LBNL Safety Culture Improvement



"Safety is one of the Lab's 5 Strategic Goals" (Alivisatos State of the Lab address in January, 2010)

Why focus on safety culture?

- · Keep our People Safe!
- Continually improve safety at the lab
- · To drive toward Zero Injuries
- To Achieve the "Next Level" of safety performance
 Overcome the Plateau effect
- · To move beyond reactive approach
- To better measure and reward proactive efforts
- · Allow more time and resources for science

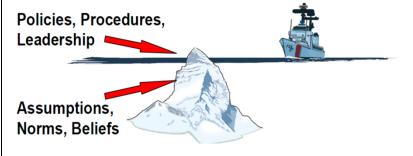
"Culture Eats Strategy for Lunch"

Implemented through a Safety Culture Improvement (Division Director retreat in March, 2010)

Background

What determines safety culture?

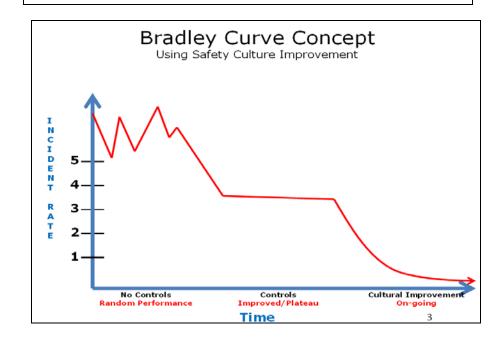
- · Like an Iceberg
 - 10 % of actions and events are visible and approved
 - 90% of actions and events are invisible and guided by culture
- Can Sink Even the "Unsinkable" Safety Program



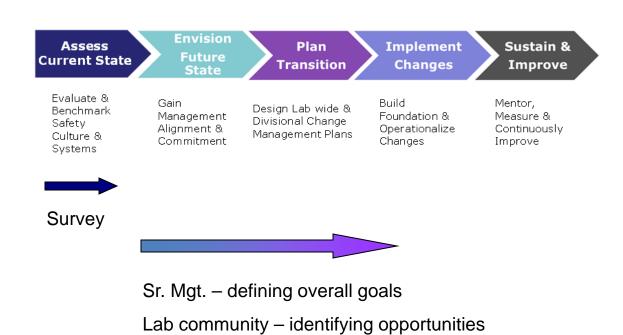
What is safety culture?

Definition:

"The product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organizations health and safety management" (UK HSC, ACSNI)



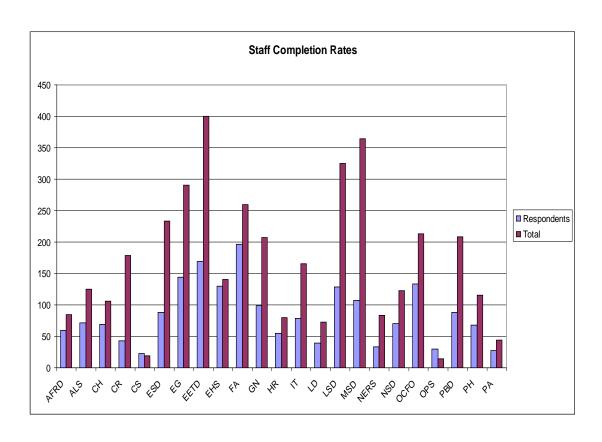
DuPont



Survey response rate

Staff 1752 ~45%

Total 1950



4. How many LBL or UC years of service do you have?							
Value	Count						
0 - 1 year	367						
2 - 3 years	268						
4 - 5 years 6 - 10 years	162						
6 - 10 years	330						
11 - 15 years	272						
16 or more years	551						
Total Responses:	1950						

6. What is your job category	/?
Value	Count
Executive	25
Manager/Supervisor	370
Hourly Worker	392
Professional	1163
Total Responses:	1950

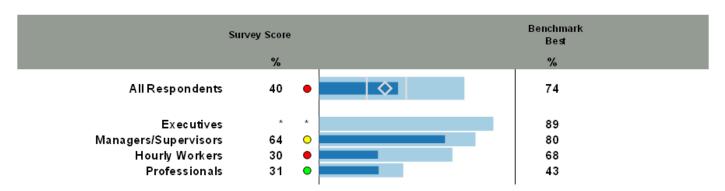
1. What is your 'primary' work site?						
Value	Count					
LBNL Site (including Donner)	1582					
JBEI	54					
JGI	100					
Potter	54					
OSF	32					
Campus	84					
Other	44					
Total Responses:	1950					

How to read the report

32

Question 9a: In the past year, how active were you in safety improvement activities such as serving on a committee, participating in an incident investigation, or helping put together safety rules?

