Industrial Hygiene and Monitoring Equipment

2011

CLEAReport
by Clear Seas Research

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CLEAReport by Clear Seas Research

Study Overview

Background

- Clear Seas Research conducted the Industrial Hygiene & Monitoring Equipment Study to help manufacturers and purchasers of industrial hygiene equipment better understand current market drivers and levels of satisfaction with various industrial hygiene products.

Purpose and Objectives

- The purpose of this study is to evaluate the opinions and preferences of safety professionals regarding various brands in the industry. Specifically, this research seeks to identify:
  - Trends in industrial hygiene staffing
  - Trends in industrial hygiene equipment purchasing
  - Utilization of industrial hygiene equipment
  - Ratings of specific industrial hygiene manufacturers and their products

Methodology

Research Details

- **Target Audience:** A total of 50,958 active, qualified *ISHN* direct request subscribers
- **Sample Selection Method:** Systematic sample from the domestic circulation, on an Nth name basis.
- **Survey Method:** Online
- **Incentive:** (5) $50 AMEX gift checks
- **Field Dates:** February 15 – 27, 2011
- **Completed Returns Summary:**

Analysis and Presentation

- Online results were reviewed and cleaned to eliminate data from unqualified individuals and/or speeders. The data was then exported to SPSS, a statistical software package, and data tabulations were produced.
- The data produced in SPSS is presented in graphical and tabular format with the number of respondents who answered each question.
- Some questions in this survey requested respondents to write in a response. Other than minor editing for readability, these responses are presented as written by the respondent.
- Whenever possible data was trended to previous years, although not all questions were asked each year.

	Number Mailed	Undeliverable/ Unusable	Usable Base	Usable Returns	Response Rate
2011 (Web)	50,958	3,433	47,525	324	1%
2009 (Web)	33,630	NA	33,630	358	1%
2007 (Web/Mail)	2,268	70	2,198	336	15%
2005 (Mail)	750	22	728	274	38%

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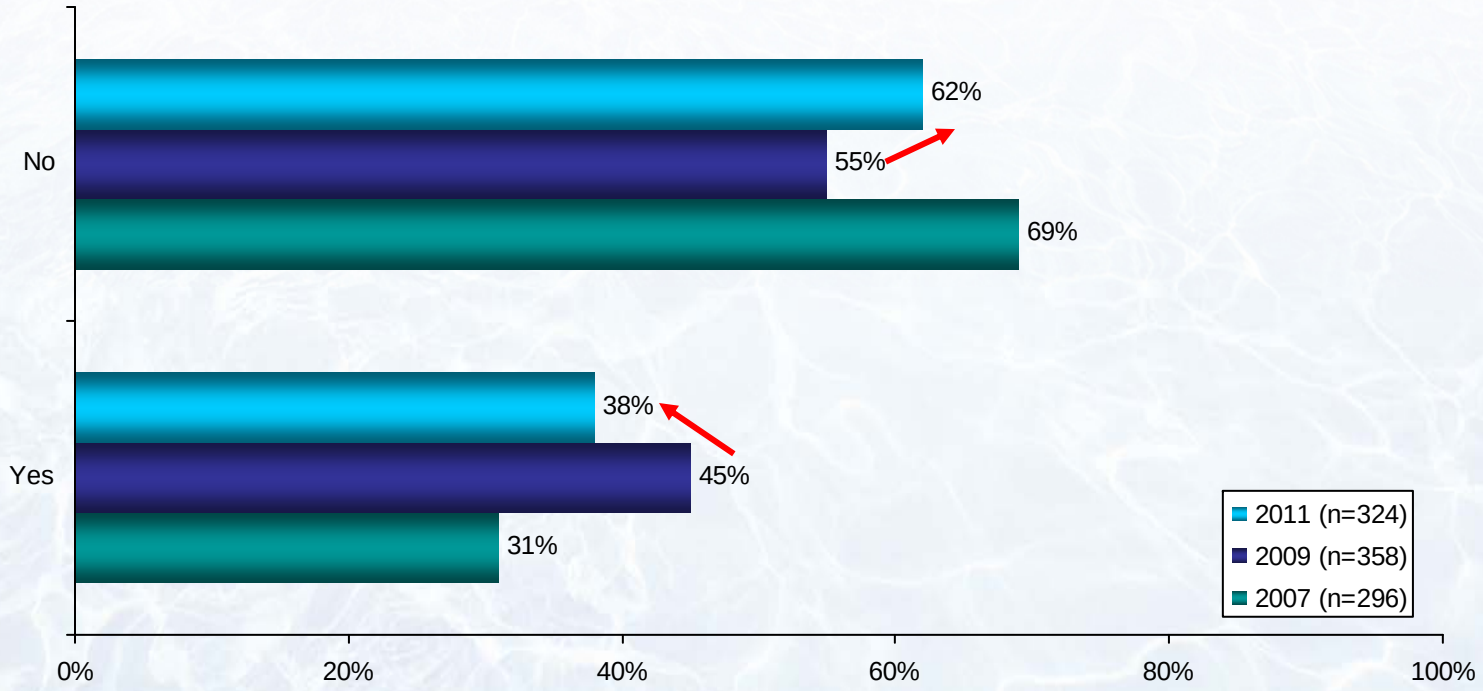
Study Results

Staffing

Employment of Full-Time Hygienist

Just over one-in-three 2011 survey participants indicate their company does employ a full-time hygienist on payroll to manage toxic exposures.



Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q1. Does your company employ a full-time hygienist on their payroll to manage your company's toxic exposures monitoring program?

