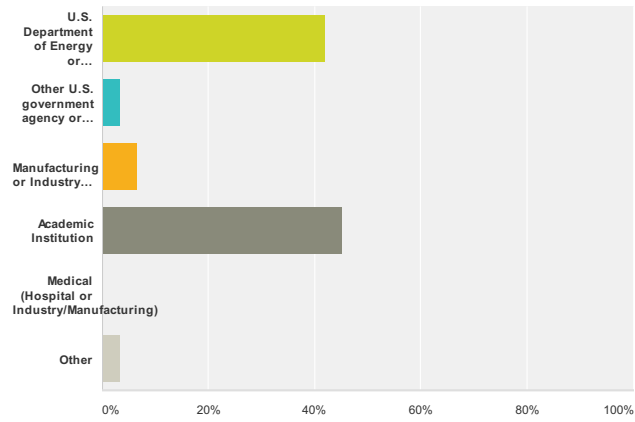


Laser Safety Performance Metrics

Q1 Affiliation:

Answered: 31 Skipped: 0

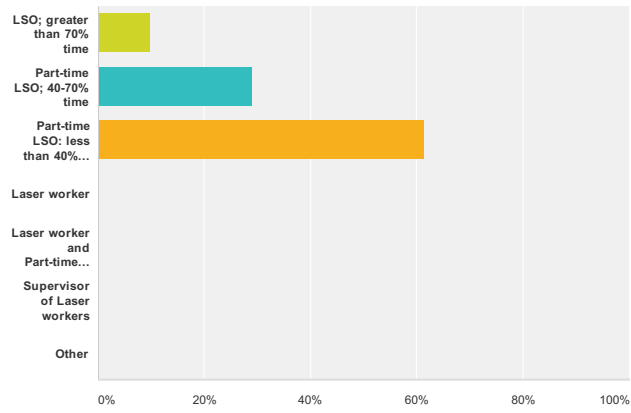


Answer Choices	Responses	
U.S. Department of Energy or DOE facility	41.94%	13
Other U.S. government agency or military	3.23%	1
Manufacturing or Industry (non-medical)	6.45%	2
Academic Institution	45.16%	14
Medical (Hospital or Industry/Manufacturing)	0%	0
Other	3.23%	1
Total		31

Laser Safety Performance Metrics

Q2 Laser-related job function: (Choose one answer that is the best match)

Answered: 31 Skipped: 0

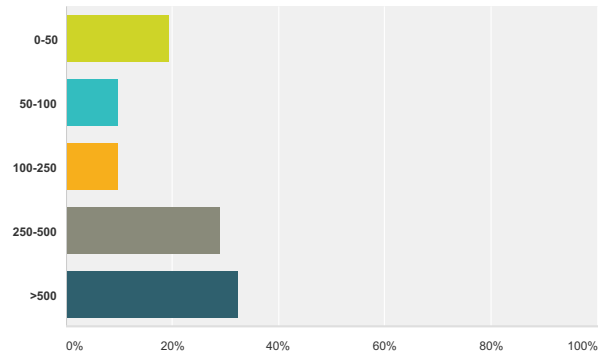


Answer Choices	Responses	Count
LSO; greater than 70% time	9.68%	3
Part-time LSO; 40-70% time	29.03%	9
Part-time LSO; less than 40% time	61.29%	19
Laser worker	0%	0
Laser worker and Part-time LSO	0%	0
Supervisor of Laser workers	0%	0
Other	0%	0
Total		31

Laser Safety Performance Metrics

Q3 Approximate number of laser operators at your institution/facility (or in your area of responsibility):

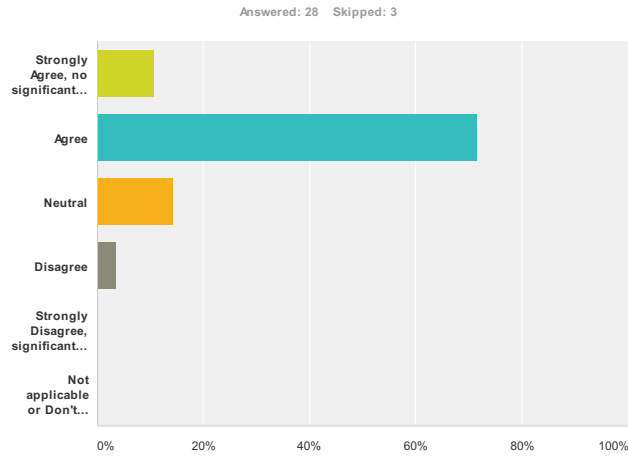
Answered: 31 Skipped: 0



Answer Choices	Responses	
0-50	19.35%	6
50-100	9.68%	3
100-250	9.68%	3
250-500	29.03%	9
>500	32.26%	10
Total		31

Laser Safety Performance Metrics

Q4 Laser Safety Supervisors are those who have line management responsibilities for safe laser operations in their lab. They must provide good site-specific On-the-Job Training, and do a good job managing and overseeing safe laser operations in their laser lab. They should visit the lab regularly and interact with laser operators, observing and discussing their work. How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, laser safety supervisors perform their job functions well no significant improvements are needed to reduce risk of a laser injury incident.

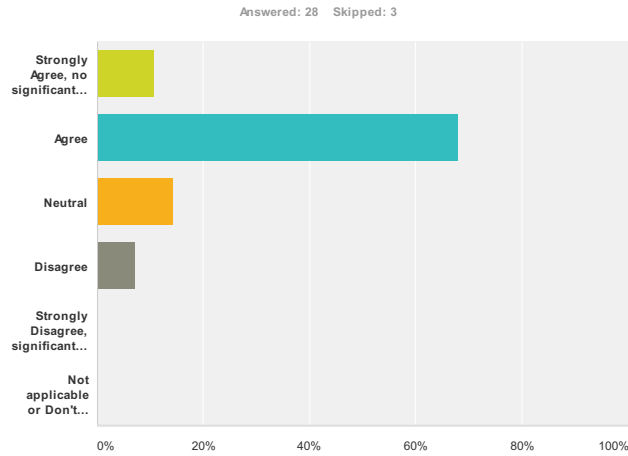


Answer Choices	Responses
Strongly Agree, no significant improvements are needed	10.71% 3
Agree	71.43% 20
Neutral	14.29% 4
Disagree	3.57% 1
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	Most supervisors are outstanding at this while a handful may need slight improvements	9/3/2013 3:01 PM
2	Laser system owners are responsible for providing the site specific OJT	9/3/2013 11:39 AM
3	There is ALWAYS room for Improvement	9/3/2013 8:37 AM

Laser Safety Performance Metrics

Q5 Laser Safety Supervisors are those who have line management responsibilities for safe laser operations in their lab. They must provide good site-specific On-the-Job Training, and do a good job managing and overseeing safe laser operations in their laser lab. They should visit the lab regularly and interact with laser operators, observing and discussing their work How well do you agree with the following statement? Laser safety supervisors at my institution/facility that I am familiar with perform their job functions well; no significant improvements are needed to reduce risk of a laser injury incident.