Percent of respondents who say they are deeply or quite involved in safety activities:



All Responses

All Kespolises					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Deeply <	*	29	0	11	16
Quite <	*	36	30	19	24
Moderately	*	14 🔳	40	28	26
Not Very Much	*	21 ===	20	17=	18
Not At All	*	0	10■	25	16
Count of Responses Above:	2	14	10	36	62

< Indicates what response or responses are grouped together for Benchmarking.

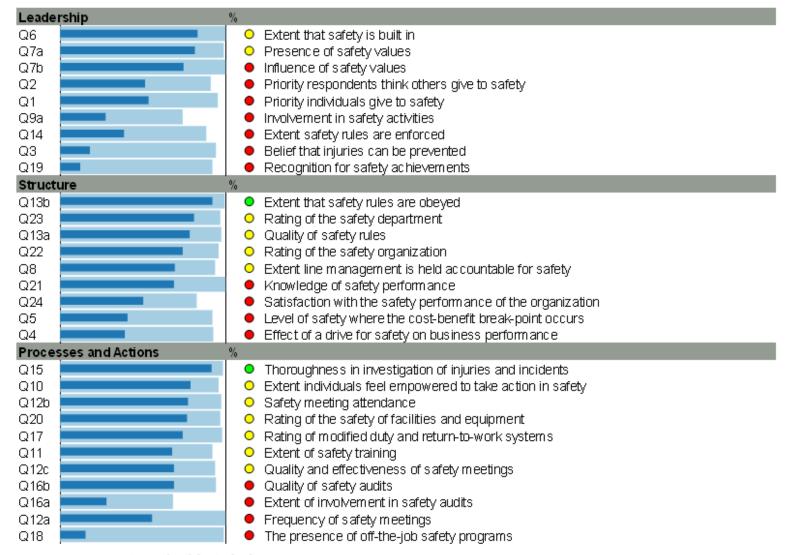
DuPont Sustainable Solutions



^{*} To ensure confidentiality, responses from groups with less than 3 respondents are not shown.

LBNL Summary

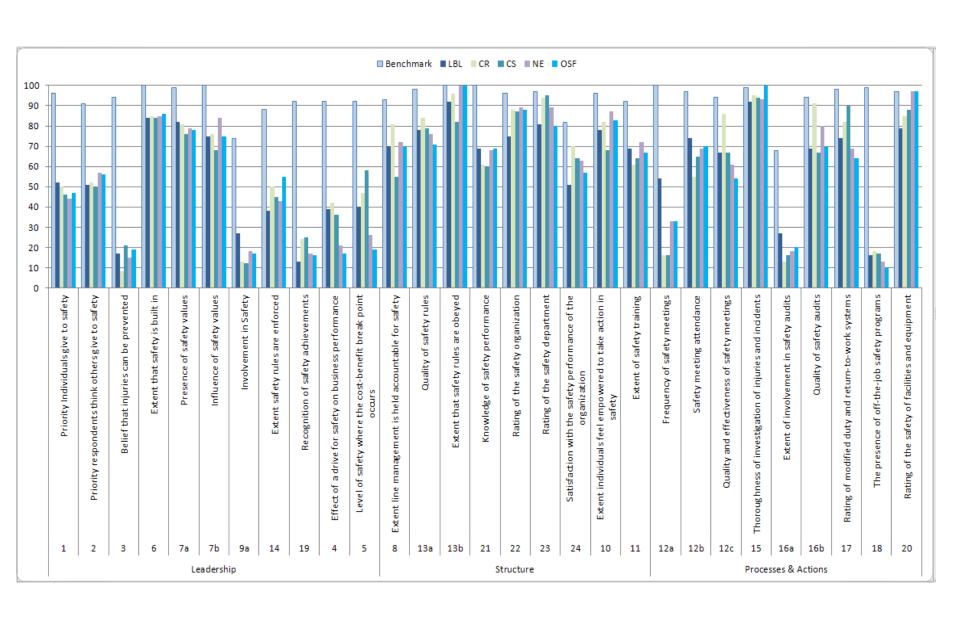
Overall Survey Results vs. Benchmark Best, sorted by strength



