

UNIVERSITY LASER SAFETY SURVEY

1. Please respond to questions as they relate to your **research use of lasers only** (exclude medical use of lasers).
2. Estimate numbers if exact numbers are unknown.
3. Answer based on your program **as it currently exists**.
4. Information about specific institutions will be shared only with other CSHEMA committee members.

	UPen	UFI	Duke	UIUC	UIC	Purd.	IUPUI	NC St.	Stanf.	UKY	UMd	Utah	UAB	Pitt	SLU	CMU	Baylor	UDel	Miami	ASU	Harv.	UMo
How many undergraduate and graduate students at all campuses of your university?	23704	48000	15000	41938	27000	38000 Note 7	12000	30000	15000	26439	5450	29000	17000	33000	11800	9600	1248	19000	15674	61033	Not given	29000
Does your institution have a Laser Use Policy approved by upper management? A = Yes- solely covers laser use B = Yes- part of broader safety policy but lasers are mentioned C = Yes- part of a broader safety policy but lasers are not specifically mentioned D = No policy approved by mgmt.	B	D ¹	A ²	B	A	A	A	A	A	A	A	C	A	A	D ¹²	D	A	C	A	Not given	B	D
Job title of person in upper management who has signed off on laser safety policy	No answer	None	No answer	No answer	No answer	President	Lab Safety Comm	No answer	No answer	No answer	RS Officer	No answer	No answer	Note 11	None	None	No answer	Executive VP	Vice Pres ¹³	No answer	Note 15	None
Do you have a Laser Safety Manual? A = Yes- manual solely covering laser use B = Yes- section in a manual that covers other hazards C = No	A	A	A	A	A	A	A	C	A	A	A	B	A	B	C ¹²	A	A	A	A	A	B	A
What department has laser safety responsibilities? A = EHS B = Autonomous Radiation Safety Office C = Autonomous Industrial Hygiene Office D = Other (specify)	A	A	A	A ⁶	A	A	A	A	A	B	B	A	A	A	A	A	A	A	A	A	A	A
Estimate the number of Class 3b and 4 research lasers at all campuses	120	250	150 ³	500	28	400	10	50	525	50	20	150	No answer	125	10	40	54	70	62	134	340	Un-Known
Is a list of Class 3b and 4 lasers kept up-to-date by EHS? A = Yes B = No C = Yes but not updated that often	A	C	A	A	A	A ⁸	B ⁸	A	C ⁹	A	C	C	A	A	B ¹²	A ⁸	A	C	C	A	A	B ⁸
Estimate number of all Class 3b and 4 operators	100	325	200 ⁴	450	50	400-600	20-30	150	No answer	75	25	150+	No answer	Un-known	20	15	90	100	Un-Known	125	170	Un-known
Is a list of approved Class 3b and 4 operators kept up-to-date by EHS? A = Yes B = No C = Yes but not updated that often	A	B	B ⁵	A	C	A ⁸	B ⁸	B ⁵	A ¹⁰	C	C	C	A	B	B ¹²	B ¹²	A	B ¹⁴	B ¹⁴	A	A	B

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How is laser safety instruction provided to laser operators? A = Provided by immediate supervisor B = Provided by EHS C = Web based/on-line training D = Lecture training E = Other (specify) F = No training is provided	A, B, D Note 16	A ¹⁷	A, B, C, D	A, B, C, D	A, B	A, B, D	C	A, B, D	C	B, C	A	A	A, D	A, B Note 16	F Note 16	A, B	A E (hand-out with a test)	B, D	B, D Note 16	A, B, D	A, B, D	Maybe A
Is there follow-up by a central safety department (such as EHS) to determine that all laser operators have attended safety instruction? A = YES B = NO C = No training is provided	B	B	A	B	A	B	B	B ¹⁹	A ²⁰	A	B	A	A	B	B	B	A ²³	B ¹⁹	A	A	A	B
Is refresher training required? Note frequency in parenthesis. A = YES B = NO	B	B	A (4yrs)	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
What non-accident related medical exams are required by institution for laser operators? A = None B = Pre-assignment C = Periodic (list how often) D = Terminal	B	A	A	A	A	A ¹⁸	B	A	Note 21	A	A	Note 22	A	A	A	A	A	A	B	B	B	A
Who conducts the non-accident related medical exams for laser operators? A = No exams conducted B = Campus health C = Contracted medical professional D = Operator's choice of medical professional E = Hospital associated with university	E	A	A	A	A	A	B	A	C	A	A	No answer	A	A	A	A	A	A	E or D	C	B	A