Question Type: Single Choice

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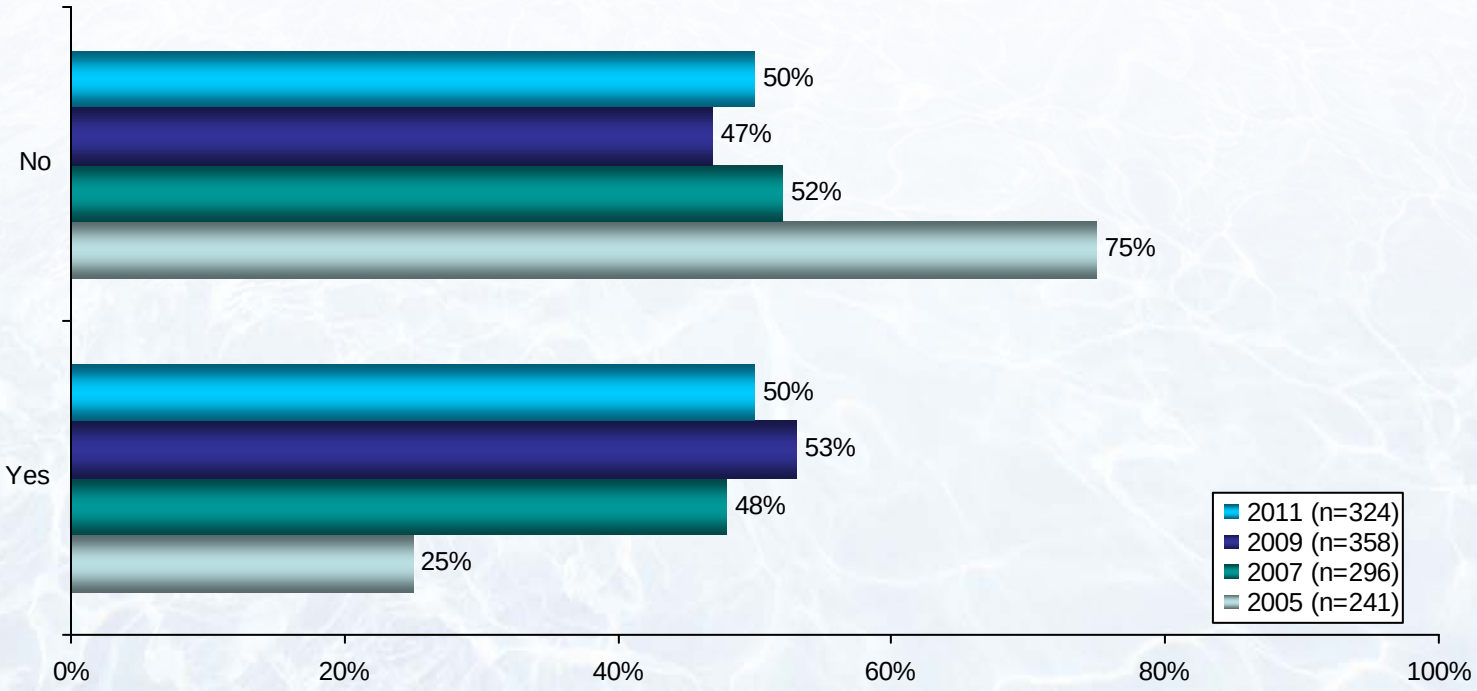
Usage of Industrial Hygiene Consultant

Consistent with 2007 and 2009, half of respondents indicate that their company uses an industrial hygiene consultant to manage their company's toxic exposures monitoring program.



Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q2. Does your company use the services of an industrial hygiene consultant to manage your company's toxic exposures monitoring program?

Question Type: Single Choice

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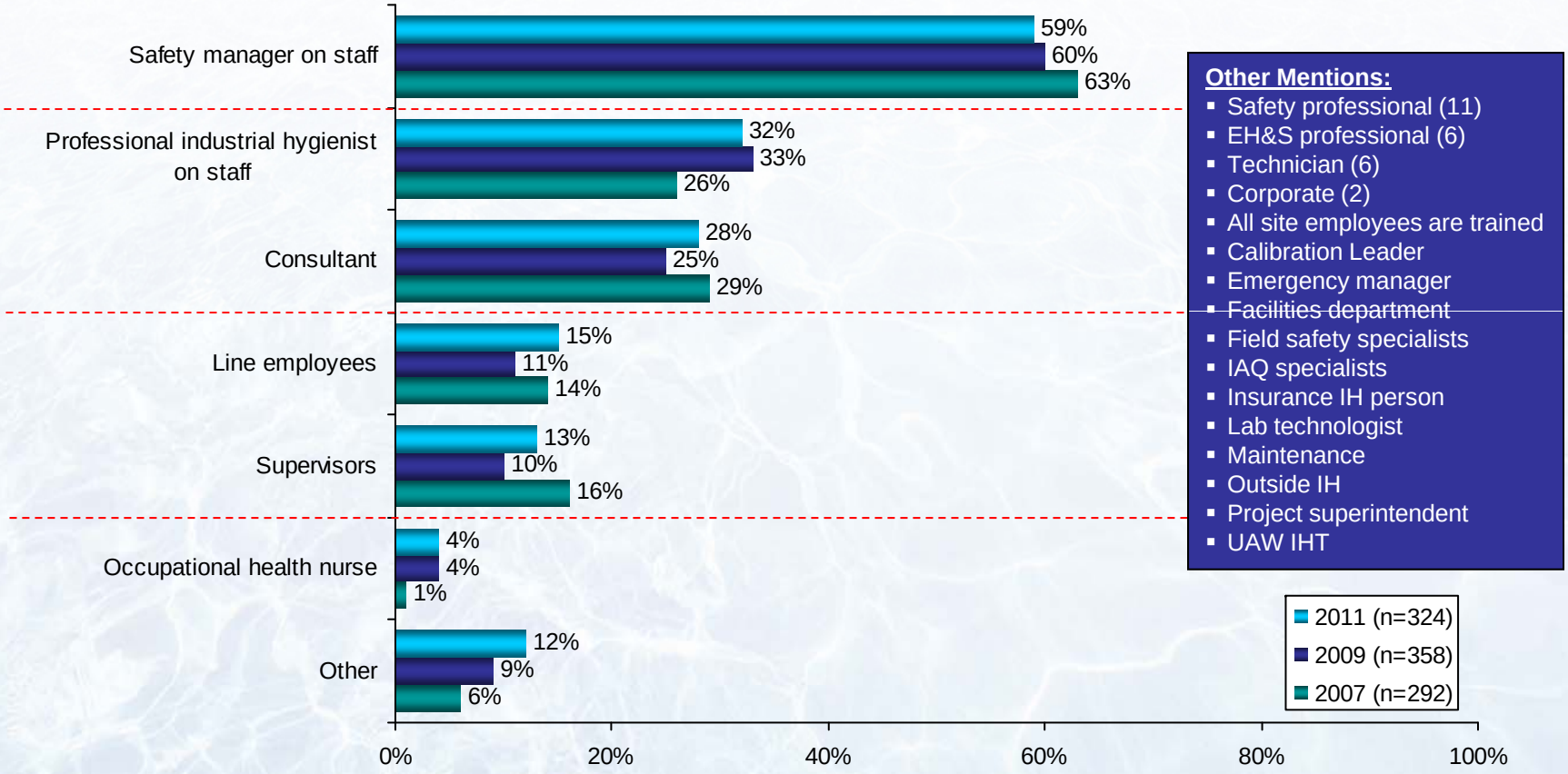
Operator of Industrial Hygiene Monitoring Equipment to Collect Exposure Data

Safety manager on staff is the primary person who operates the industrial hygiene monitoring equipment, followed by professional industrial hygienist on staff and consultants.



Other Mentions:

- Safety professional (11)
- EH&S professional (6)
- Technician (6)
- Corporate (2)
- All site employees are trained
- Calibration Leader
- Emergency manager
- Facilities department
- Field safety specialists
- IAQ specialists
- Insurance IH person
- Lab technologist
- Maintenance
- Outside IH
- Project superintendent
- UAW IHT

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q3. Who at your company operates the industrial hygiene monitoring equipment to collect exposure data?