DuPont Sustainable Solutions



Summary of Lab and the various Computing Organizations



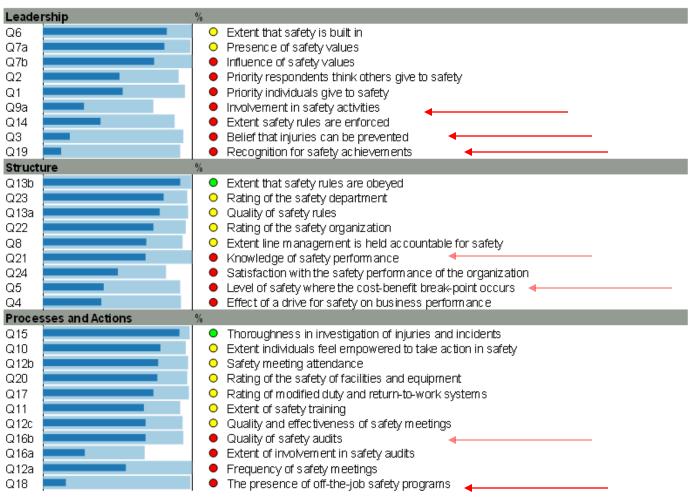
Identify Opportunities

- Low scores
 - Overall/relative to benchmarks
- "Quick returns"
- "Philosophical bases"
- Demographic disparities

Useful and important to you!

DuPont Recommendations

Overall Survey Results vs. Benchmark Best, sorted by strength



DuPont Sustainable Solutions

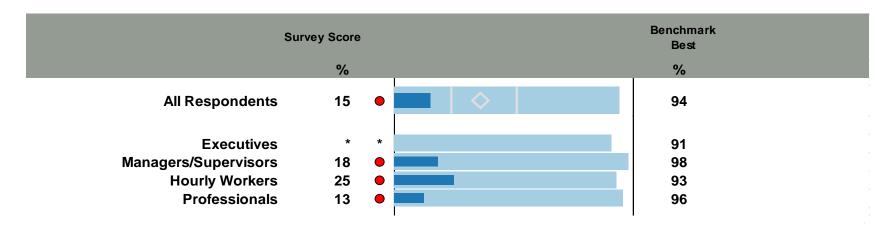


Belief that injuries can be prevented

NERSC

Question 3: To what extent can injuries be prevented?

Percent of respondents answering that all injuries can be prevented:



All Responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
All <	*	18	25	13	15
Almost All	*	64	50	67	64
Many	*	18	0	21	18
Some	*	0	25	0	31
Few	*	0	0	0	0
Count of Responses Above:	0	11	4	24	39

< Indicates what response or responses are grouped together for Benchmarking.

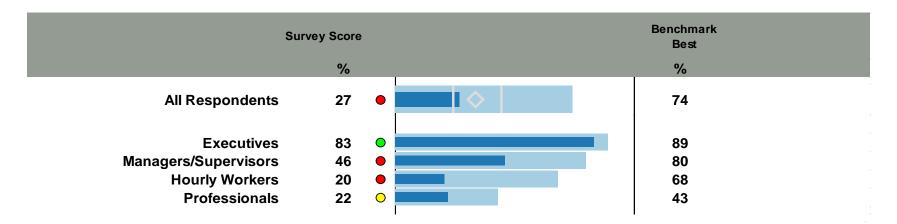
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Involvement

LBNL

Question 9a: In the past year, how active were you in safety improvement activities such as serving on a committee, participating in an incident investigation, or helping put together safety rules?

Percent of respondents who say they are deeply or quite involved in safety activities:



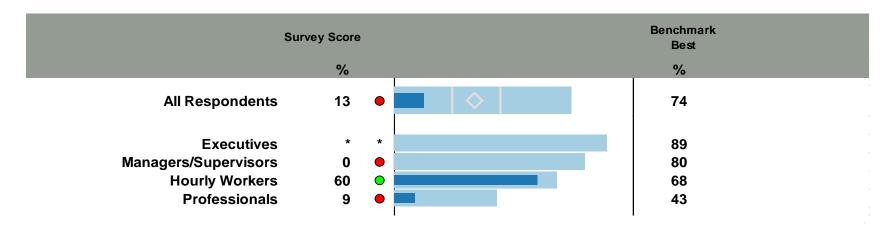
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Deeply <	50	22	8	10	12
Quite <	33	24	13	12	15
Moderately	8	24	20	19	20
Not Very Much	4	20	22	24	22
Not At All	4	11	38	36	31
Count of Responses Above:	24	391	417	1,270	2,103