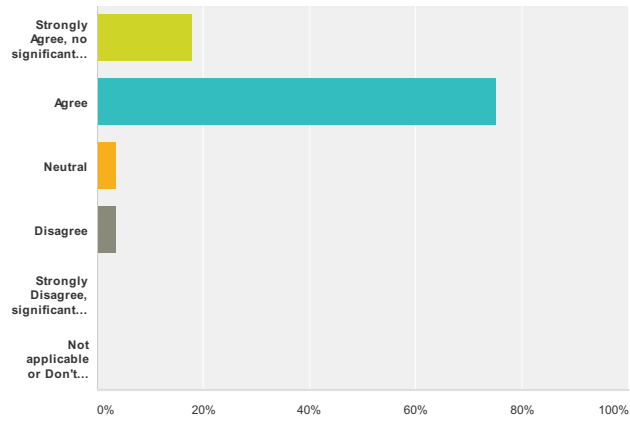
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	10.71% 3
Agree	67.86% 19
Neutral	14.29% 4
Disagree	7.14% 2
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	Program is set up well but individual performance may vary.	9/3/2013 11:39 AM
2	Some supervisors are very good; others not so much. So hard to give a generalized answer.	9/3/2013 9:52 AM
3	It is not known how often they independently do this; the LSOs visit the LCAs at least every six months and generally find few observable issues.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q6 Available equipment and laser lab configuration: How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, these are good and are effective; no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 28 Skipped: 3



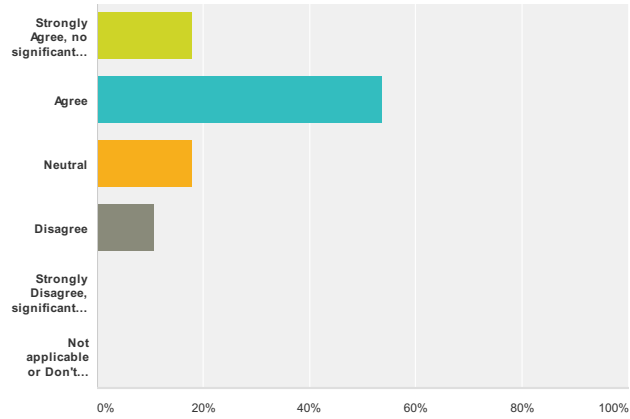
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	17.86% 5
Agree	75% 21
Neutral	3.57% 1
Disagree	3.57% 1
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	availability of equipment and or funds to provide safety measures? If so I would answer neutral as there is always a cost benefit issue involved.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q7 Available equipment and laser lab configuration: How well do you agree with the following statement? Within the laser labs at your facility/institution that you are familiar with, these are good and are effective; no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 28 Skipped: 3



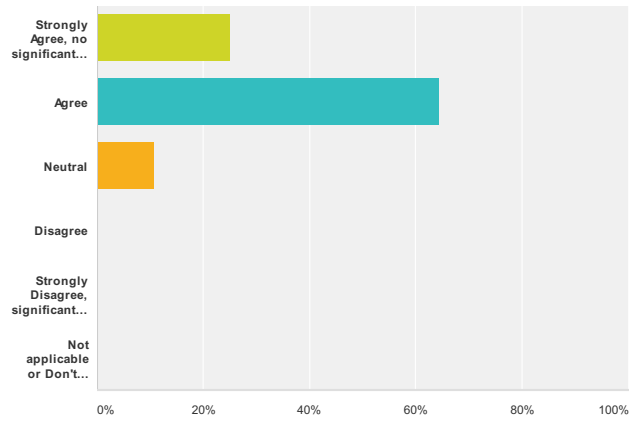
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	17.86% 5
Agree	53.57% 15
Neutral	17.86% 5
Disagree	10.71% 3
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	see comments for question 6	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q8 Engineering Controls (such as interlocks, safety shutters, barriers and Class 1 enclosures): How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, these are well done and are effective no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 28 Skipped: 3



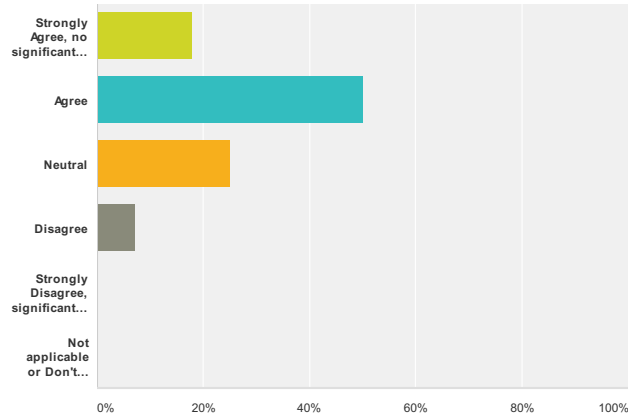
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	25% 7
Agree	64.29% 18
Neutral	10.71% 3
Disagree	0% 0
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	Barrier in some areas could be improved; these are usually balanced with access issues.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q9 Engineering Controls (such as interlocks, safety shutters, barriers and Class 1 enclosures): How well do you agree with the following statement? Within the laser labs that you are familiar with at your institution/facility, these are well done and are effective; no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 28 Skipped: 3



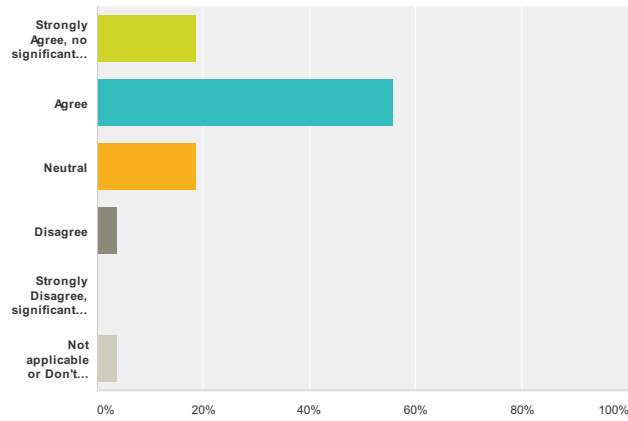
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	17.86% 5
Agree	50% 14
Neutral	25% 7
Disagree	7.14% 2
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	28

