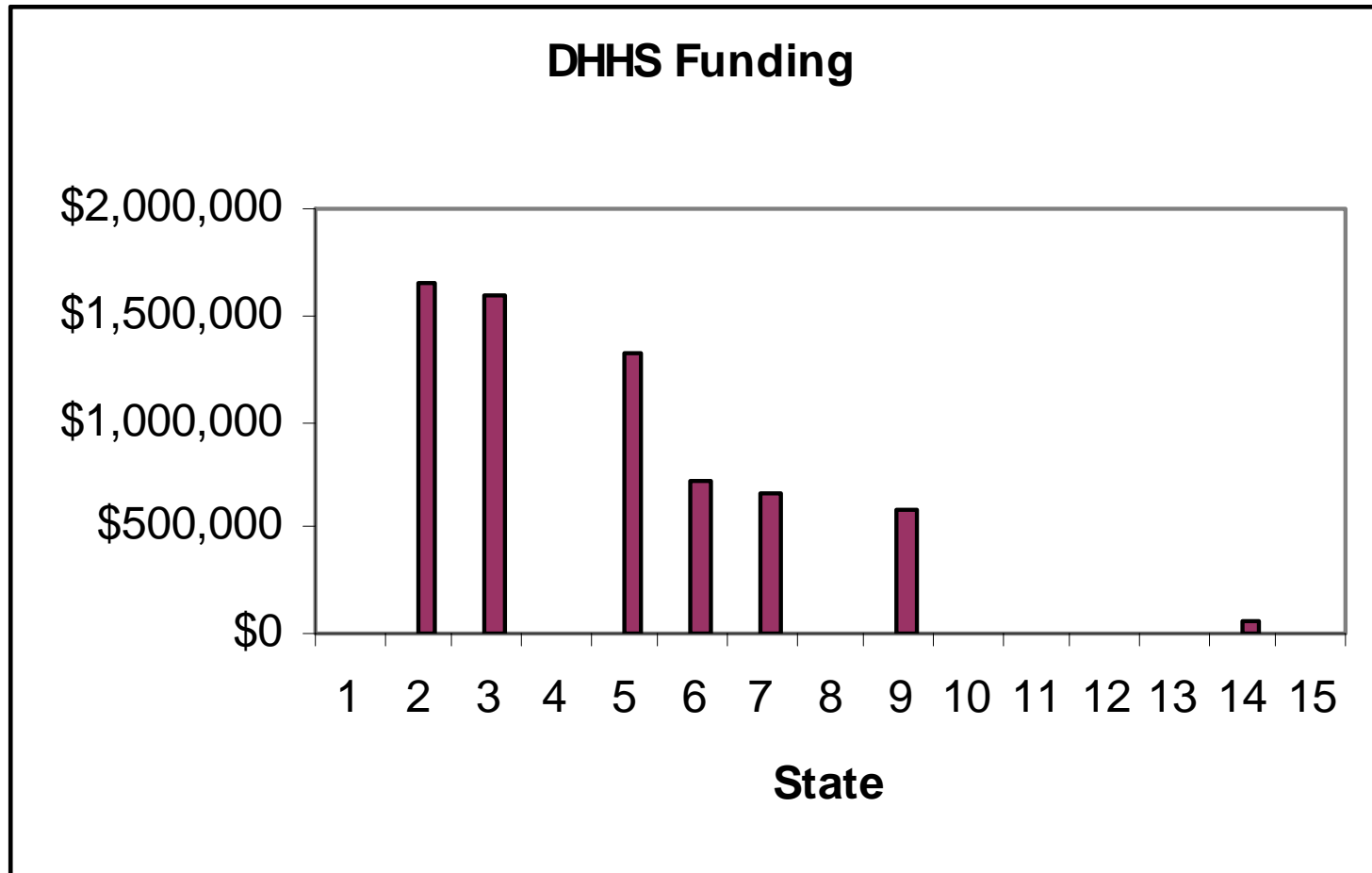
## Percent Fees for Services



# Federal Funds

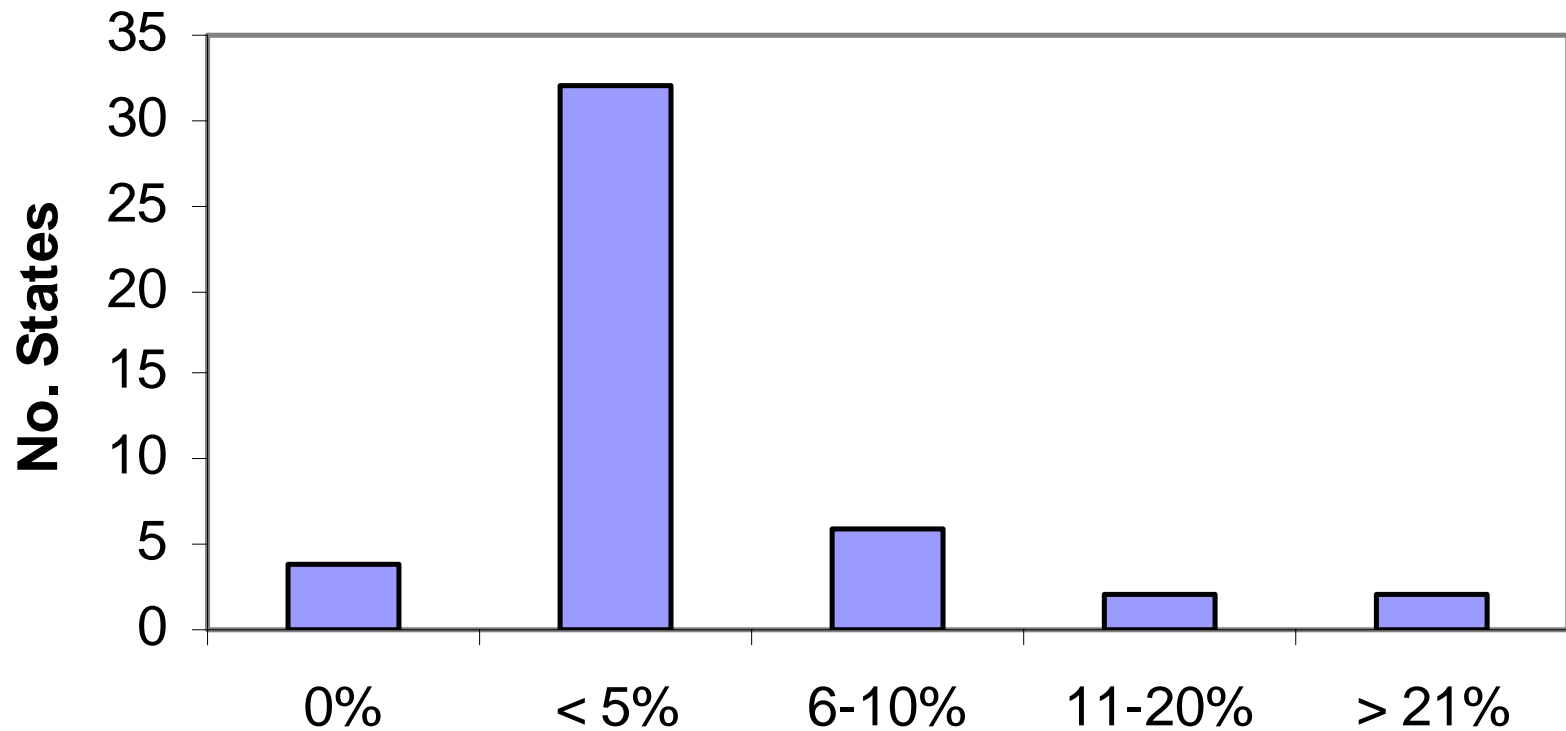


# Federal Funds



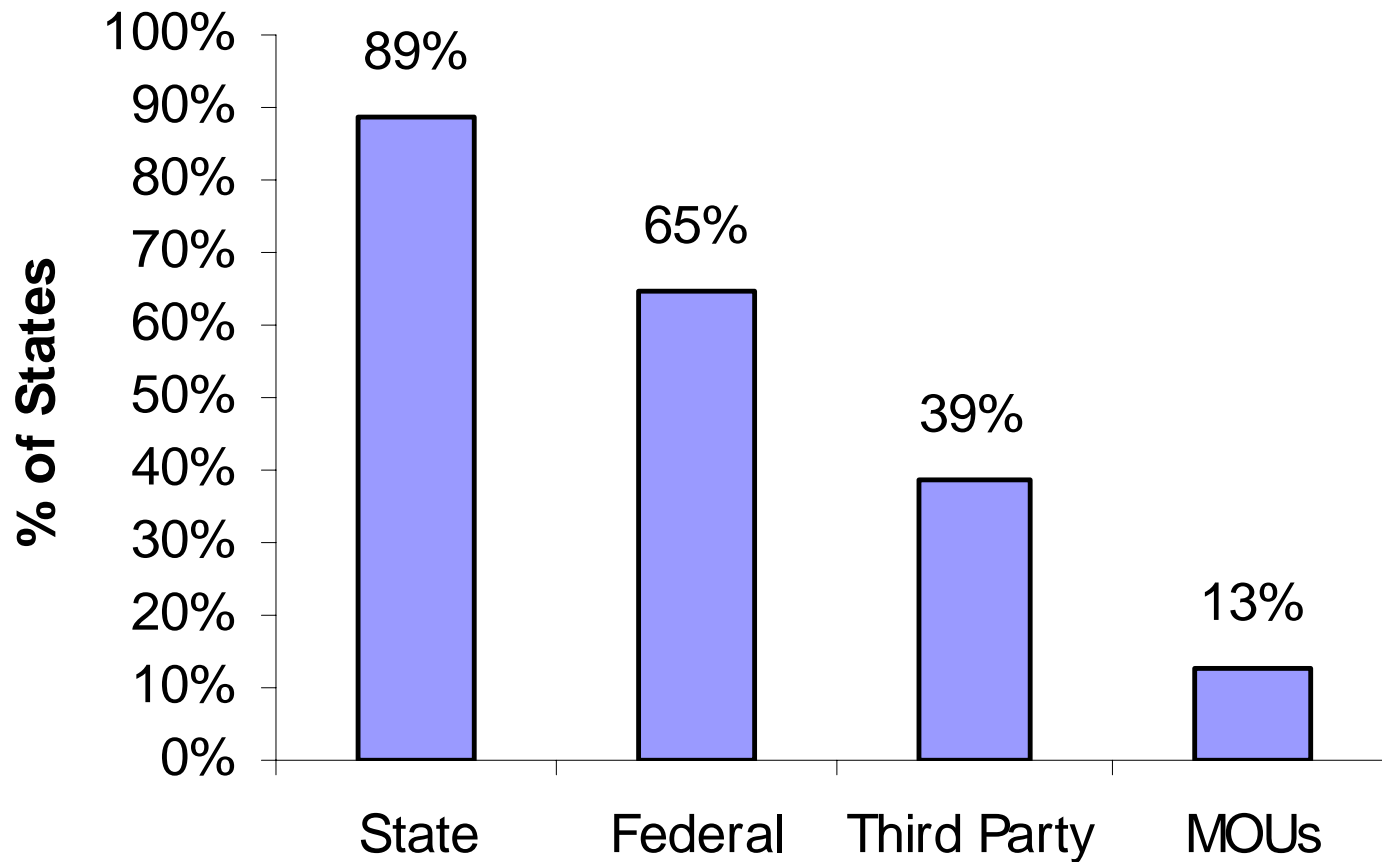
# Emergency Services

**Percent of Services Devoted to Emergency Response**



# Emergency Services

## % Funding for Emergency Response



# Does your environmental laboratory have a Laboratory Management System (LIMS)?

Response (n=49)		
Yes	41	(84%)
No	8	(16%)

# LIMS Type

Responses N = 42

- **Developed in-house** 13 (33%)
- **Commercially developed** 29 (67%)

# Commercial LIMS

<u>Vendor</u>	<u>No. Labs</u>
• Perkin Elmer Labworks	7
• StarLims	5
• Accelerated Tech. Labs	3
• LITS plus (CDC)	2
• Epic Systems	2
• Others (9 listed)	1 @

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# Has your laboratory adopted nationally recognized electronic data standards?