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Computational Research

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Percent of respondents who say they are deeply or quite involved in safety activities:



All Responses						
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents	
Percent of Respondents:	%	%	%	%	%	
Deeply <	*	0	20	21	4	
Quite <	*	0	40	7	9	
Moderately	*	75	0	11	16	
Not Very Much	*	0	0	39	32	
Not At All	*	25	40	41	39	
Count of Responses Above:	1	4	5	46	56	

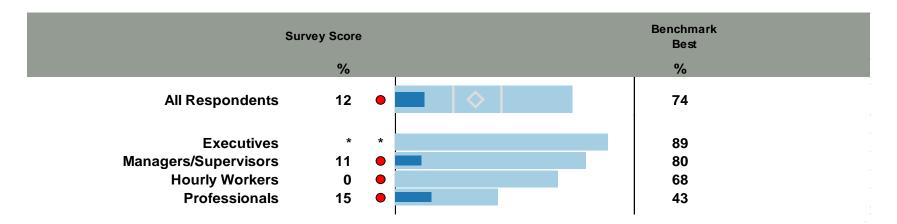
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Computing Sciences

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Percent of respondents who say they are deeply or quite involved in safety activities:



All Responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Deeply <	*	11	0	15	12
Quite <	*	0	0	0	0
Moderately	*	33	0	15	20
Not Very Much	*	56	0	15	28
Not At All	*	0	100	54	40
Count of Responses Above:	0	9	3	13	25

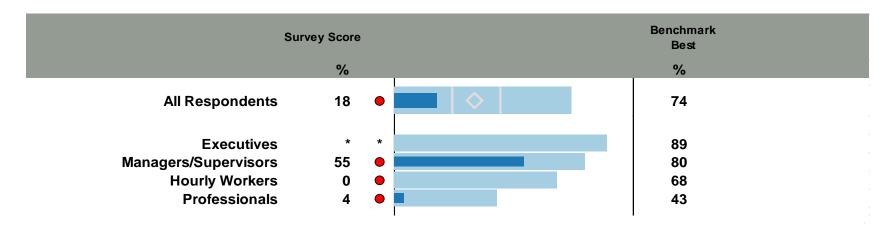
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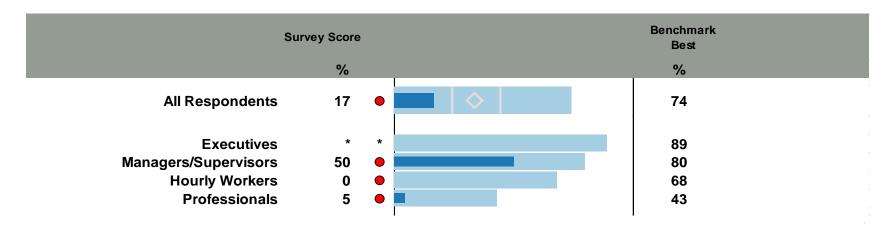
All Responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Deeply <	*	45	0	0	13
Quite <	*	9	0	4	5
Moderately	*	18	0	8	10
Not Very Much	*	18	25	42	33
Not At All	*	9	75	46	38
Count of Responses Above:	0	11	4	24	39

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Percent of respondents who say they are deeply or quite involved in safety activities:



All Responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Deeply <	*	40	0	0	11
Quite <	*	10	0	5 •	6
Moderately	*	20	0	5 I	8
Not Very Much	*	20	25	36	31
Not At All	*	10	75	55	44
Count of Responses Above:	0	10	4	22	36

< Indicates what response or responses are grouped together for Benchmarking.