#	Additional comments:	Date
1	Although the laser supervisors, with which I have spoken, are highly competent, the support budget for safety equipment has not always been sufficient.	9/3/2013 7:42 AM
2	see comments for question 8	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q10 Standard Operating Procedure (SOP) document: this is prepared by laser safety supervisors and is used for initial training, as a reference for safe operating procedures, and for documenting laser hazards and controls and safety requirements. How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, the SOP document accomplishes these goals well; no significant improvements to the SOP are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



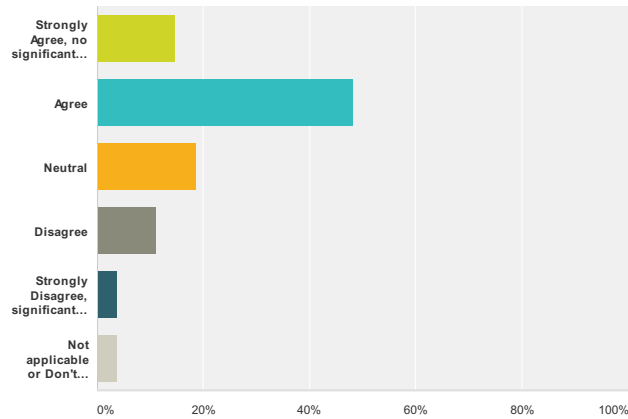
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	18.52% 5
Agree	55.56% 15
Neutral	18.52% 5
Disagree	3.70% 1
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	3.70% 1
Total	27

#	Additional comments:	Date
1	Some may say there is too much	9/3/2013 11:39 AM
2	These can always be improved; probably the most common issue is actually doing following each precaution/caveat stated in the SOP.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q11 Standard Operating Procedure (SOP) document: this is prepared by laser safety supervisors and is used for initial training, as a reference for safe operating procedures, and for documenting laser hazards and controls and safety requirements. How well do you agree with the following statement? Within the laser labs in which you are familiar at your institution/facility, the SOP document accomplishes these goals well; no significant improvements to the SOP are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



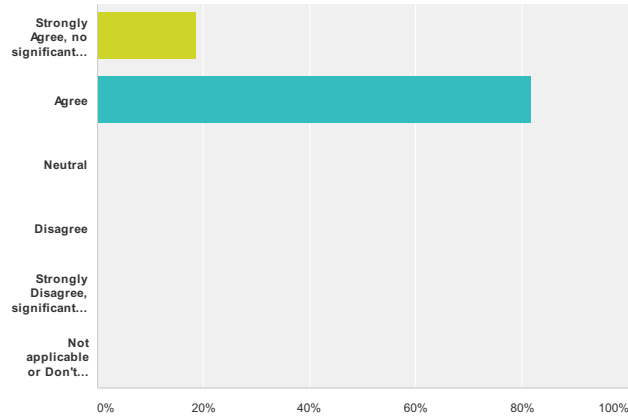
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	14.81% 4
Agree	48.15% 13
Neutral	18.52% 5
Disagree	11.11% 3
Strongly Disagree, significant improvements are needed	3.70% 1
Not applicable or Don't Know	3.70% 1
Total	27

#	Additional comments:	Date
1	Some are outstanding while others are just boiler plate language and even others are too large and hard to digest.	9/3/2013 3:01 PM
2	There is always room for improving procedures.	9/3/2013 11:39 AM
3	Our laser program is relatively new and I have not evaluated individual SOPs	9/3/2013 7:42 AM
4	There are some lab supervisors who need much more oversight and encouragement in writing and implementing stronger SOPs than others, though they all agree to its value.	9/3/2013 5:51 AM
5	see comments for question 10	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q12 Practicing safe laser procedures: How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, laser operators work safely, adhering to safe practices. No significant improvements are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



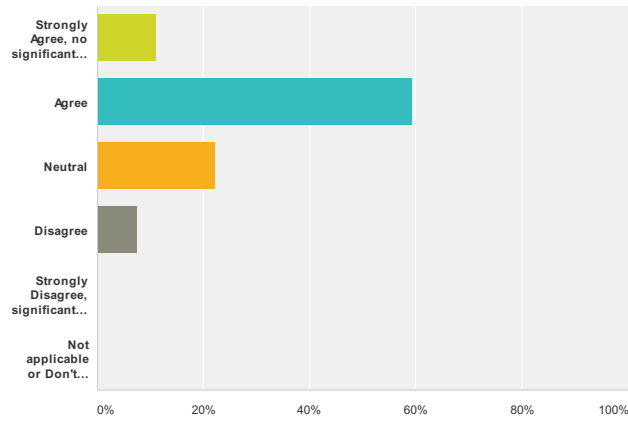
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	18.52% 5
Agree	81.48% 22
Neutral	0% 0
Disagree	0% 0
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	27

#	Additional comments:	Date
1	Researchers watch out for each other	9/3/2013 11:39 AM
2	This again is related to my comments to question 10.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q13 Practicing safe laser procedures: How well do you agree with the following statement? Within the laser labs you are familiar with at your institution/facility, laser operators work safely, adhering to safe practices. No significant improvements are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



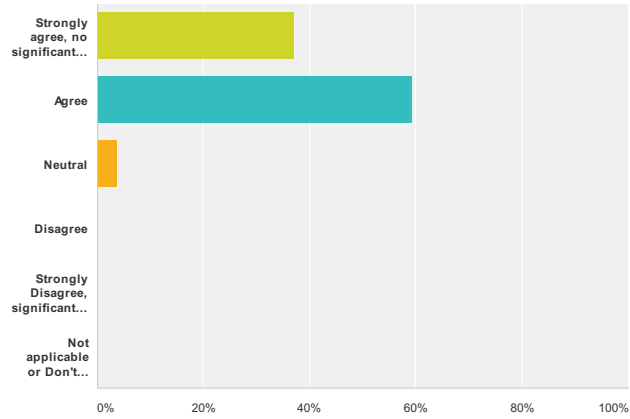
Answer Choices	Responses
Strongly Agree, no significant improvements are needed	11.11% 3
Agree	59.26% 16
Neutral	22.22% 6
Disagree	7.41% 2
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	27

#	Additional comments:	Date
1	Would be strongly agree if not for second-hand knowledge of a worker cutting corners	9/3/2013 3:01 PM
2	As in most research organizations, we have a few unique personalities that present there own challenges.	9/3/2013 11:39 AM
3	see answer for question 12	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q14 Laser eyewear requirements and available laser eyewear: How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, these are implemented well and are effective, and it is easy to comply with the laser eyewear requirements; no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