Question Type: Multiple Choice

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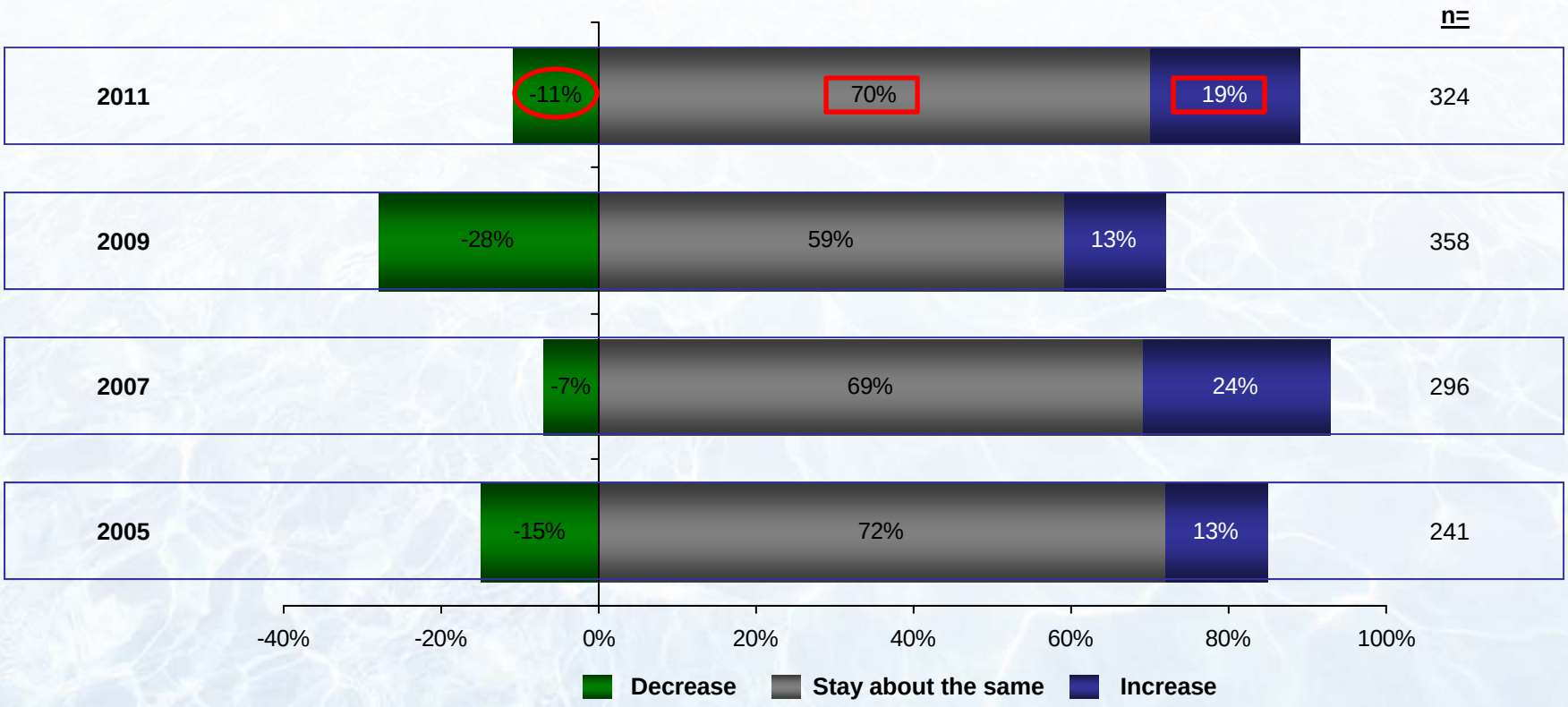
Study Results

Purchasing Trends

Expected Company Spending

Compared to 2009, significantly more respondents expect their companies spending on industrial hygiene monitoring equipment to stay the same or increase in 2011.



Increase/Decrease differences of 4.8% are considered significant using a 90% confidence interval and are indicated by □ / ○ respectively

Q5. Compared to 2010, do you expect your company's spending on industrial hygiene monitoring equipment to increase, decrease or stay about the same?

Question Type: Single Choice

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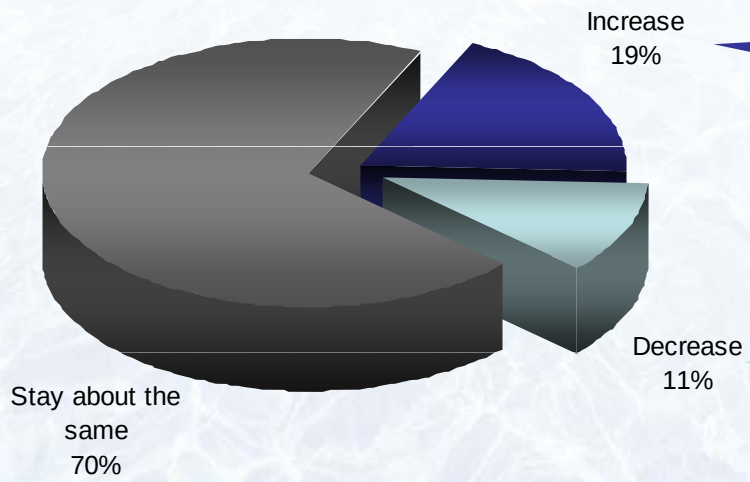
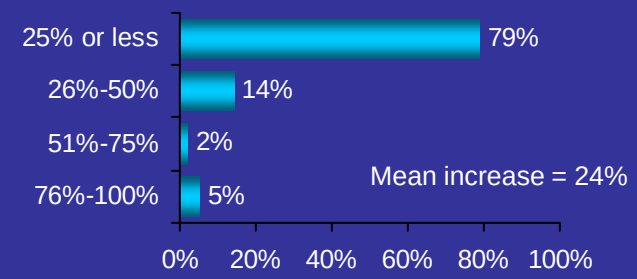
Expected Company Spending

Of those purchasers that expect their spending to increase, most expect their increases to be 25% or less. In contrast, those expecting a decrease, expect an average decrease of about 50%.

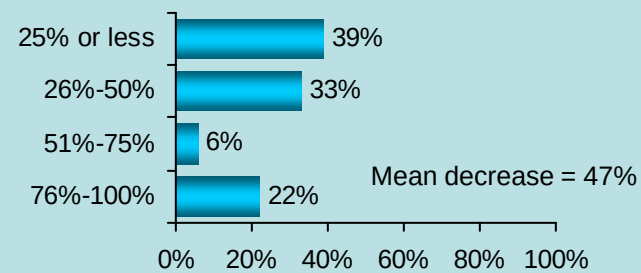
2011 Spending Levels



Increase Percentage



Decrease Percentage



n= 324 (Overall); 57 (Increase); 36 (Decrease)

Q5. Compared to 2010, do you expect your company's spending on industrial hygiene monitoring equipment to increase, decrease or stay about the same?

Q6. You indicated that you expect your company's 2011 spending to [RESTORE Q5] from 2010 levels. By what percentage do you expect it to [RESTORE Q5]?

Question Type: Single Choice

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Types of Equipment Planning to Purchase

Survey participants report being most likely to purchase calibration gases and regulators, multi-gas monitors and noise monitors in the next two years. Calibration gases and regulators are likely to be purchased over the next six months. There has been a significant increase in the percentage of respondents indicating they plan to purchase docking stations, multi-gas monitors, fixed point detection systems and indoor air quality monitors within the next six months.