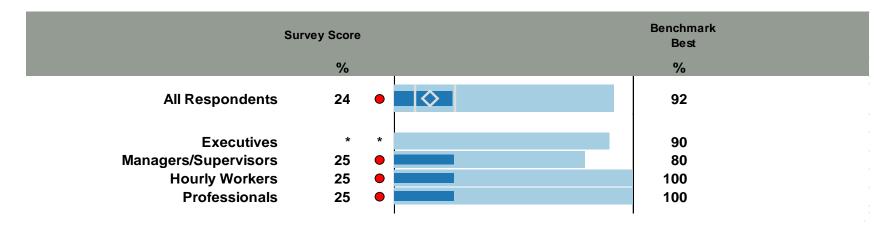
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Recognition

Computational Research

Question 19: To what extent does your organization recognize safety achievements and celebrate good safety performance?

Percent of respondents answering that safety achievements are recognized:



	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Thorough & Extensive <	*	25	25	25	24
Frequent	*	25	25	48	45
Some	*	50	0	25	24
Little	*	0	50	3	6■
None	*	0	0	0	0
Count of Responses Above:	1	4	4	40	49
"I Don't Know" Responses Excluded:	0	0	1	6	7

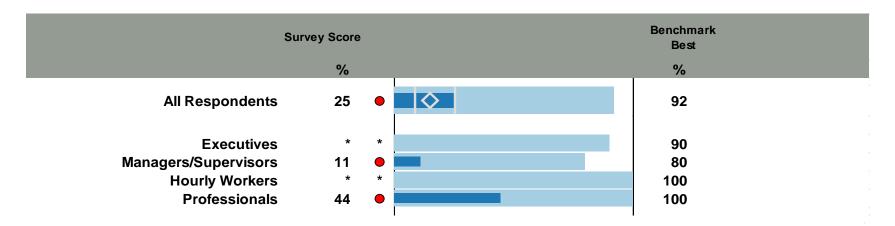
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Computing Sciences

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	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Thorough & Extensive <	*	11	*	44	25
Frequent	*	56	*	22	40
Some	*	33	*	11	20
Little	*	0	*	11	10
None	*	0	*	11	5■
Count of Responses Above:	0	9	2	9	20
"I Don't Know" Responses Excluded:	0	0	1	4	5

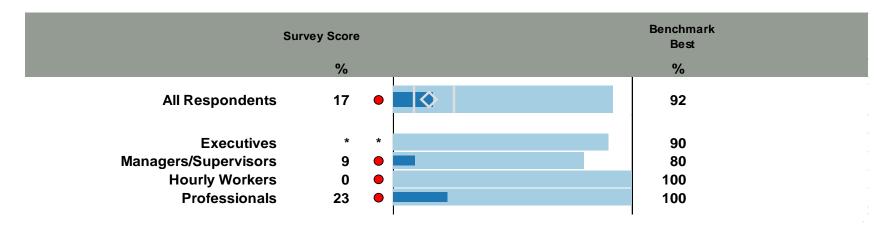
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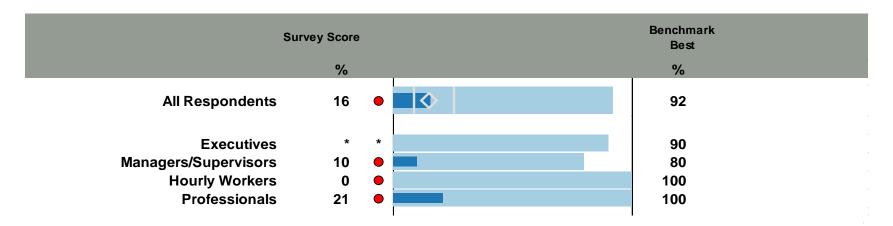
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondent
Percent of Respondents:	%	%	%	%	%
Thorough & Extensive <	*	9	0	23	17
Frequent	*	64	0	32	39
Some	*	9	0	23	17
Little	*	18	0	14	14
None	*	0	100	9■	14
Count of Responses Above:	0	11	3	22	36
"I Don't Know" Responses Excluded:	0	0	1	1	2

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Percent of respondents answering that safety achievements are recognized:



	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Thorough & Extensive <	*	10	0	21	16
Frequent	*	60	0	32	38
Some	*	10	0	26	19
Little	*	20	0	5	9
None	*	0	100	16	19
Count of Responses Above:	0	10	3	19	32
"I Don't Know" Responses Excluded:	0	0	1	2	3

< Indicates what response or responses are grouped together for Benchmarking.