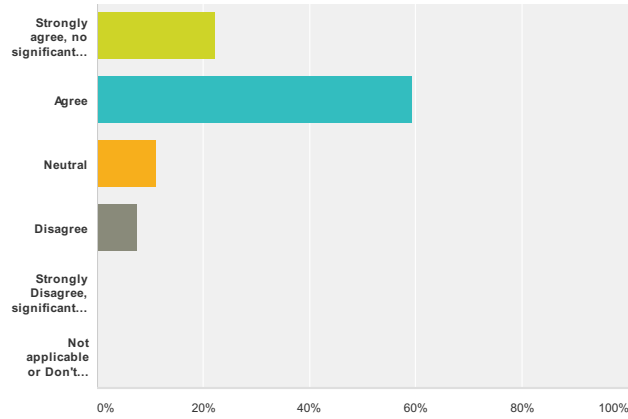
Answer Choices	Responses
Strongly agree, no significant improvements are needed	37.04% 10
Agree	59.26% 16
Neutral	3.70% 1
Disagree	0% 0
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	27

#	Additional comments:	Date
1	This may be an area which could use more inquiry . We rarely get comments that eyewear is an impediment to performing work but we don't always ask the question ourselves of the users	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q15 Laser eyewear requirements and available laser eyewear: How well do you agree with the following statement? Within the laser labs which you are familiar with at your institution/facility, these are implemented well and are effective, and it is easy to comply with the laser eyewear requirements; no significant improvements are needed to reduce risk of a laser injury incident.

Answered: 27 Skipped: 4



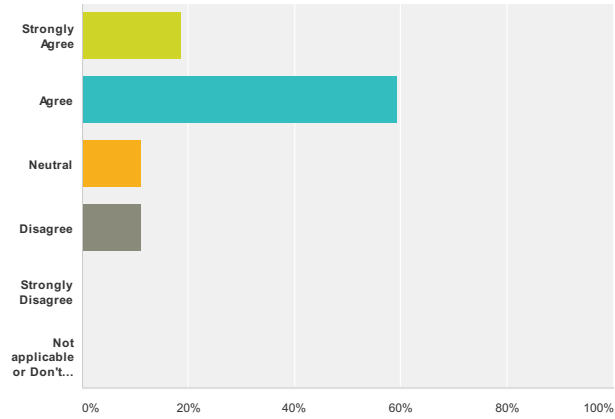
Answer Choices	Responses
Strongly agree, no significant improvements are needed	22.22% 6
Agree	59.26% 16
Neutral	11.11% 3
Disagree	7.41% 2
Strongly Disagree, significant improvements are needed	0% 0
Not applicable or Don't Know	0% 0
Total	27

#	Additional comments:	Date
1	Challenge is getting eyewear replaced when it gets scratched or otherwise impairs vision.	9/3/2013 11:39 AM
2	see comments for question 14.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q16 Laser eyewear practices (Part 1): How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? Within the laser labs in which you work, laser eyewear requirements are always adhered to. I am not aware of laser operators intentionally or mistakenly violating a laser eyewear requirement.

Answered: 27 Skipped: 4



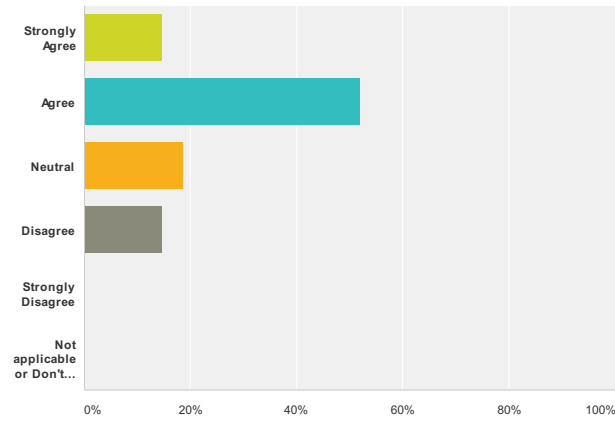
Answer Choices	Responses	
Strongly Agree	18.52%	5
Agree	59.26%	16
Neutral	11.11%	3
Disagree	11.11%	3
Strongly Disagree	0%	0
Not applicable or Don't Know	0%	0
Total		27

#	Additional comments:	Date
1	This has relevance to previous comments for question 12	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q17 Laser eyewear practices (Part 1): How well do you agree with the following statement? Within the laser labs which you are familiar with at your institution/facility, laser eyewear requirements are always adhered to. I am not aware of laser operators intentionally or mistakenly violating a laser eyewear requirement.

Answered: 27 Skipped: 4



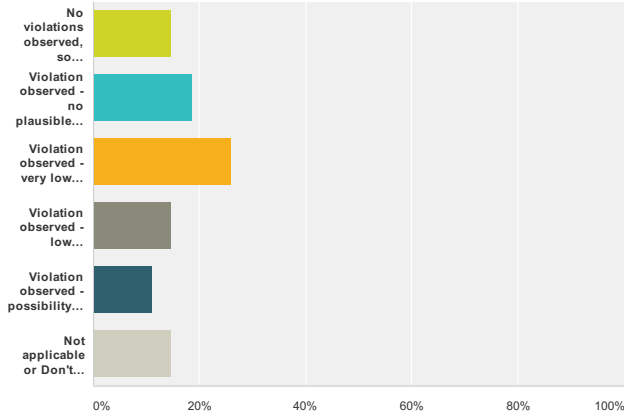
Answer Choices	Responses
Strongly Agree	14.81% 4
Agree	51.85% 14
Neutral	18.52% 5
Disagree	14.81% 4
Strongly Disagree	0% 0
Not applicable or Don't Know	0% 0
Total	27

#	Additional comments:	Date
1	Second hand knowledge of individual who may have not been wearing laser eyewear during an alignment prevents strongly agree. This was taken care of immediately by discussing the importance of laser eyewear. Have not heard of this occurring since it happened approximately 3 years ago.	9/3/2013 3:01 PM
2	It is difficult to agree with such an absolute statement "always adhered to" because we know that "always" can't be met.	9/3/2013 11:39 AM
3	see 16	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q18 Laser Eyewear Practices (Part 2): How would you expect laser operators at your institution/facility to answer on agreeing with the following statement? If a laser eyewear requirement has been observed to be violated, whether intentional or by mistake, estimate the potential for a hazardous exposure of the most severe violation observed.