		% No Planned Purchase	Sig. test @ 90% CI	Among those planning to purchase: More than 1 year from now	7 to 12 months from now	Within the next 6 months	n=
Calibration Gases and Regulators	2011	44%	6.1%	15%	35%	50%	180
	2009	49%		20%	30%	51%	183
Single-Gas Monitors	2011	71%	8.5%	36%	32%	33%	95
	2009	72%		37%	31%	31%	102
Docking Stations	2011	83%	11.1%	36%	31%	33%	55
	2009	84%		50%	31%	19%	58
Multi-Gas Monitors	2011	52%	6.9%	39%	29%	31%	157
	2009	59%		44%	37%	20%	147
Radiation Monitors	2011	88%	13.9%	53%	21%	26%	38
	2009	89%		58%	21%	21%	38
Fixed Point Detection Systems	2011	80%	10.2%	50%	29%	21%	66
	2009	78%		56%	33%	10%	78
Indoor Air Quality Monitors	2011	68%	8.3%	53%	27%	20%	104
	2009	72%		64%	28%	8%	183
Noise Monitors	2011	59%	7.2%	52%	29%	20%	133
	2009	63%		54%	24%	22%	133
Dust and Particulate Monitors	2011	69%	8.7%	44%	36%	19%	99
	2009	74%		52%	30%	18%	94

0% 20% 40% 60% 80% 100%

More than 1 year from now **7 to 12 months from now** **Within the next 6 months**

Increase/Decrease differences are considered significant using a 90% confidence interval and are indicated by ▭ / ◯ respectively

Q9. Which of the following types of industrial hygiene monitoring equipment do you plan to purchase within the next 2 years?

Question Type: Single Choice Grid

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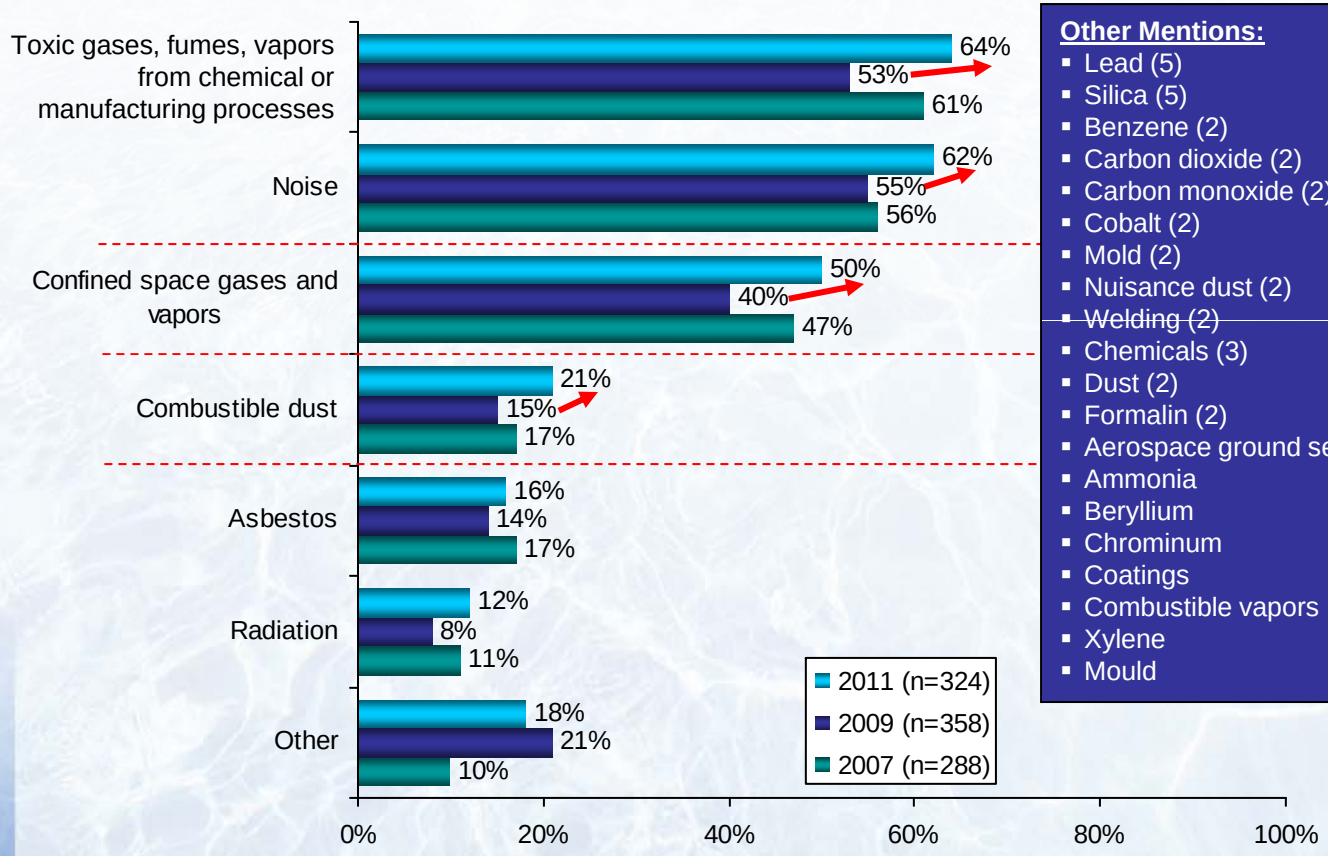
Study Results

Utilization of Industrial Hygiene Equipment

Exposure Risks

Respondents indicate that the most significant exposure risks faced by company employees are toxic gases, fumes, vapors from chemical or manufacturing processes and noise.



Other Mentions:

- Lead (5)
- Silica (5)
- Benzene (2)
- Carbon dioxide (2)
- Carbon monoxide (2)
- Cobalt (2)
- Mold (2)
- Nuisance dust (2)
- Welding (2)
- Chemicals (3)
- Dust (2)
- Formalin (2)
- Aerospace ground servicing
- Ammonia
- Beryllium
- Chrominum
- Coatings
- Combustible vapors
- Xylene
- Mould
- General air quality
- General IAQ
- Heavy metals
- Hex chrome dust
- IDLH atmospheres
- Indoor air quality
- Metallic powders
- Metals
- Micro particulate
- MRF
- Natural gas
- Office indoor air quality testing
- Paint
- Pharmaceutical compounds
- Potent compounds (API) pharma/biotech
- Stoddard solvent
- Toxic dusts
- Varies depending on client
- VOCs

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q4. Which of the following are the most significant exposure risks that employees face at your company?