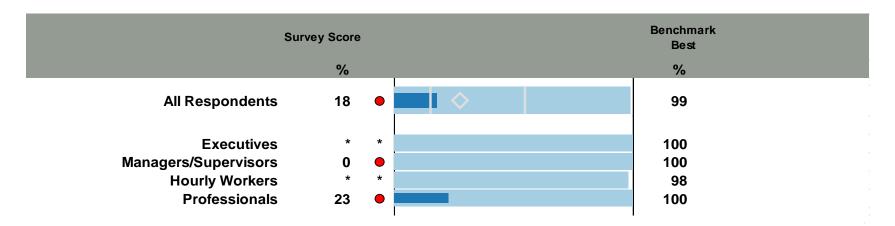
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Off-the-Job

Computational Research

Question 18: To what extent is "off-the-job" safety dealt with in your workplace safety program?

Percent of respondents answering that off-the-job safety is present:



All Responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Important Component <	*	0	*	23	18
Informal Component	*	100	*	64	71
Not Included	*	0	*	14	11
Count of Responses Above:	1	4	1	22	28
"I Don't Know" Responses Excluded:	0	0	4	24	28

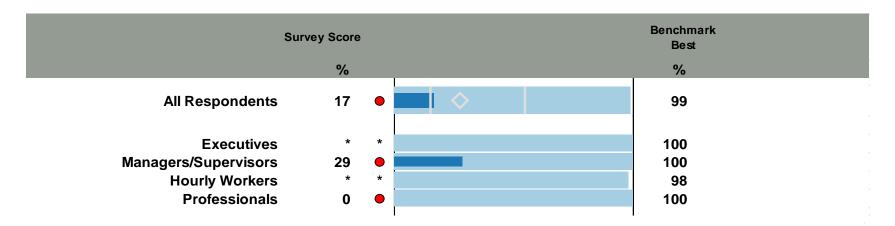
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All Nespolises						
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents	
Percent of Respondents:	%	%	%	%	%	
Important Component <	*	29	*	0	17	
Informal Component	*	71	*	75	75	
Not Included	*	0	*	25	8	
Count of Responses Above:	0	7	1	4	12	
"I Don't Know" Responses Excluded:	0	2	2	9	13	

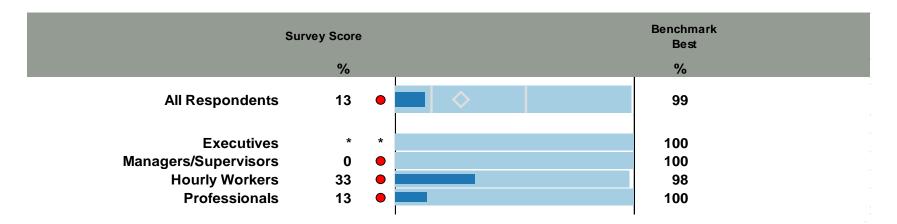
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All Nespolises						
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents	
Percent of Respondents:	%	%	%	%	%	
Important Component <	*	0	33	13	13	
Informal Component	*	83	0	47	50	
Not Included	*	17	67	40	38	
Count of Responses Above:	0	6	3	15	24	
"I Don't Know" Responses Excluded:	0	5	1	8	14	

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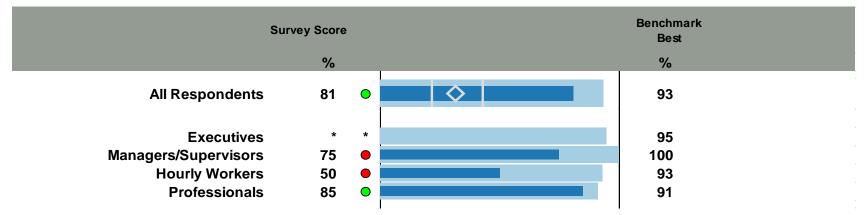
Other 'Opportunities'

Accountability

Computational Research

Question 8: Respond to this statement: "In my organization, supervisors and managers are held accountable for preventing injuries and safety incidents in their area, and safety performance has a direct effect on their performance rating, advancement, and pay."