Response N = 48

- Yes 15 (31%)
- No 33 (69%)

## How is the environmental data communicated to other local, state or federal agencies?

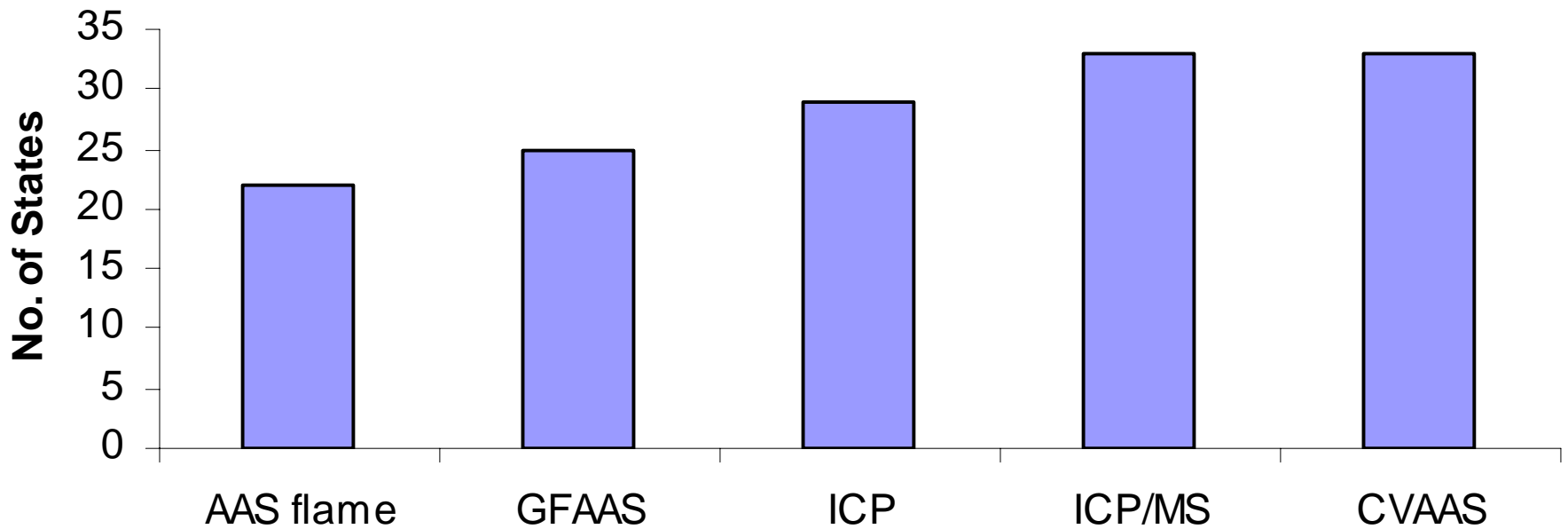
<b>Mode of Communication (n=48)</b>	<b>Yes (%)</b>	<b>No (%)</b>
<b>Telephone</b>	<b>35 (73%)</b>	<b>13 (27%)</b>
<b>Paper (mail)</b>	<b>43 (90%)</b>	<b>5 (10%)</b>
<b>Fax</b>	<b>39(81%)</b>	<b>9 (19%)</b>
<b>Email</b>	<b>36 (75%)</b>	<b>12 (25%)</b>
<b>Electronically via online reporting tool (not integrated w/LIMS)</b>	<b>23(48%)</b>	<b>25 (52%)</b>
<b>Interoperable LIMS</b>	<b>12 (25%)</b>	<b>36 (75%)</b>

Does your environmental laboratory use real-time data exchange system to link environmental monitoring data to public health programs?

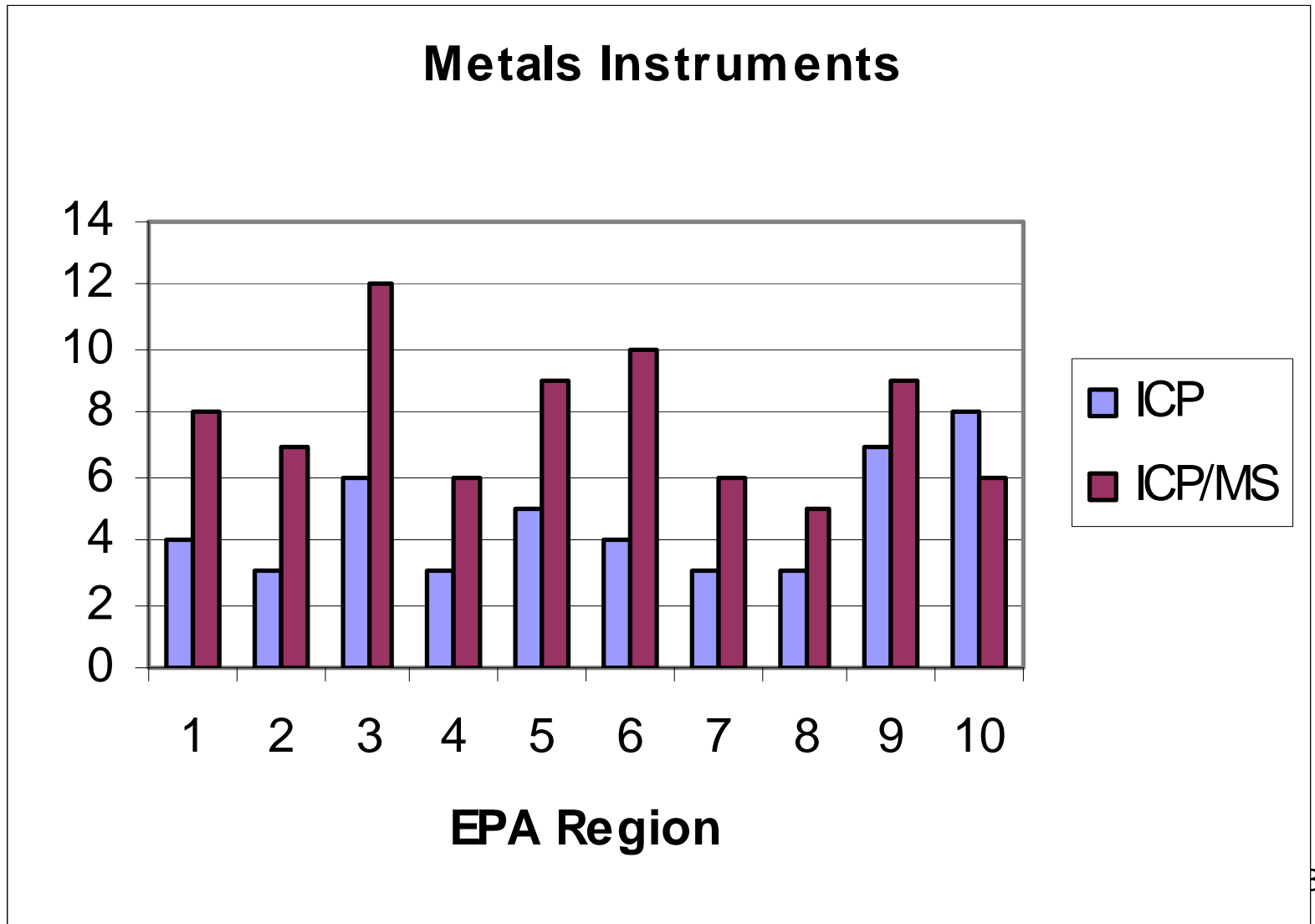
Response (n=48)
• Yes 9 (19%)
• No 36 (75%)
• Don't Know 3 (6%)