Question Type: Multiple Choice

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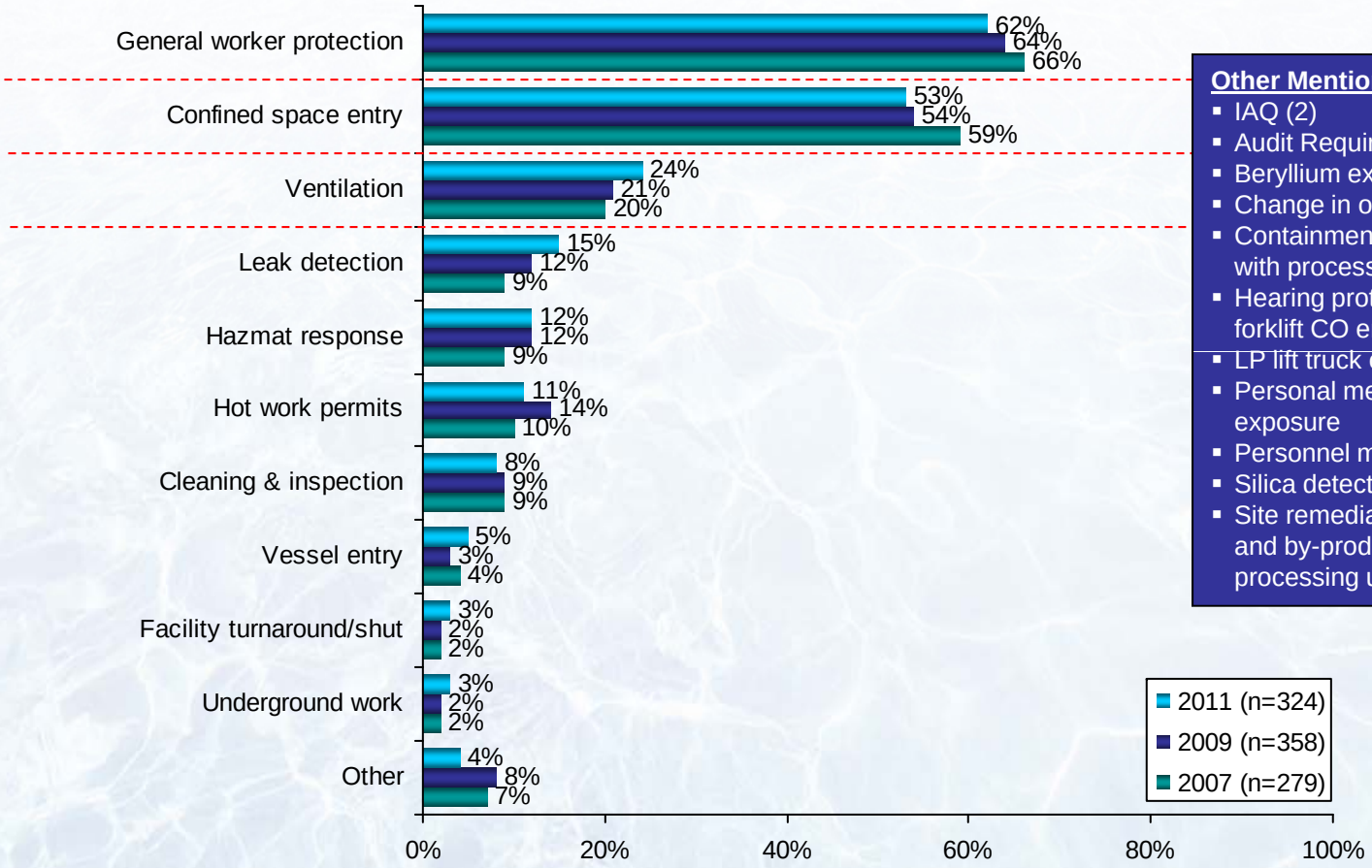
Applications for Hygiene Monitoring Equipment

General worker protection is the top application for respondents' use of hygiene monitoring equipment, followed by confined space entry.



Other Mentions:

- IAQ (2)
- Audit Requirements
- Beryllium exposure
- Change in operations
- Containment verification with processing API
- Hearing protection and forklift CO emissions
- LP lift truck carburetion
- Personal metals fume exposure
- Personnel monitoring
- Silica detection
- Site remediation: radiation and by-products of processing uranium

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q10. Please indicate the top 2 applications for your use of hygiene monitoring equipment.

Question Type: Multiple Choice

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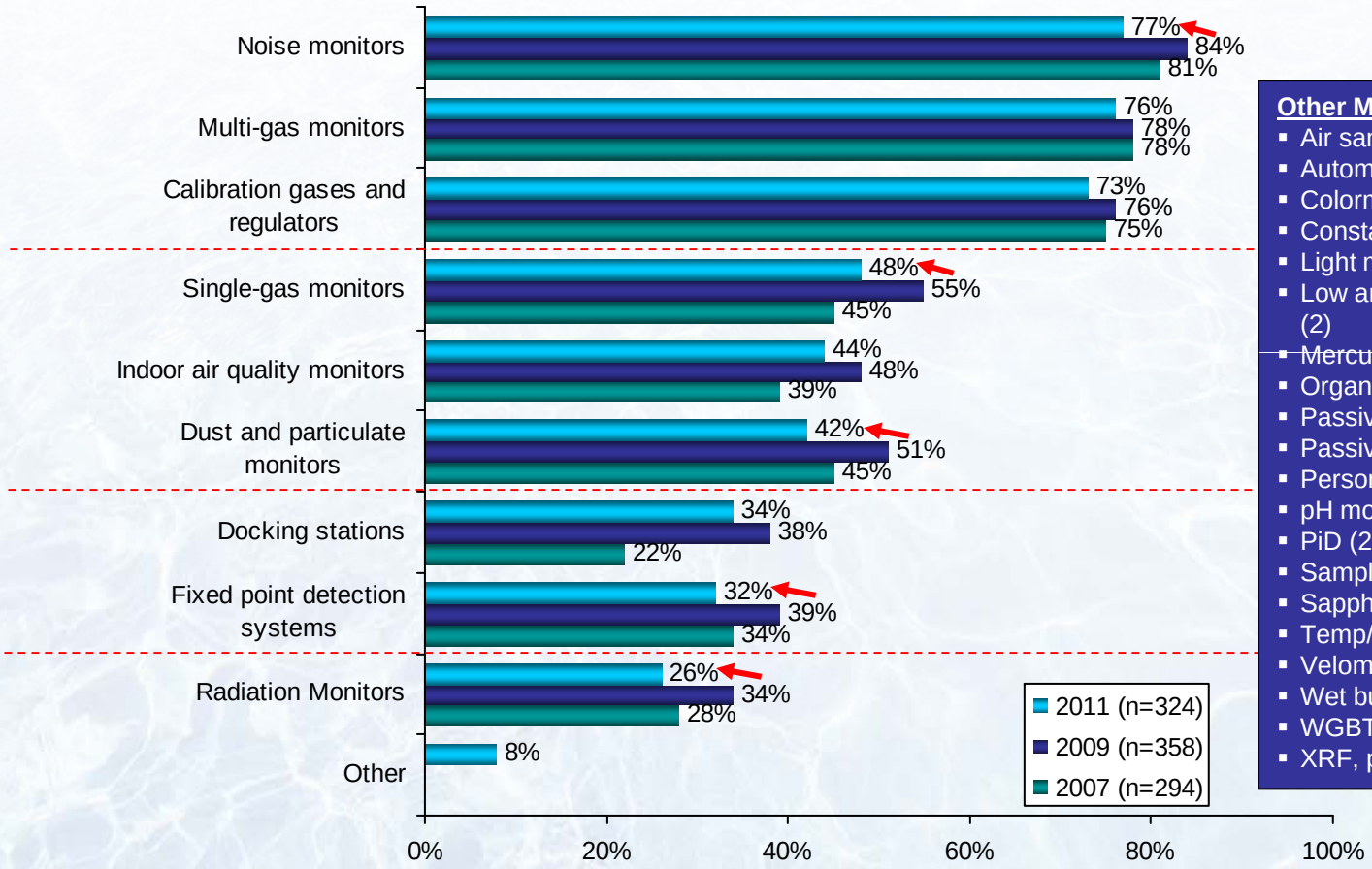
Types of Industrial Hygiene Monitoring Equipment Currently In Use

Noise monitors, multi-gas monitors and calibration gases and regulators are the three types of equipment most likely to be in used by respondent companies. Noise monitors, single-gas monitors, dust and particulate monitors, fixed point detection systems and radiation monitors are reportedly used significantly less than in 2009.