Percent of respondents who strongly agree or agree that managers and supervisors are held accountable:



	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Strongly Agree <	*	50	50	42	43
Agree <	*	25	0	42	38
Neutral	*	25	0	6	7
Disagree	*	0	25	6	7
Strongly Disagree	*	0	25	3	5■
Count of Responses Above:	1	4	4	33	42
"I Don't Know" Responses Excluded:	0	0	1	13	14

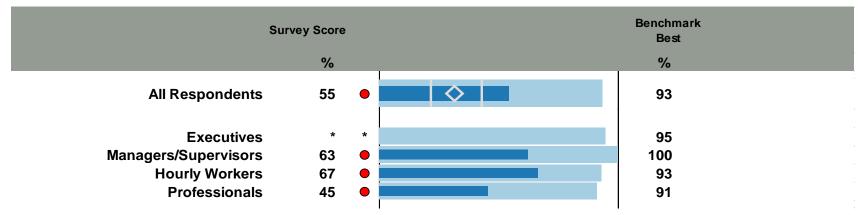
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Computing Sciences

Question 8: Respond to this statement: "In my organization, supervisors and managers are held accountable for preventing injuries and safety incidents in their area, and safety performance has a direct effect on their performance rating, advancement, and pay."

Percent of respondents who strongly agree or agree that managers and supervisors are held accountable:



7 W 1.00 P 011000					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Strongly Agree <	*	25	0	18	18
Agree <	*	38	67	27	36
Neutral	*	25	0	36	27
Disagree	*	0	33	0	5
Strongly Disagree	*	13	0	18	14
Count of Responses Above:	0	8	3	11/	22
"I Don't Know" Responses Excluded:	0	1	0	2	3

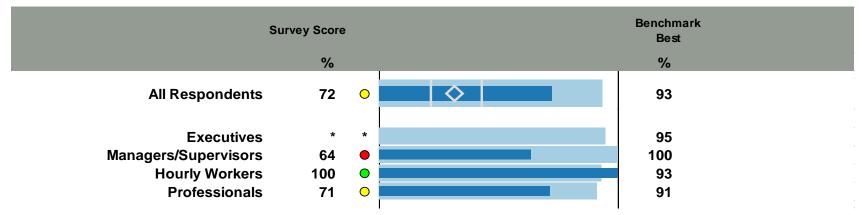
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Percent of respondents who strongly agree or agree that managers and supervisors are held accountable:



	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Strongly Agree <	*	36	75	29	36
Agree <	*	27	25	43	36
Neutral	*	36	0	24	25
Disagree	*	0	0	5	31
Strongly Disagree	*	0	0	0	0
Count of Responses Above:	0	11	4	21	36
"I Don't Know" Responses Excluded:	0	0	0	3	3

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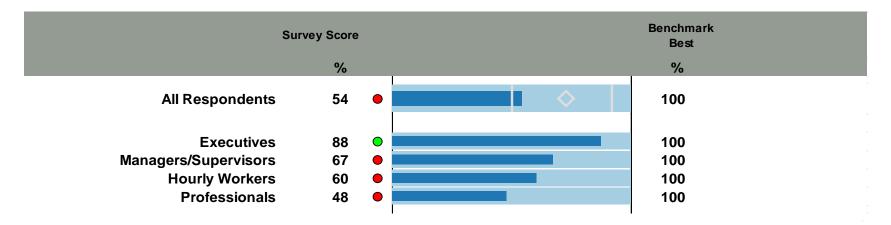
Other 'Opportunities'

Frequency of safety meetings

LBNL

Question 12a: How often are safety meetings held in your workplace?

Percent of respondents who say safety meetings are held weekly, bi-weekly, or monthly:



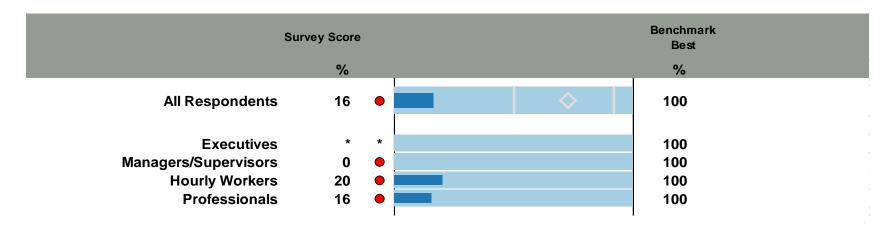
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondent
Percent of Respondents:	%	%	%	%	%
Weekly or Every Two Weeks <	42	29	34	19	24
Monthly <	46	38	26	28	30
Every Two Months	4	6■	7 ■	8	7
Less Than Every Two Months	4	16	18	27	23
Never	4	10	15	17	15
Count of Responses Above:	24	388	412	1,253	2,078

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Computational Research

Question 12a: How often are safety meetings held in your workplace?