Answered: 27 Skipped: 4



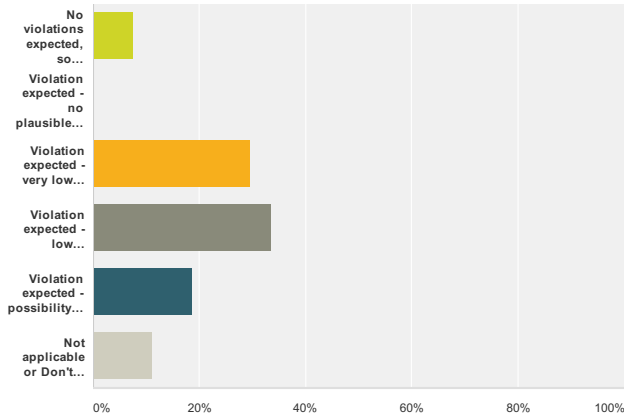
Answer Choices	Responses	
No violations observed, so no related possibility for hazardous exposure	14.81%	4
Violation observed - no plausible possibility for hazardous exposure	18.52%	5
Violation observed - very low possibility (<<1%) for hazardous exposure	25.93%	7
Violation observed - low possibility (< 2%) for hazardous exposure	14.81%	4
Violation observed - possibility existed (>2%) for hazardous exposure	11.11%	3
Not applicable or Don't Know	14.81%	4
Total		27

#	Additional comments:	Date
1	Excluding accidents where we believe/know the MPE was exceeded, this is difficult to answer. The LSOs have not seen violations, but how common is irregular use of eyewear is difficult to actually determine.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q19 Laser Eyewear Practices (Part 2): How well do you agree with the following statement? If a laser eyewear requirement were to be violated in a laser lab you are familiar with at your institution/facility, whether intentional or by mistake, estimate the potential for a hazardous exposure of the most severe violation expected.

Answered: 27 Skipped: 4



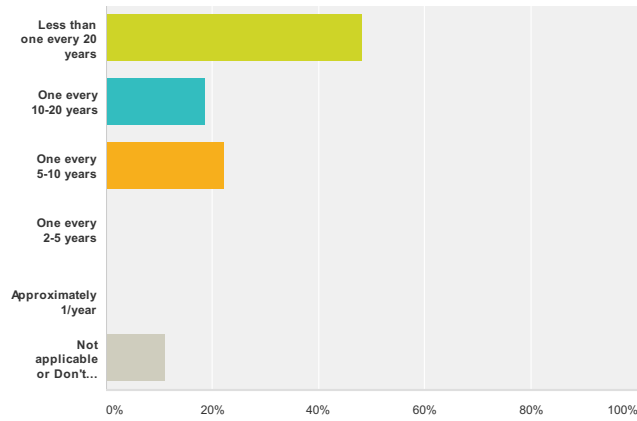
Answer Choices	Responses
No violations expected, so no related possibility for hazardous exposure	7.41% 2
Violation expected - no plausible possibility for hazardous exposure	0% 0
Violation expected - very low possibility (<1%) for hazardous exposure	29.63% 8
Violation expected - low possibility (< 2%) for hazardous exposure	33.33% 9
Violation expected - possibility exists (>2%) for hazardous exposure	18.52% 5
Not applicable or Don't Know	11.11% 3
Total	27

#	Additional comments:	Date
1	In my institution, I am only allowed to visit labs when invited. Obviously they adhere to this when I assist in inspections or reviews (they are prepared)	9/4/2013 11:42 AM
2	see answer for 18	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q20 Frequency of laser eye injuries at your institution/facility: How would you expect laser operators at your institution/facility to answer the following question? For every 100 laser operators at your institute/facility – what is your best estimate for how often a single eye injury may occur from a laser accident to any of these laser operators?

Answered: 27 Skipped: 4



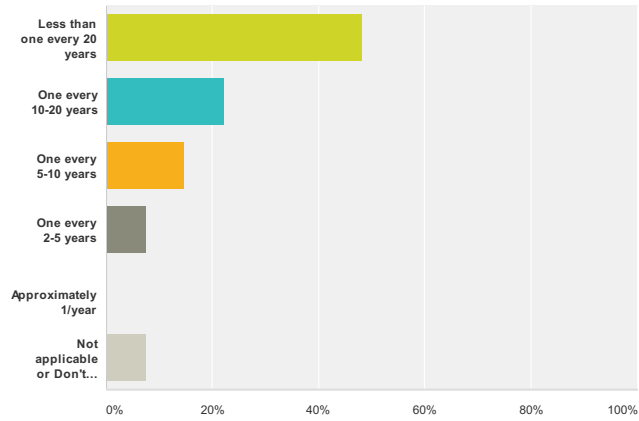
Answer Choices	Responses	
Less than one every 20 years	48.15%	13
One every 10-20 years	18.52%	5
One every 5-10 years	22.22%	6
One every 2-5 years	0%	0
Approximately 1/year	0%	0
Not applicable or Don't know	11.11%	3
Total		27

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q21 Frequency of laser eye injuries at your institution/facility: How would do you answer the following question? For every 100 laser operators at your institute/facility – what is your best estimate for how often a single eye injury may occur from a laser accident to any of these laser operators?

Answered: 27 Skipped: 4



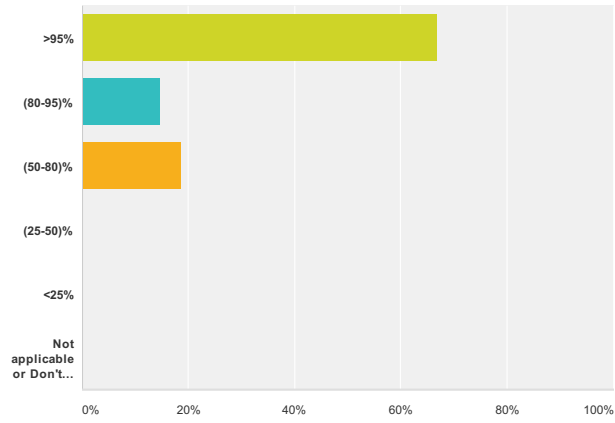
Answer Choices	Responses	
Less than one every 20 years	48.15%	13
One every 10-20 years	22.22%	6
One every 5-10 years	14.81%	4
One every 2-5 years	7.41%	2
Approximately 1/year	0%	0
Not applicable or Don't know	7.41%	2
Total		27

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q22 Reporting laser eye injuries: How would you expect laser operators at your institution/facility to answer the following question? What is your best estimate of the probability that a laser eye injury at your institute/facility would be reported if it occurred?