Other Mentions:

- Air sampling pumps
- Automated weather station
- Colormetric tubes
- Constant flow air pumps
- Light meter
- Low and hi volume pumps (2)
- Mercury vapor
- Organic vapor analyzer
- Passive badges (2)
- Passive dosimeters
- Personal air samplers
- pH monitoring
- PiD (2)
- Sampling pumps (2)
- Sapphire
- Temp/humidity monitors
- Velometers
- Wet bulb temperature
- WGBT
- XRF, pumps

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

Q8. Which of the following types of industrial hygiene monitoring equipment are currently used at your company?

Question Type: Multiple Choice

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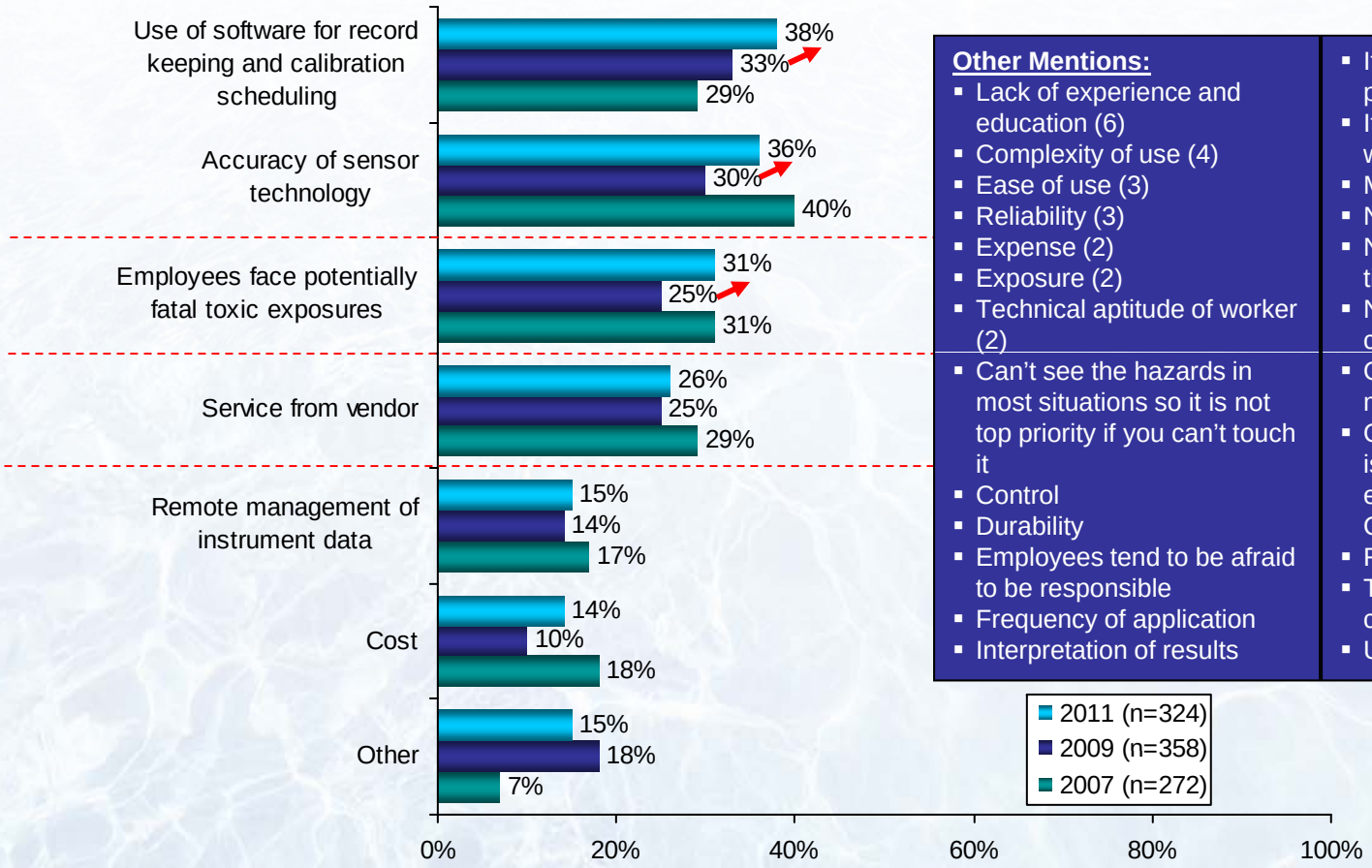
Attributes That Prevent Equipment From Becoming Commodities

Use of software for record keeping and calibration scheduling and accuracy of sensor technology are the top two issues that prevent industrial hygiene monitoring equipment from becoming commodities.



Other Mentions:

- Lack of experience and education (6)
- Complexity of use (4)
- Ease of use (3)
- Reliability (3)
- Expense (2)
- Exposure (2)
- Technical aptitude of worker (2)
- Can't see the hazards in most situations so it is not top priority if you can't touch it
- Control
- Durability
- Employees tend to be afraid to be responsible
- Frequency of application
- Interpretation of results
- It is a commodity purchase
- It is equipment that lasts when cared for
- Maintenance
- Not consumable
- Not needed 100% of the time
- Not needed as commodities
- Ongoing calibration and maintenance
- Our monitoring equipment is used daily & calibrated every 3 months per state OSHA
- Regulatory requirements
- There is not enough competition
- Use of the items

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by →

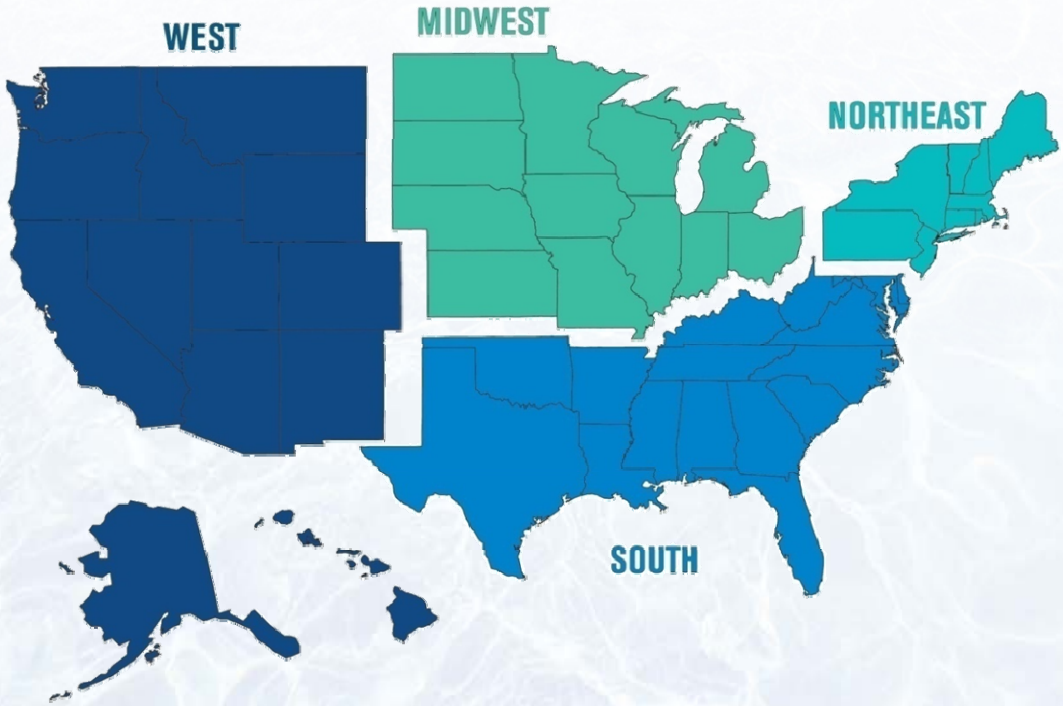
Q7. In your opinion, what prevents industrial hygiene monitoring equipment from becoming commodities, such as earplugs or gloves?