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Do you have a standing Laser Safety Committee (LSC)? A = YES B = NO C = Radiation Safety Committee does laser safety committee work	B	B	A	C	A	A	B	B	B	B ³¹	B	B		B	B	B	C	B	B	B	C	B
Do you have a Laser Safety Officer (LSO)? If LSO is not their job title, enter job title in parenthesis. A = YES B = NO	A (IH)	A (HP)	A ²⁷	A ²⁸	A	A (HP)	A ³⁰	A (IH)	A	A (Asst RSO)	A (RSO)	A (IH)		A ³⁰	B ³²	A ³³	A	A (RSO)	A (Bio. Offcr)	A (RSO)	A (RSO)	A (HP)
The duties below are the responsibility of- A = the LSC B = the LSO C = no answer/unclear response																						
Determine Laser Use Policy for institution	B	B	A, B	A, B	A, B	A, B	B	B	B	B	B		C		Note 32		A		B	B	A, B	Note 32
Issue laser permits			A, B	A, B		A, B	B		B	B	B		C			B	A	B		B	A, B	
Review/approve laser uses	B		A, B	B		A, B	B		B	B	B	B	C			B	A, B		B		A, B	
Review/approve SOPs	B	B	A, B	B	A, B	A, B	B			B	B	B	C	B		B	A, B		B	B	B	
Review/approve laser facilities	B	B	A, B	B	B	A, B	B	B		B	B	B	C	B		B	A, B	B	B	B	A, B	
Inspect laser labs	B	B ²⁴	A, B	B	B	B	B	B	B	B		B	C	B		B	A, B		B	B	B	
Issue deficiencies for non-compliance	B	B	A, B	B	B	B	B			B			C	B		B	A, B		B	B	B	
Enforce policy in labs when deficiencies are not corrected	B	B	A, B	A, B	B	A, B	B			B			C			B	A, B		B	B	B	
Determine NHZ in Class 4 facilities	B	B	A, B	B	B	B	B			B	B		C	B		B	A, B	B	B		B	
Calculate OD of laser eyewear	B	B	A, B	B	B	B	B	B		B	B		C	B		B	A, B	B		B	B	
Provide laser safety instruction	B	B	A, B	B	B	A, B	B		B	B	B	B	C	B		B	A, B	B	B	B	B	
Investigate accidents	B	B	A, B	B	B	A, B	B	B	B	B	B	B	C	B		B	A, B	B	B	B	B	
Other		B ²⁵				A ²⁶ B ²⁹													B ²⁵			
What is the current total amount of time spent administering and managing the laser safety program in FTE? <i>If still developing program, the expected total amount of time spent administering and managing the laser safety program in FTE (in parenthesis)?</i>	0.25	0.05 (0.35)	0.5	0.25 (0.5)	0.25	0.5	<0.25	<0.25	0.25	0.1	<0.25	0.25		<0.25	0.0 (0.1)	Note 34 (0.25)	0.5	0.05	0.25 (Note 35)	1	1	<0.25

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Who conducts laser inspections/audits? A = LSO B = Deputy LSO C = EHS technician D = LSC member(s) E = PI self-inspection F = Audits not currently being performed	A	F ³²	A, B, C	B	A	A	A	A, E	A	A	F	No answer	No answer	A, E (work together)	F ³²	A, B, C	EHS lab audit teams	A	A ³⁷	A, B, C	A, B	E or F
How often is the inspection/audit conducted? A = Annual B = Quarterly C = Upon request only D = Audits not currently being performed	A	D ³²	A	A	A	Initial Only	A	As needed	A	A	D	No answer	No answer	A	D ³²	A	A	C	A	No answer	bi-annual	un-known
How is inspection/audit documented? A = Standardized checklist/form (paper or electronic) B = Notes in file C = No documentation	B	C ³²	A	No answer	B	A	A	B	B	B	C	No answer	No answer	A, B	C ³²	A	A	B	A	A	A Detail-ed SOP	C
Which are required in your Class 4 facilities? (* means not always required) A = Posted SOP B = Laser curtains or barriers to isolate operation C = Only one Class 4 laser per room or curtained area D = Entranceway interlocked with laser power or shutter E = Illuminated warning sign at entrance F = Total beam enclosure G = Other Class 4 facility requirement- (Specify)	A, E	A B*, D*, E*, F*	A, B, D, E, F	 A*, B*, C*, D*, E*, F*	A, B, C, D, E, F	 A*, B*, C*, D*, E*, F*	A, B, C, D, E, F	B, E	B, D, E	No answer	E, F, G ³⁶	No answer	No answer	B, D, E	Note 32	A, B	A, B D*, E*	E A*, B*, F*	A, B, C E*	A, D, E	A, B, D, E	NONE (up to PI)

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Notes:

1	Policy in place but not approved by upper management	21	Eye exams are offered but not required
2	Has two laser policies; one for clinical, one for research	22	Only the large LASER institute is doing this
3	Additional 50 lasers in storage	23	LSO provides handout with a written test that must be returned.
4	Additional 800 clinical lasers	24	Inspect Class 3b and 4 facilities only
5	List of laser supervisors or (laser "owner") is maintained but not operators	25	Register lasers with State agency
6	Actually DRS (chem./bio/rad) but no OS&H	26	The LSC mainly focuses on exceptions to the guidelines
7	57000 if regional campuses included but little laser use there	27	Radiation Safety Manager is the LSO
8	Still working on list	28	Asst Director of Research Safety is the LSO
9	List depends on users to register information	29	We are still trying to gain "acceptance" so our enforcement is rather weak
10	Based on completion of training requirement	30	Laboratory Safety Manager or Safety & Training Manager is the LSO
11	Policies not signed off but Chancellor signs manual	31	LSC initiated program but then was disestablished
12	Under development	32	Planning to develop laser safety program and establish this feature of the program
13	VP for Business Services	33	Assist. Director and Biosafety Officer is also the LSO
14	Has list of those that have received training	34	Large portion of time currently spent due to program infancy
15	Policy issued by Rad Safety Committee chartered by university	35	FTE will increase as satellite facilities are added to program
16	Planning to develop on-line laser safety training	36	Laser enclosure interlock
17	Training may also be provided by LSO on case by case basis	37	Training LSO assistant to do and also developing on-line self-inspection form
18	Considering a requirement for medical exams		
19	PIs are informed about training and are expected to send operators		
20	Confirmation of laser training is part of annual lab inspection		

Questionnaire Respondents:

UPen	University of Pennsylvania, Karen Kelley, kelly@ehrs.udel.edu	Utah	University of Utah, Marty Shaub, marty.schaub@ehs.utah.edu
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