Answered: 27 Skipped: 4



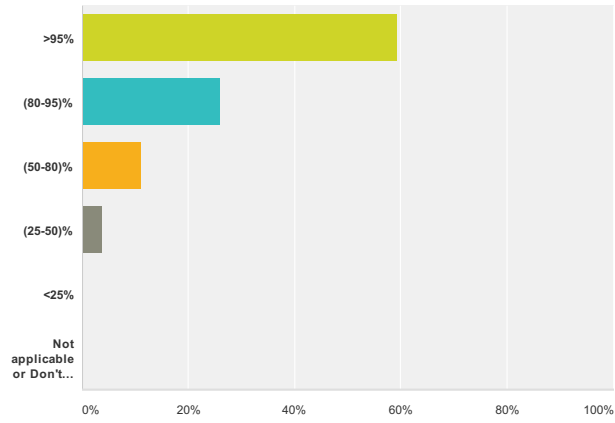
Answer Choices	Responses	
>95%	66.67%	18
(80-95)%	14.81%	4
(50-80)%	18.52%	5
(25-50)%	0%	0
<25%	0%	0
Not applicable or Don't know	0%	0
Total		27

#	Additional comments:	Date
1	This would be my estimate for how users would answer since one would think they would want to seek treatment following an exposure, but I may be wrong here based on apparent findings at other labs.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q23 Reporting laser eye injuries: How would do you answer the following question? What is your best estimate of the probability that a laser eye injury at your institute/facility would be reported if it occurred?

Answered: 27 Skipped: 4



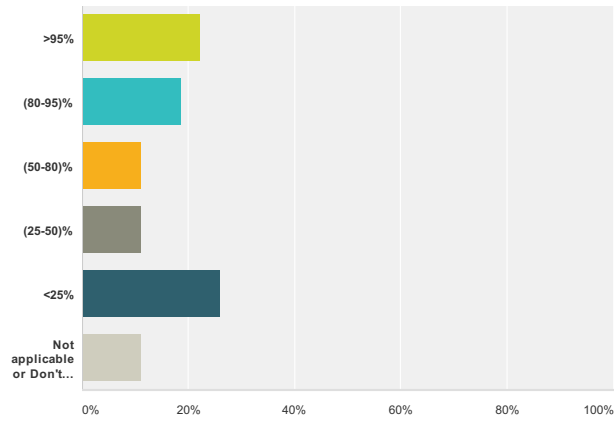
Answer Choices	Responses	
>95%	59.26%	16
(80-95)%	25.93%	7
(50-80)%	11.11%	3
(25-50)%	3.70%	1
<25%	0%	0
Not applicable or Don't know	0%	0
Total		27

#	Additional comments:	Date
1	My opinion is that if there is a perceived exposure, people will report it, but of course this could be wrong.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q24 Reporting Near Misses: A Near Miss occurs when safety is compromised such that only one or no barriers are in place to prevent a laser eye injury. How would you expect laser operators at your institution/facility to answer the following question? What is your best estimate of the probability that a Near Miss laser incident at your institute/facility would be reported if it occurred?

Answered: 27 Skipped: 4



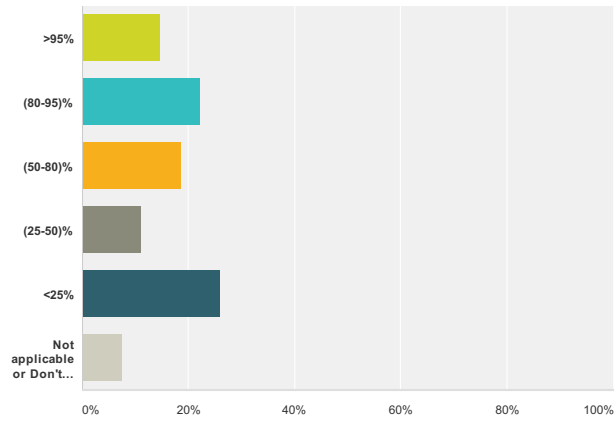
Answer Choices	Responses	
>95%	22.22%	6
(80-95)%	18.52%	5
(50-80)%	11.11%	3
(25-50)%	11.11%	3
<25%	25.93%	7
Not applicable or Don't know	11.11%	3
Total		27

#	Additional comments:	Date
1	we have had reports of "missing barriers" but it is hard to determine how frequently this happens and how often it would be reported.	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q25 Reporting Near Misses: A Near Miss occurs when safety is compromised such that only one or no barriers are in place to prevent a laser eye injury. How would do you answer the following question? What is your best estimate of the probability that a Near Miss laser incident in a laser lab at your institute/facility would be reported if it occurred?

Answered: 27 Skipped: 4



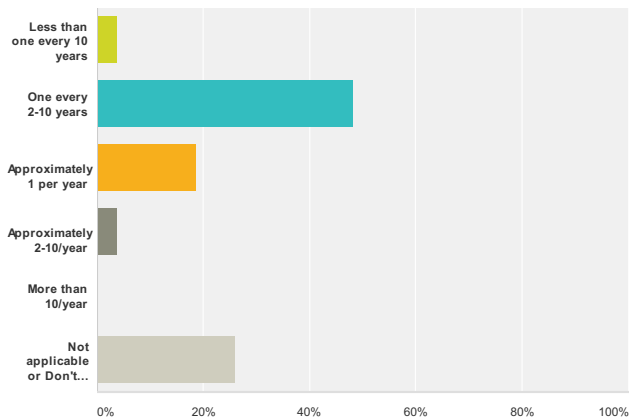
Answer Choices	Responses	
>95%	14.81%	4
(80-95)%	22.22%	6
(50-80)%	18.52%	5
(25-50)%	11.11%	3
<25%	25.93%	7
Not applicable or Don't know	7.41%	2
Total		27

#	Additional comments:	Date
1	see answer for 24	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q26 Frequency of Near Misses: How would you expect laser operators at your institution/facility to answer the following question? For every 100 QLOs at your institute/facility – what is your best estimate for how often a near miss event may occur to any of these laser operators (see previous question for near miss definition)?