Question Type: Multiple Choice

Demographic Profile

Location of Respondents

National representation was achieved although more participants are located in the Midwest or South compared to the West or Northeast.



Region	2011
Midwest	32%
South	29%
West	20%
Northeast	19%
Total	**324**

Differences of 4.8% are considered significant using a 90% confidence interval

Q19. In what state are you located?

Question Type: Single Choice

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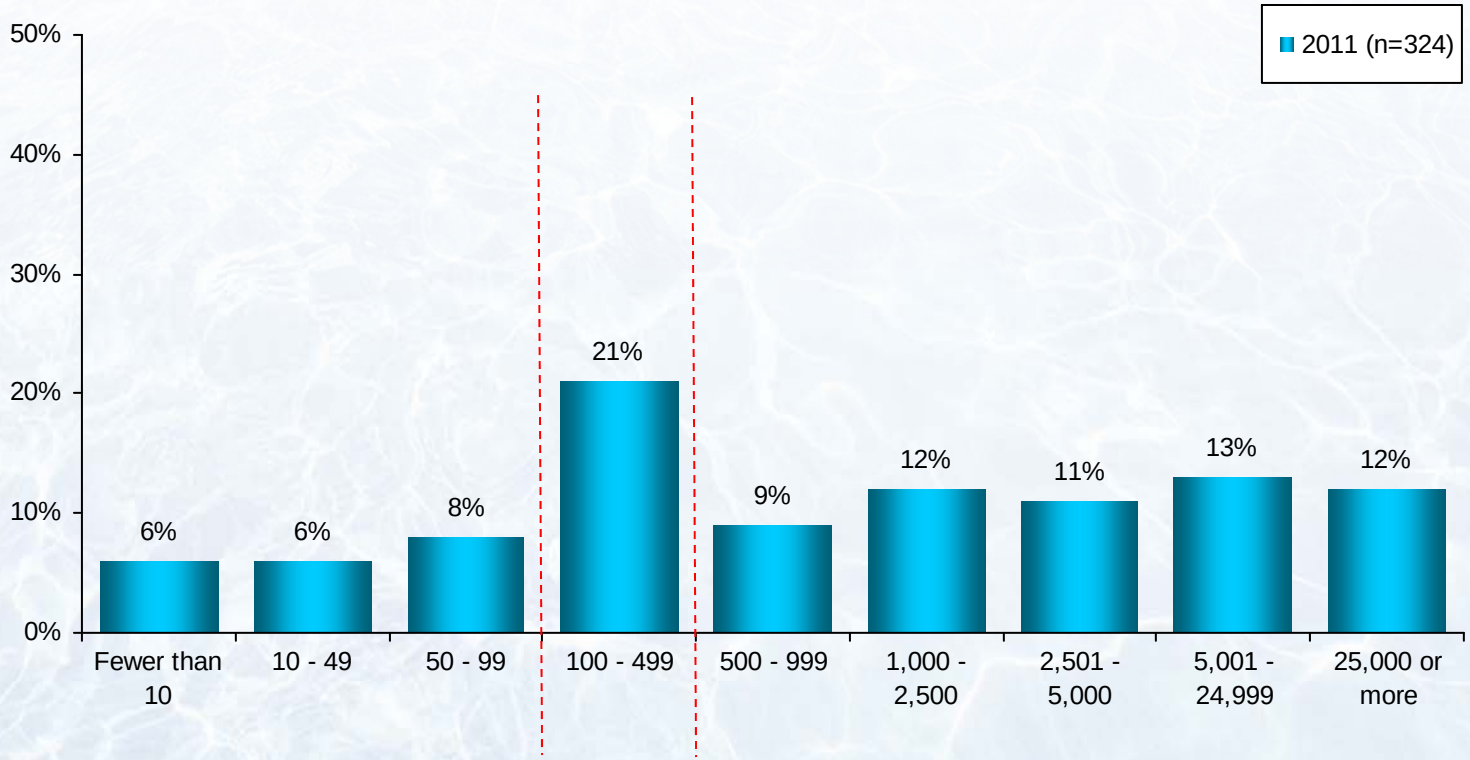
Number of Full-Time Employees

Roughly one-half of survey participants report fewer than 1000 full-time employees across all locations.



Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by - - - - -

Q20. How many full-time employees (and equivalents) are employed by your company across all locations (plants, divisions, subsidiaries)?