# Instruments

## Metals Analysis

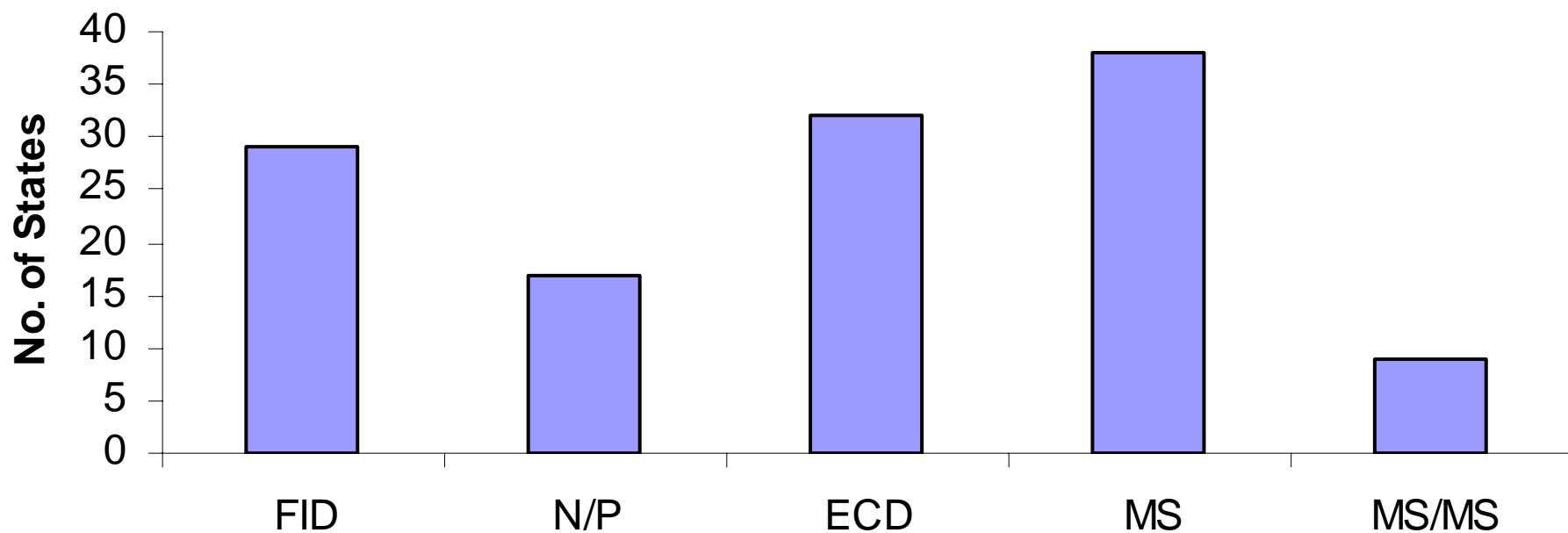


# Instruments per Region

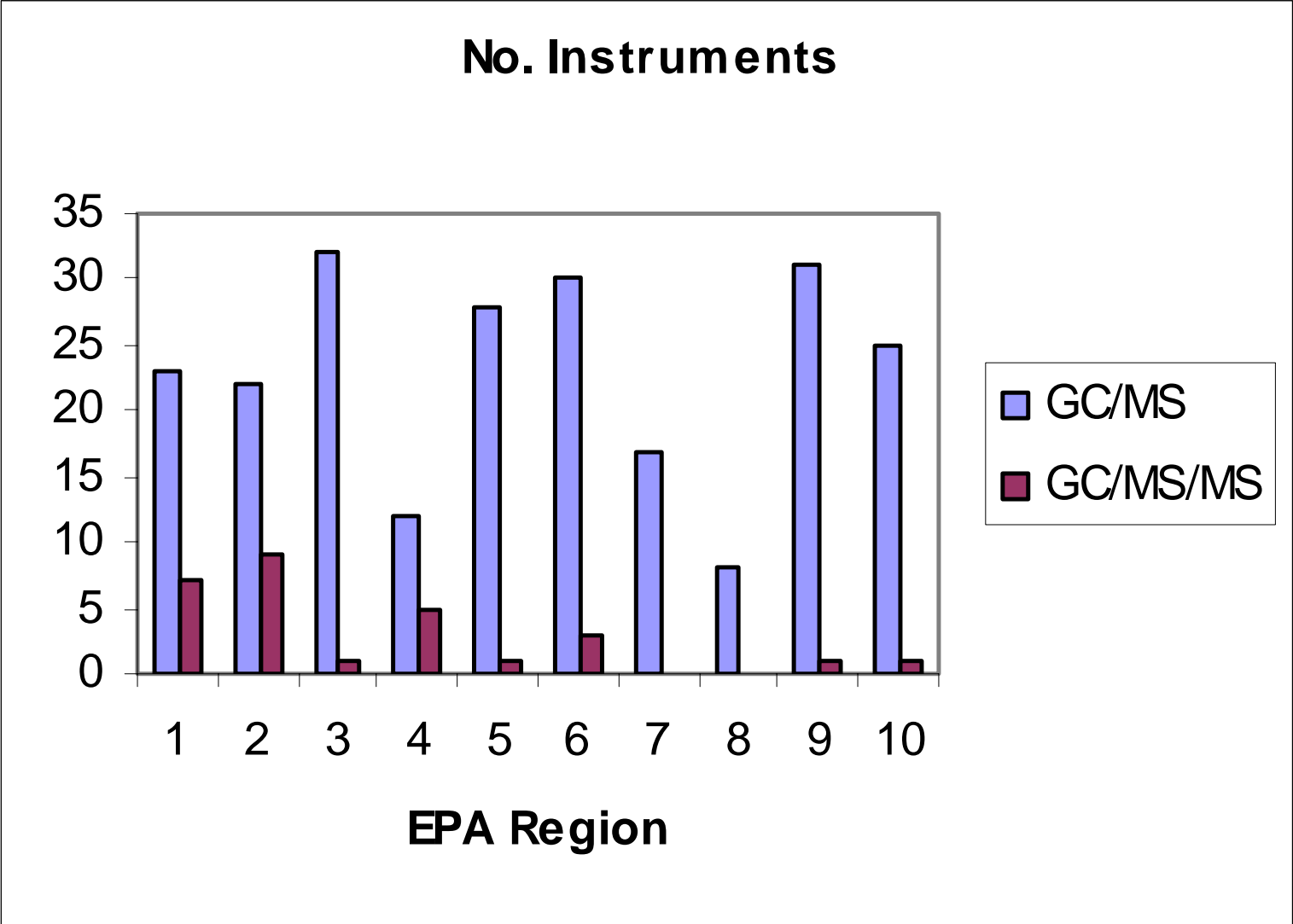


# Instruments

## GC w/Detector

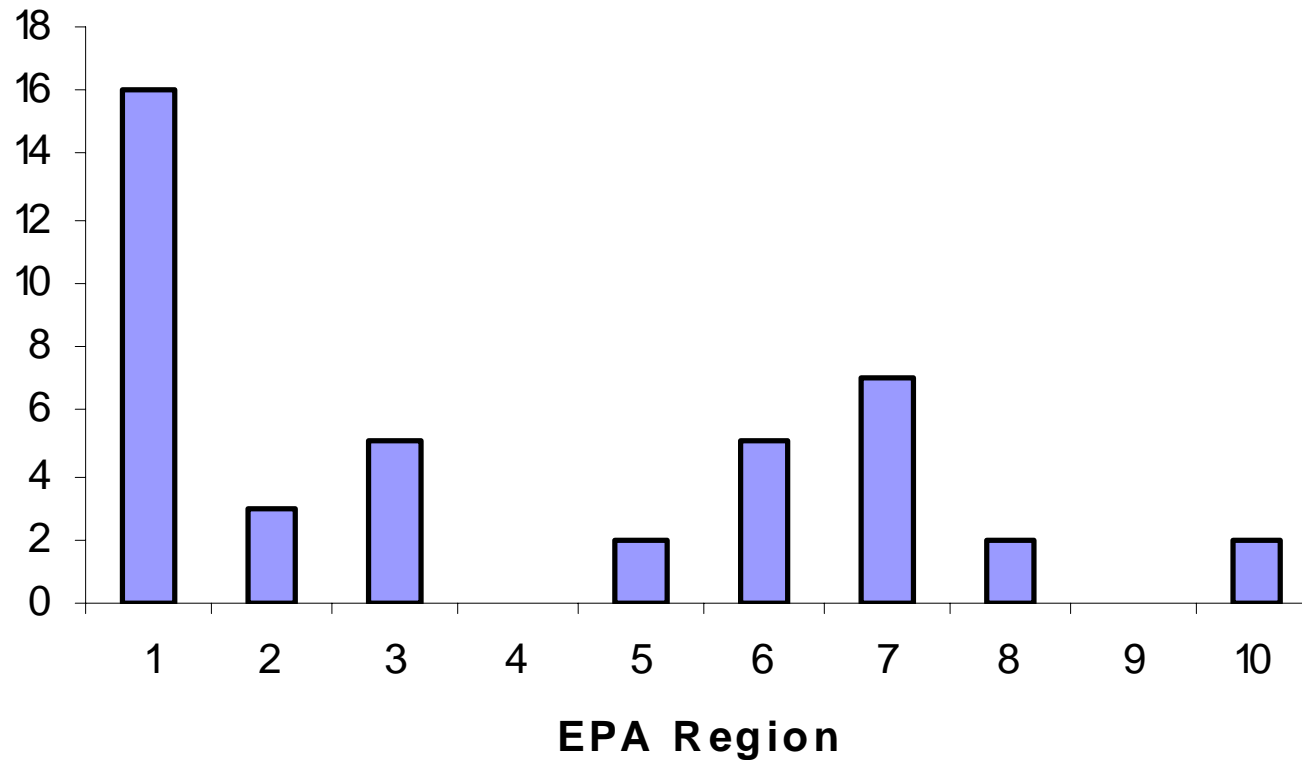


# Instruments by EPA Region

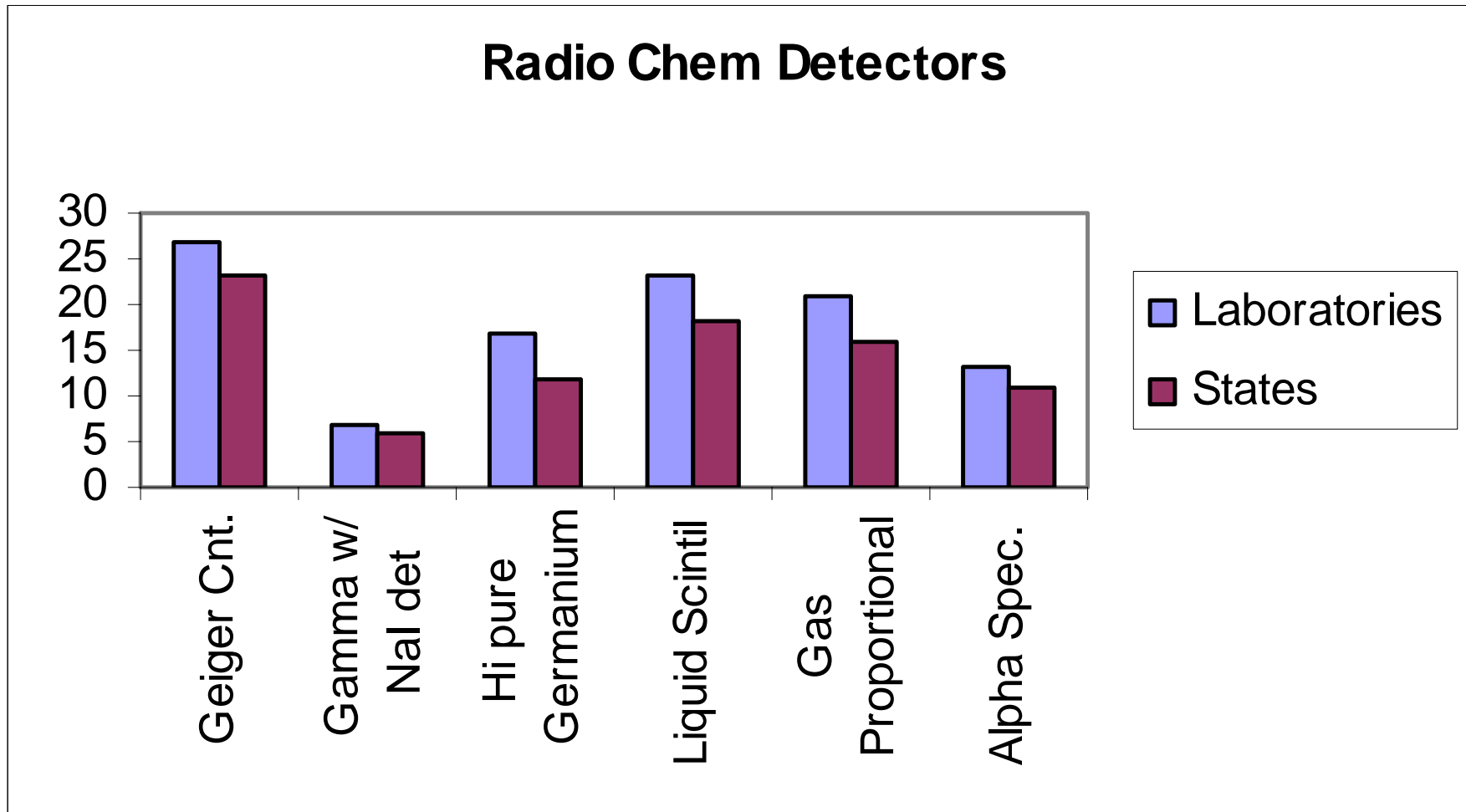


# Instruments for Air Analysis by EPA Region

## Air Analysis

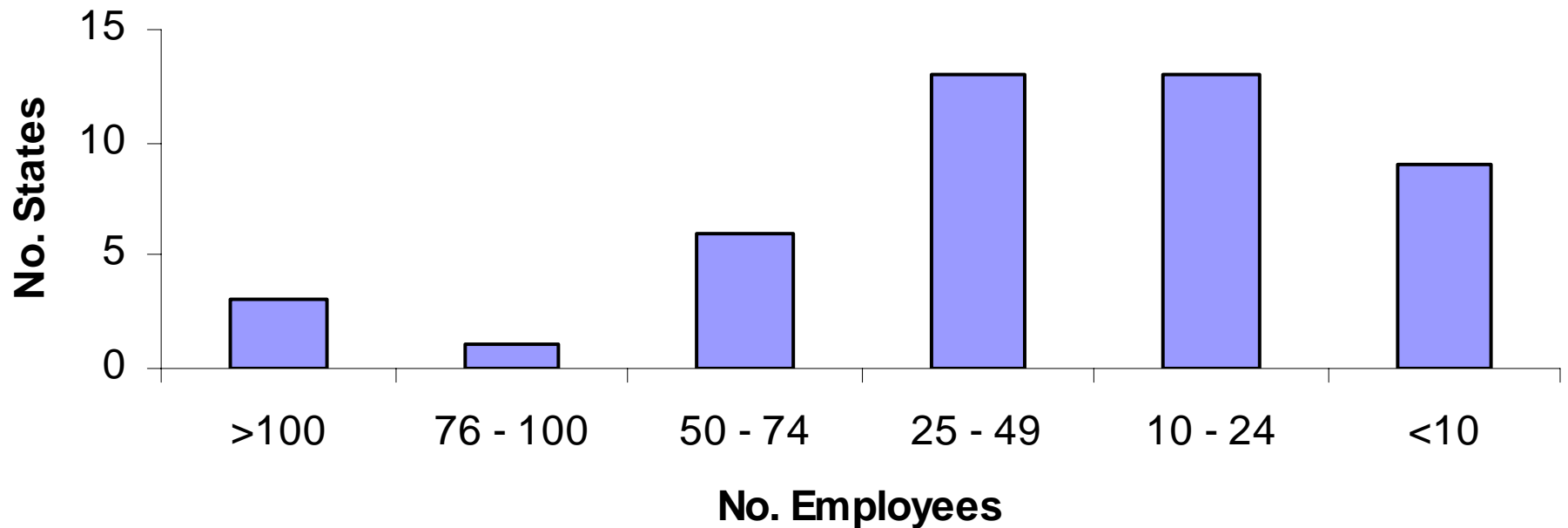