Answered: 27 Skipped: 4



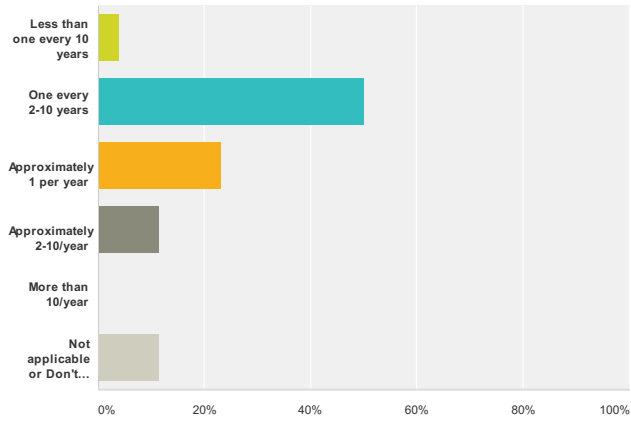
Answer Choices	Responses
Less than one every 10 years	3.70% 1
One every 2-10 years	48.15% 13
Approximately 1 per year	18.52% 5
Approximately 2-10/year	3.70% 1
More than 10/year	0% 0
Not applicable or Don't know	25.93% 7
Total	27

#	Additional comments:	Date
1	This is hard to answer; it may be more frequent than is apparent to us (LSOs)	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q27 Frequency of Near Misses: How would do you answer the following question? For every 100 QLOs at your institute/facility – what is your best estimate for how often a near miss event may occur to any of these laser operators (see previous question for near miss definition)?

Answered: 26 Skipped: 5



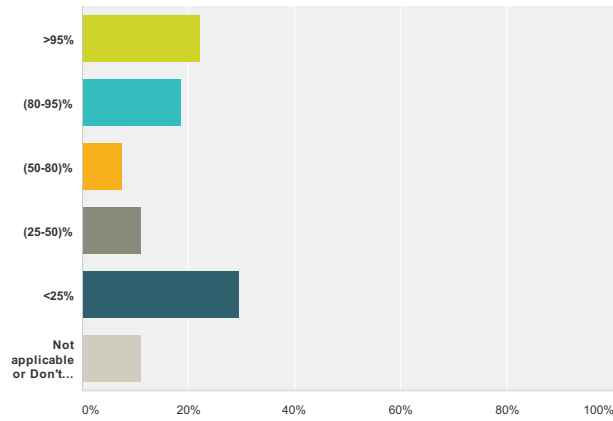
Answer Choices	Responses	
Less than one every 10 years	3.85%	1
One every 2-10 years	50%	13
Approximately 1 per year	23.08%	6
Approximately 2-10/year	11.54%	3
More than 10/year	0%	0
Not applicable or Don't know	11.54%	3
Total		26

#	Additional comments:	Date
1	see answer to 26	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q28 Reporting "other" Lessons Learned Events: A Lessons Learned event would include a laser injury incident or a Near Miss, but would also include "other" events where a safety control or barrier was missing and reporting the event would provide valuable information for laser personnel. How would you expect laser operators at your institution/facility to answer the following question? What is your best estimate of the probability that "other" Lessons Learned laser events at your institute/facility would be reported if they occur?

Answered: 27 Skipped: 4



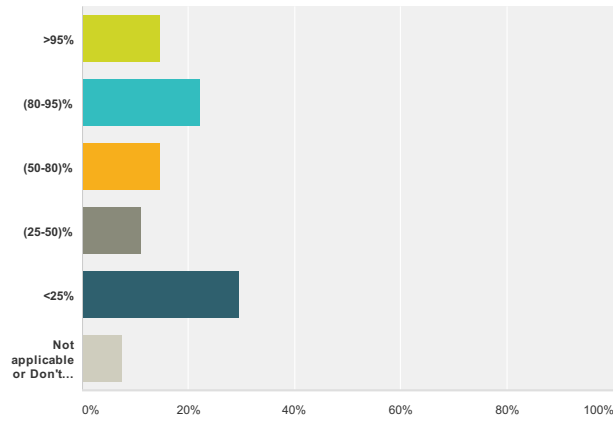
Answer Choices	Responses	
>95%	22.22%	6
(80-95)%	18.52%	5
(50-80)%	7.41%	2
(25-50)%	11.11%	3
<25%	29.63%	8
Not applicable or Don't know	11.11%	3
Total		27

#	Additional comments:	Date
1	see answer to 26	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q29 Reporting "other" Lessons Learned Events: A Lessons Learned event would include a laser injury incident or a Near Miss, but would also include "other" events where a safety control or barrier was missing and reporting the event would provide valuable information for laser personnel. How would do you answer the following question? What is your best estimate of the probability that "other" Lessons Learned laser events at your institute/facility would be reported if they occur?

Answered: 27 Skipped: 4



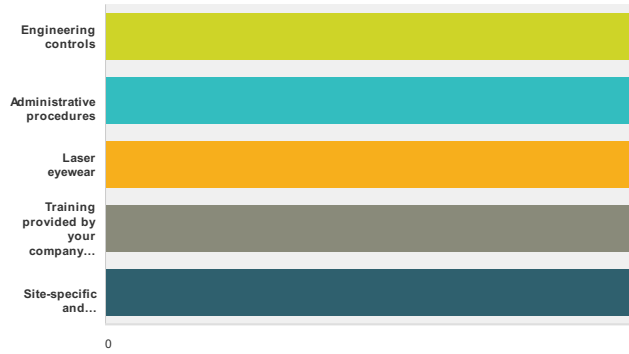
Answer Choices	Responses
>95%	14.81% 4
(80-95)%	22.22% 6
(50-80)%	14.81% 4
(25-50)%	11.11% 3
<25%	29.63% 8
Not applicable or Don't know	7.41% 2
Total	27

#	Additional comments:	Date
1	see answer to 26	9/2/2013 8:36 AM

Laser Safety Performance Metrics

Q30 Effectiveness of controls. How would you expect laser operators at your institution/facility to answer this rating question? (skip question if not applicable) Rank in order from most effective (1) to least effective (5) these safety factors that are used to reduce the risk of a laser eye injury. (Note: Engineering controls include interlocks, safety shutters, barriers and enclosures. Administrative procedures include use of temporary beam blocks checking for and blocking stray beams, using minimum intensity, etc.)