Percent of respondents who say safety meetings are held weekly, bi-weekly, or monthly:



All responses					
	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Weekly or Every Two Weeks <	*	0	0	7	5
Monthly <	*	0	20	9	11
Every Two Months	*	0	0	4	4
Less Than Every Two Months	*	100	40	44	47
Never	*	0	40	36	33
Count of Responses Above:	1	4	5	45	55

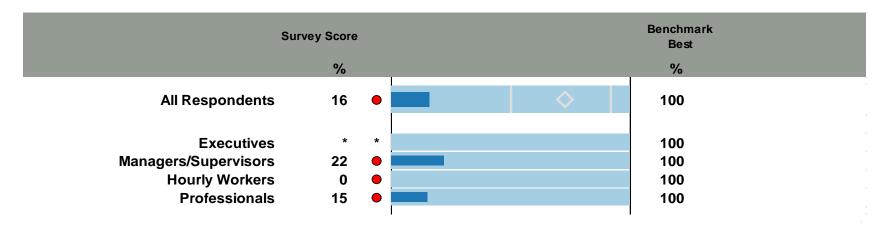
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Percent of respondents who say safety meetings are held weekly, bi-weekly, or monthly:



All Nespolises	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Weekly or Every Two Weeks <	*	11	0	8	8
Monthly <	*	11	0	8	8
Every Two Months	*	22	0	8	12
Less Than Every Two Months	*	33	100	31	40
Never	*	22	0	46	32
Count of Responses Above:	0	9	3	13	25

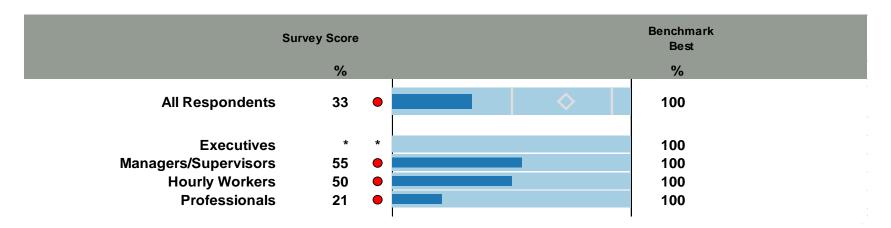
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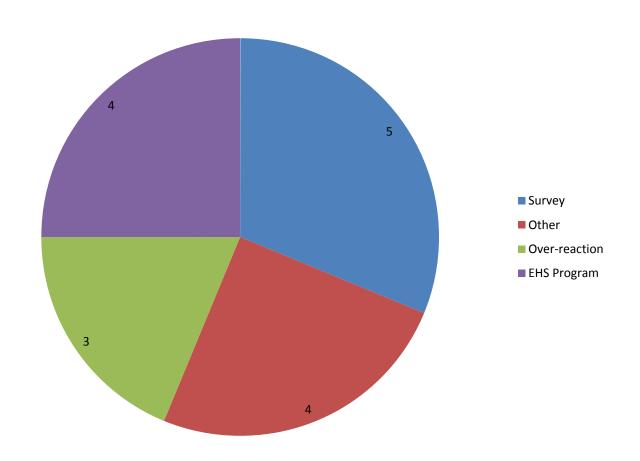


All Responses	Executives	Managers/Super visors	Hourly Workers	Professionals	All Respondents
Percent of Respondents:	%	%	%	%	%
Weekly or Every Two Weeks <	*	9	50	4	10
Monthly <	*	45	0	17	23
Every Two Months	*	18	25	25	23
Less Than Every Two Months	*	9	25	25	21
Never	*	18	0	29	23
Count of Responses Above:	0	11	4	24	39

< Indicates what response or responses are grouped together for Benchmarking.

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Computing Comments



Representative Comments

EHS Program:

"LBNL requires strict adherence to established safety rules. Yet, we are forced to do some things that increase risk to both people and equipment in order to follow rules that have been laid down (or interpreted by EH&S) to ensure against a freak incident"

Over-reaction:

"I in general find the overzealous "safety culture" to be demeaning. If you treat workers as children all the time that is what your work force becomes. "

Survey:

"Some of these questions were very leading or limiting, such that I found no good choices."