# Instrumentation

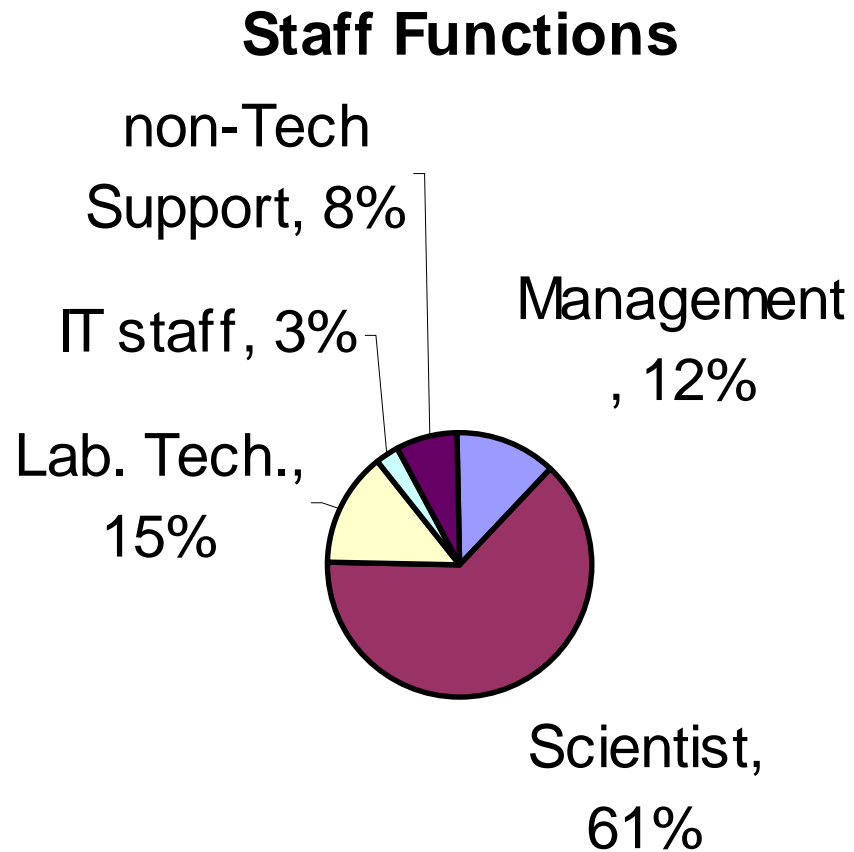


# Workforce

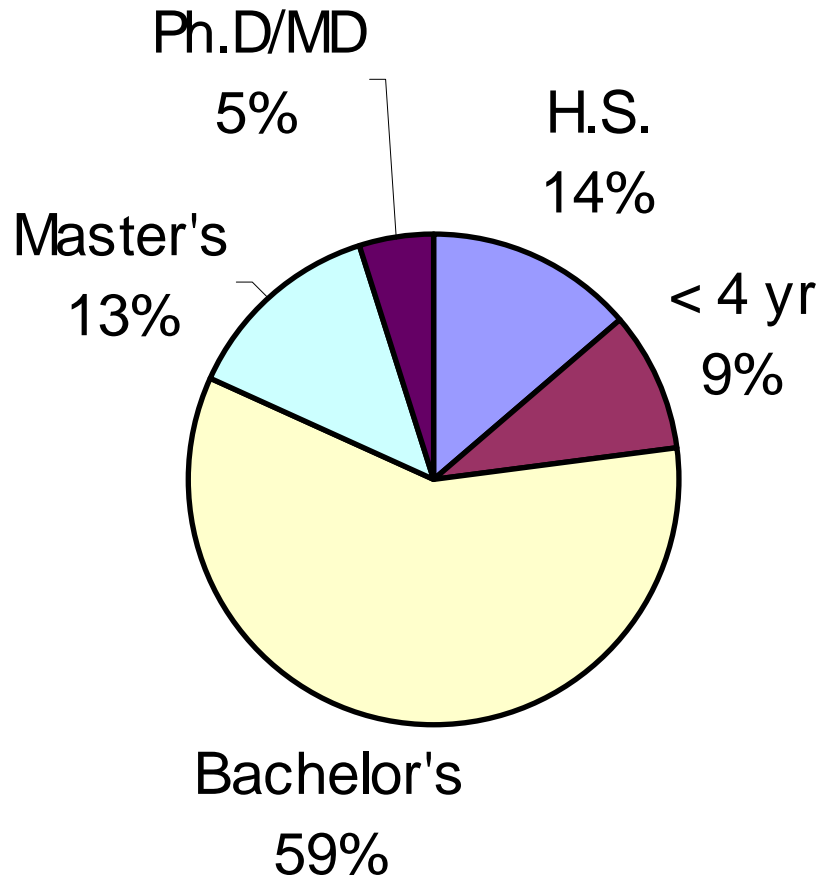
## Number of Employees



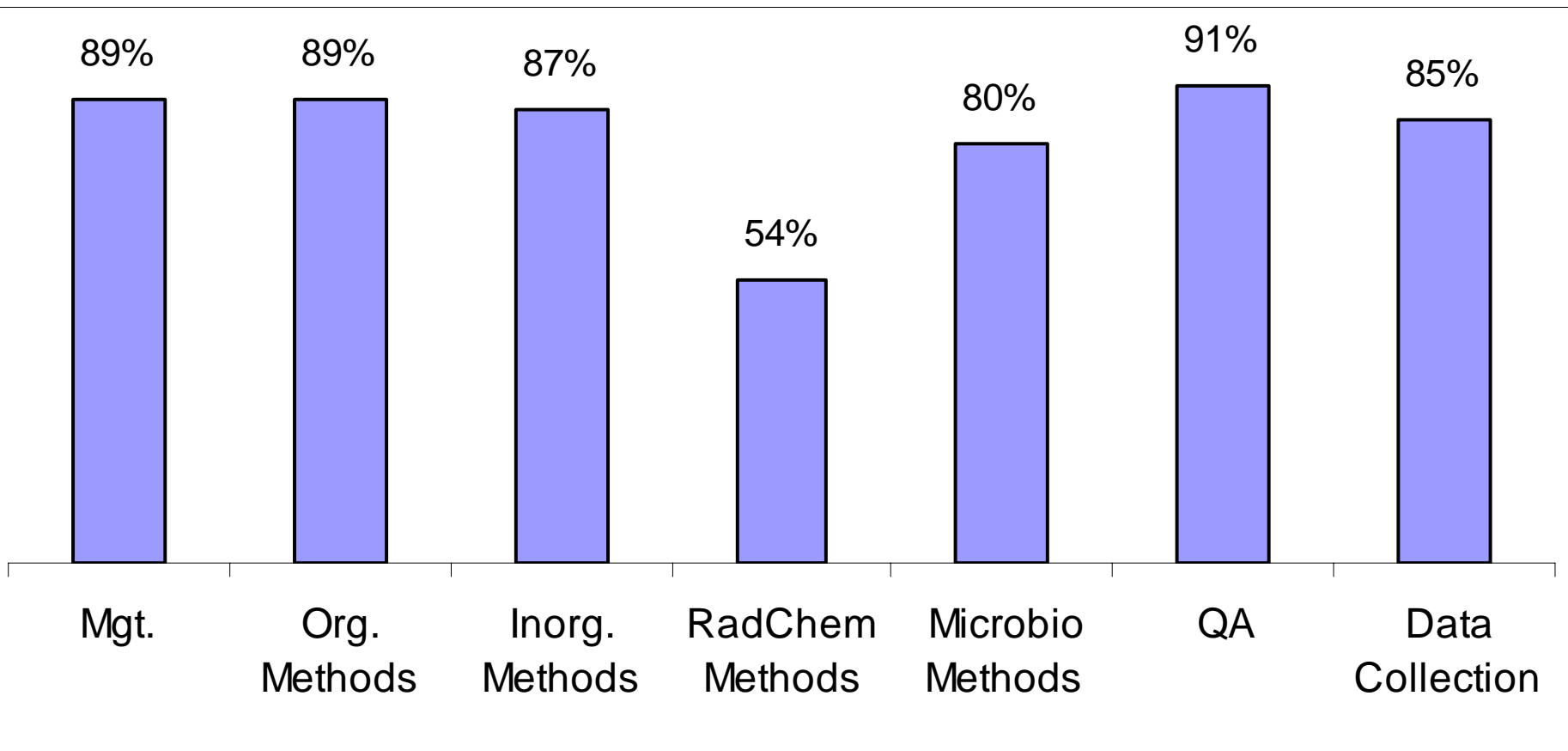
# Workforce - Functions



# Workforce - Education

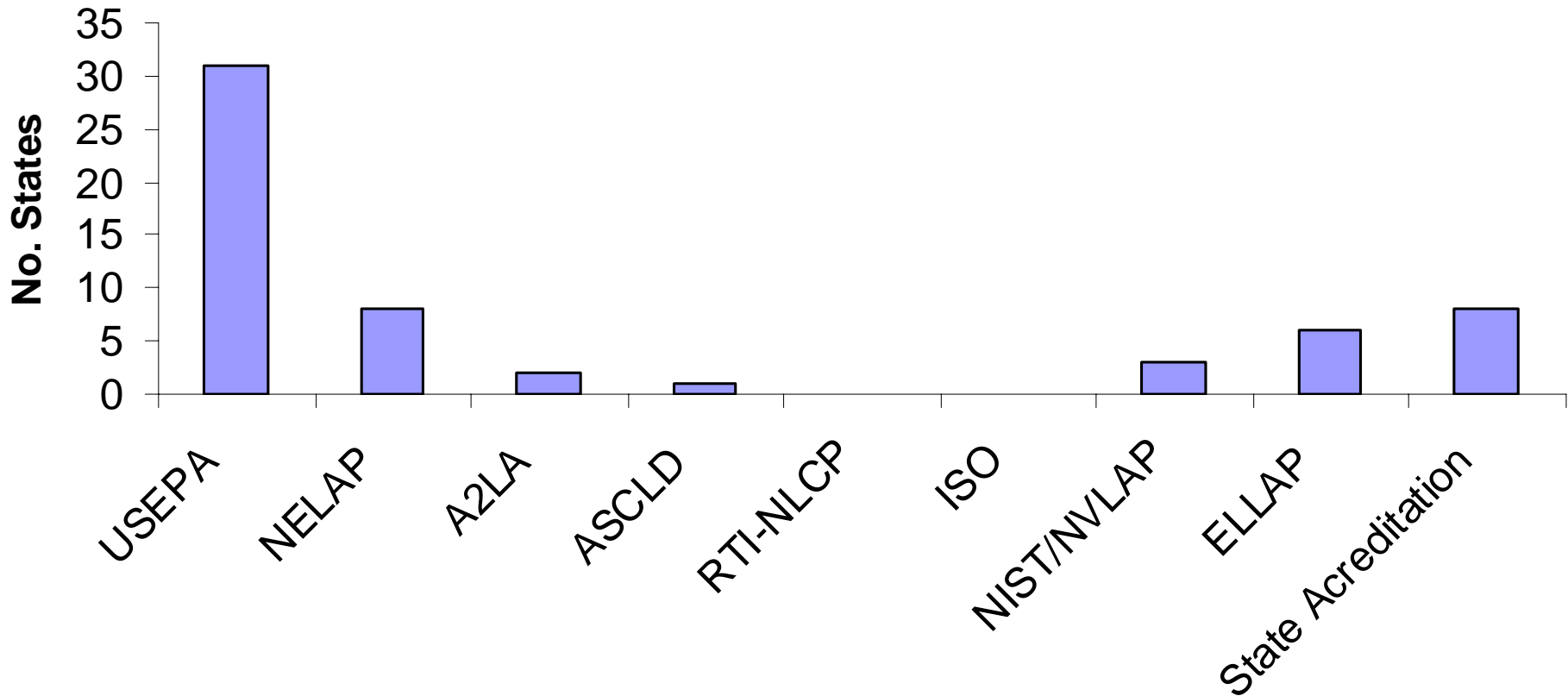


# Training Interests



# Certification of State Laboratories

## State Laboratory Certification



What are the chief barriers of your environmental laboratory from seeking NELAP accreditation? N = 38

<b>Barriers to NELAP Accreditation</b>	<b>Barriers Experienced</b>
Instability of NELAC	10 (26%)
Cost of participating in 2 PT studies/yr	5 (13%)
Costs of implementing/maintaining quality system	9 (24%)
Lack of participation by EPA	18 (47%)
Questions about NELAC's legal authority without EPA presence	16 (42%)
NELAC Standards difficult to understand	2 (5%)
Lack of resources to implement NELAC Standards	13 (34%)
Benefits of NELAC not obvious to laboratory	18 (47%)

# Summary

- **There are significant differences in the manner in which the state environmental laboratories are organized and operated.**
- **Improved communication between the laboratories is needed to develop an effective nationwide network of state environmental laboratories.**

# Summary

- **The Association of Public Health Laboratories can serve the environmental laboratories**
- **Active participation of the State Environmental Laboratory Directors is needed.**

# Summary

- **The completed survey provides a starting point.**
- **The APHL annual meeting includes presentations and break-out sessions to develop improved relationships between the states and state laboratories and federal agencies.**

# Contacts

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