Answered: 26 Skipped: 5



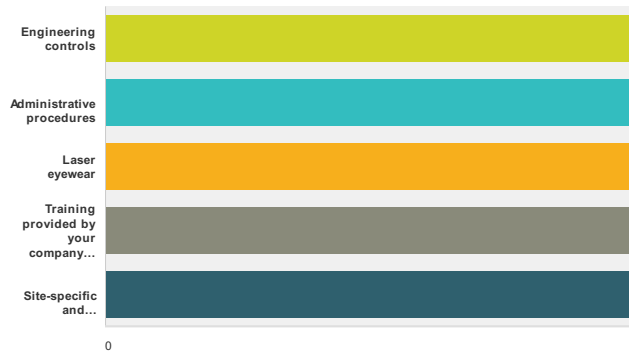
	1 - Most Effective	2	3	4	5 - Least Effective	Total	Average Rating
Engineering controls	68% 17	28.00% 7	0% 0	0% 0	4% 1	25	1.00
Administrative procedures	0% 0	16.67% 4	20.83% 5	25% 6	37.50% 9	24	1.00
Laser eyewear	8% 2	44% 11	24% 6	8% 2	16% 4	25	1.00
Training provided by your company or institution	7.69% 2	0% 0	23.08% 6	34.62% 9	34.62% 9	26	1.00
Site-specific and supervisor-provided training	20% 5	16% 4	28.00% 7	32% 8	4% 1	25	1.00

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q31 Effectiveness of controls. For laser operations at your institution/facility, how would you answer this rating question? (skip question if not applicable) Rank in order from most effective (1) to least effective (5) these safety factors that are used to reduce the risk of a laser eye injury. (Note: Engineering controls include interlocks, safety shutters, barriers and enclosures. Administrative procedures include use of temporary beam blocks checking for and blocking stray beams, using minimum intensity, etc.)

Answered: 26 Skipped: 5



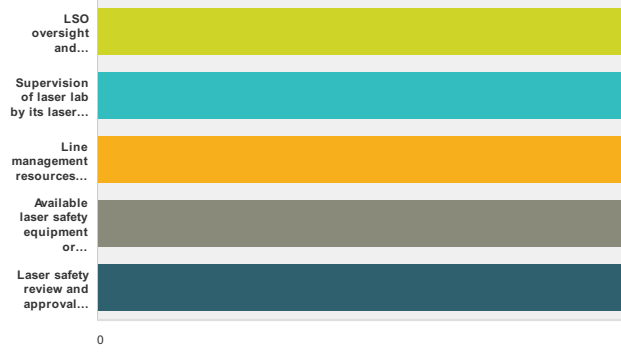
	1 - Most Effective	2	3	4	5 - Least Effective	Total	Average Rating
Engineering controls	80% 20	12% 3	4% 1	0% 0	4% 1	25	1.00
Administrative procedures	0% 0	25% 6	29.17% 7	20.83% 5	25% 6	24	1.00
Laser eyewear	8% 2	28.00% 7	24% 6	20% 5	20% 5	25	1.00
Training provided by your company or institution	4% 1	4% 1	20% 5	32% 8	40% 10	25	1.00
Site-specific and supervisor-provided training	12% 3	32% 8	20% 5	28.00% 7	8% 2	25	1.00

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q32 Effectiveness of other safety factors. How would you expect laser operators at your institution/facility to answer this rating question? (skip question if not applicable) Rank in order from most effective (1) to least effective (5) these safety factors that are used to reduce the risk of a laser eye injury.

Answered: 26 Skipped: 5



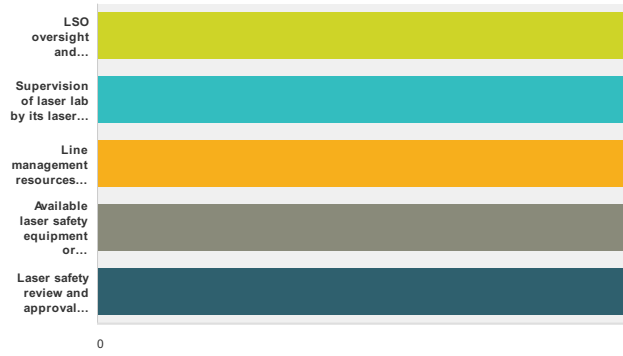
	1 - Most Effective	2	3	4	5 - Least Effective	Total	Average Rating
LSO oversight and assistance for laser safety	19.23% 5	7.69% 2	46.15% 12	19.23% 5	7.69% 2	26	1.00
Supervision of laser lab by its laser safety supervisor	25% 6	25% 6	12.50% 3	25% 6	12.50% 3	24	1.00
Line management resources and assistance for laser safety (either budget or personnel)	0% 0	16.67% 4	20.83% 5	16.67% 4	45.83% 11	24	1.00
Available laser safety equipment or laser facility configuration	54.17% 13	29.17% 7	4.17% 1	8.33% 2	4.17% 1	24	1.00
Laser safety review and approval process	4.35% 1	26.09% 6	17.39% 4	26.09% 6	26.09% 6	23	1.00

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q33 Effectiveness of other safety factors. For laser operations at your institution/facility, how would you answer this rating question? (skip question if not applicable) Rank in order from most effective (1) to least effective (5) these safety factors that are used to reduce the risk of a laser eye injury.

Answered: 26 Skipped: 5



	1 - Most Effective	2	3	4	5 - Least Effective	Total	Average Rating
LSO oversight and assistance for laser safety	23.08% 6	19.23% 5	26.92% 7	15.38% 4	15.38% 4	26	1.00
Supervision of laser lab by its laser safety supervisor	37.50% 9	33.33% 8	8.33% 2	8.33% 2	12.50% 3	24	1.00
Line management resources and assistance for laser safety (either budget or personnel)	4.35% 1	4.35% 1	13.04% 3	30.43% 7	47.83% 11	23	1.00
Available laser safety equipment or laser facility configuration	34.62% 9	26.92% 7	19.23% 5	11.54% 3	7.69% 2	26	1.00
Laser safety review and approval process	4.17% 1	20.83% 5	33.33% 8	29.17% 7	12.50% 3	24	1.00

#	Additional comments:	Date
	There are no responses.	

Laser Safety Performance Metrics

Q34 Provide any additional comments about risk for a laser injury incident

Answered: 2 Skipped: 29

#	Responses	Date
1	LOs working lasers must be experienced, well trained, take their work seriously, and apply all necessary engineering, administrative, and/or PPE controls.	9/4/2013 11:18 AM
2	Risk I think is ultimately determined by the owner/operators commitment to safety and their translation of this info down to their staff as well as their working relationship with the LSO.	9/2/2013 8:42 AM

Laser Safety Performance Metrics

Q35 Provide any other additional comments

Answered: 2 Skipped: 29

#	Responses	Date
1	Excellent survey. I would be interested to know how my workers would really answer the questions	9/3/2013 3:02 PM
2	The level of adherence to laser safety practices in a lab is directly related to the importance placed on it by the PI. The PI's attitudes are affected by the attitudes of the Chair, Dean and other administrators regarding safety. The importance of safety and a positive culture of safety must come from the top. The LSO is a resource and ensures the quality of the program, but he or she cannot make people safe. That has to happen at the lab level.	9/1/2013 9:28 AM