Question Type: Single Choice

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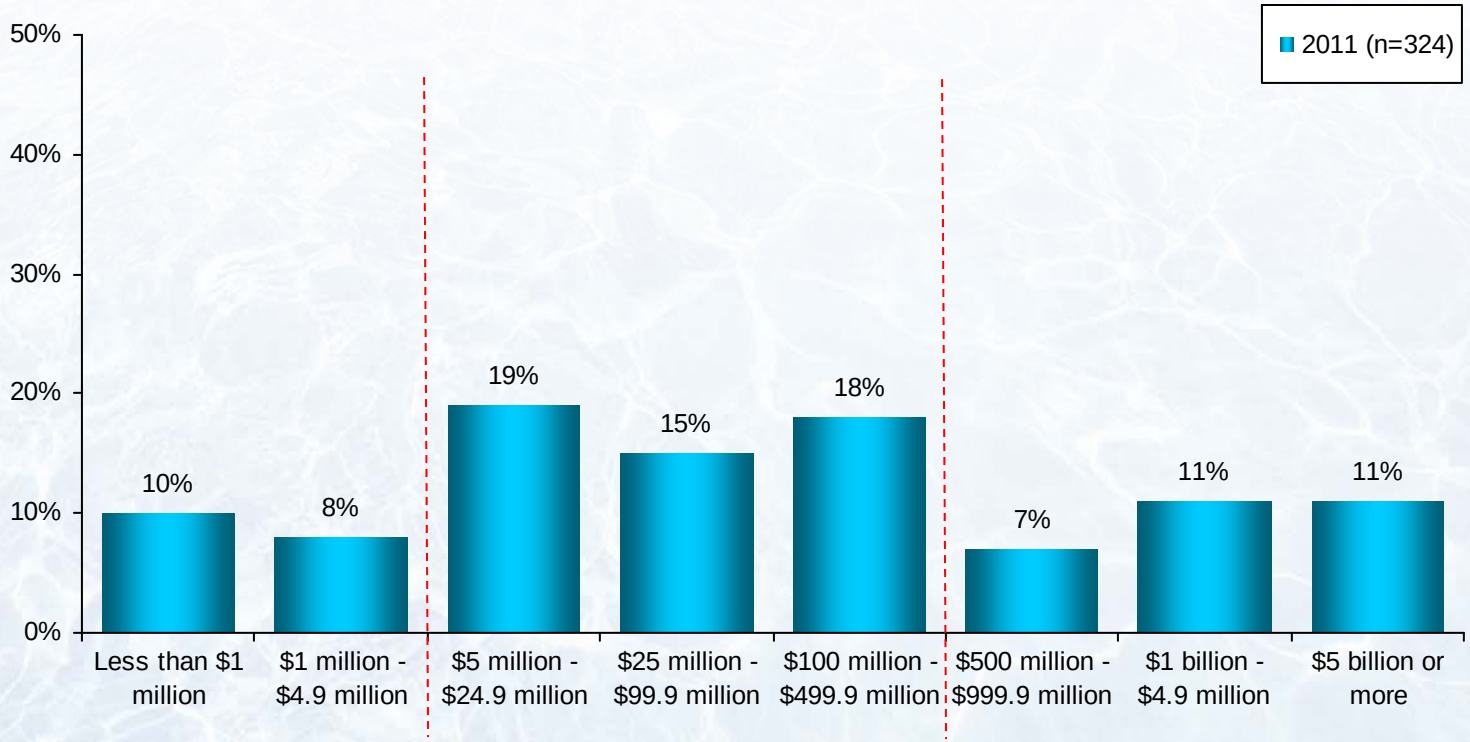
2010 Company Revenue

Half of respondents indicate that their company revenue for 2010 was $100 million or more.



Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by - - - - -

Q21. What were your company's total 2010 revenues?

Question Type: Single Choice

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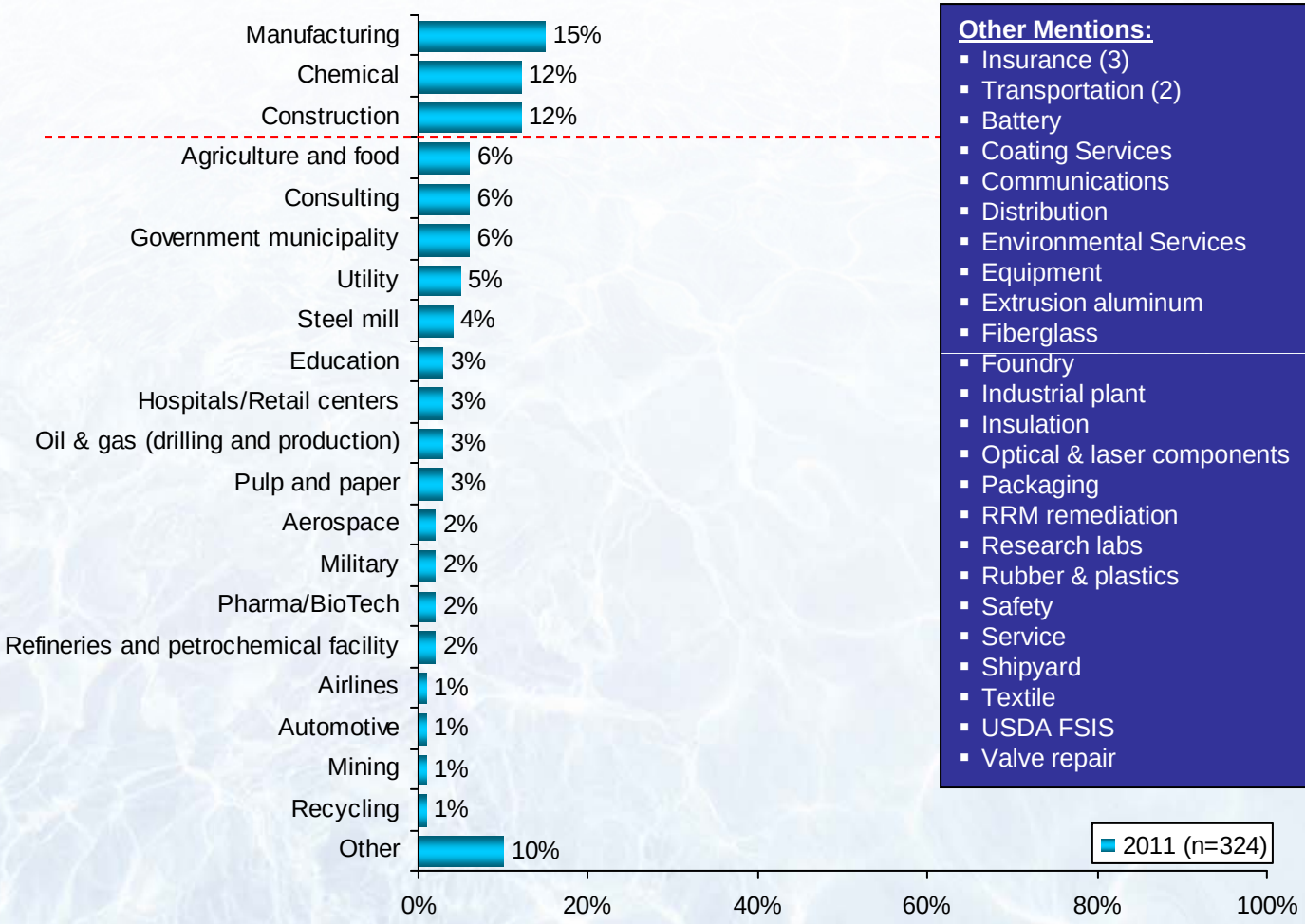
Industry

Significantly more respondents come from the manufacturing, chemical or construction industries.



Other Mentions:

- Insurance (3)
- Transportation (2)
- Battery
- Coating Services
- Communications
- Distribution
- Environmental Services
- Equipment
- Extrusion aluminum
- Fiberglass
- Foundry
- Industrial plant
- Insulation
- Optical & laser components
- Packaging
- RRM remediation
- Research labs
- Rubber & plastics
- Safety
- Service
- Shipyard
- Textile
- USDA FSIS
- Valve repair

Differences of 4.8% are considered significant using a 90% confidence interval and are indicated by

Q22. In which industry sector are you employed?

Question Type: Single Choice

Clear Seas RESEARCH

Making the complex clear

Industry Knowledge

Clear Seas Research's extensive network of industry experts and professional trade associations maximizes accuracy within studies and promotes interaction with the target audience. Utilizing a team of qualified, experienced market analysts Clear Seas Research provides actionable results with solid research recommendations.

Clear Insight

Through expert insight and actionable results Clear Seas Research facilitates superior decision making in today's business world.

For more information please contact:

Beth Surowiec at 248.786.1619 or surowiecb@clearseasresearch.com