

2012 APHL All-Hazards Laboratory Preparedness Survey Data

The following data were collected in September through November of 2012 when APHL fielded its sixth annual All-Hazards Laboratory Preparedness Survey to the 50 state, Puerto Rico, and District of Columbia (DC) public health laboratories to assess the laboratories' capability and capacity to respond to biological, chemical, radiological and other threats, such as pandemic influenza. The survey covered the 12 month period from August 10, 2011 to August 9, 2012, representing the CDC PHEP Cooperative Agreement Fiscal Year (FY) 2011, also known as Budget Period 11. Fifty two responses were received, representing all 50 states, Puerto Rico, and DC public health laboratories for a response rate of 100%.

Following the completion of each survey, APHL issues a white paper with aggregate responses for all questions. Further, APHL summarizes key points and issues a report at the organization's annual meeting. Both the white paper and report serve as an educational tool that can assist in educating policy makers, public health partners and the public on the important role laboratories play in public health preparedness and response. Electronic copies of both documents are available at www.aphl.org. To obtain hard copies, please contact APHL's main office at 240.485.2745.

For questions on the data or APHL survey methodologies, please contact Brent Waddington, Associate Specialist Survey & Research at 240.485.2710 or Brent.Waddington@aphl.org.



Table of Acronyms

Acronym	Definition
APHL	Association of Public Health Laboratories
ASPR	Assistant Secretary for Preparedness and Response
BDS	Biohazard Detection System
BT	Bioterrorism or Biological Terrorism
CAP	College of American Pathologists
CDC	Centers for Disease Control and Prevention
CLIA	Clinical Laboratory Improvement Amendments
COOP	Continuity of Operations Plan
CT	Chemical Terrorism or Chemical Threat
DHS	Department of Homeland Security
DOD	Department of Defense
FBI	Federal Bureau of Investigation
FTIR	Fourier-Transform Infrared Spectroscopy
HAN	Health Alert Network
HazMat	Hazardous Materials
HHS	Department of Health and Human Services
HPP	Hospital Preparedness Program
HSEEP	Homeland Security Exercise and Evaluation Program
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
ISO	International Organization for Standardization
LCMS	Liquid-chromatography mass spectrometry
LIMS	Laboratory Information Management System
LPX	Laboratory Preparedness Exercise
LPHL	Local Public Health Laboratory
LRN	Laboratory Response Network
LRN-B	Laboratory Response Network for Biological Threat Preparedness and Response
LRN-C	Laboratory Response Network for Chemical Threat Preparedness
NIMS	National Incident Management System
NRC	Nuclear Regulatory Commission
PCR	Polymerase Chain Reaction
PHEP	Public Health Emergency Preparedness
RT	Radiological Terrorism
SPHL	State Public Health Laboratory
USPS	United States Postal Services

2012 All-Hazards Laboratory Preparedness Survey Questions

NOTE: Unless otherwise noted, 52 responses were received for all questions, thus the denominator for all percentages is 52. Similarly, for questions requiring a numeric answer, unless otherwise indicated, the table will display totals only.

For the purposes of this data report, the terms “states,” “state public health laboratories” or “SPHLs” refer to all respondents including Puerto Rico and DC.

1. Who is the primary contact in your laboratory for this survey?

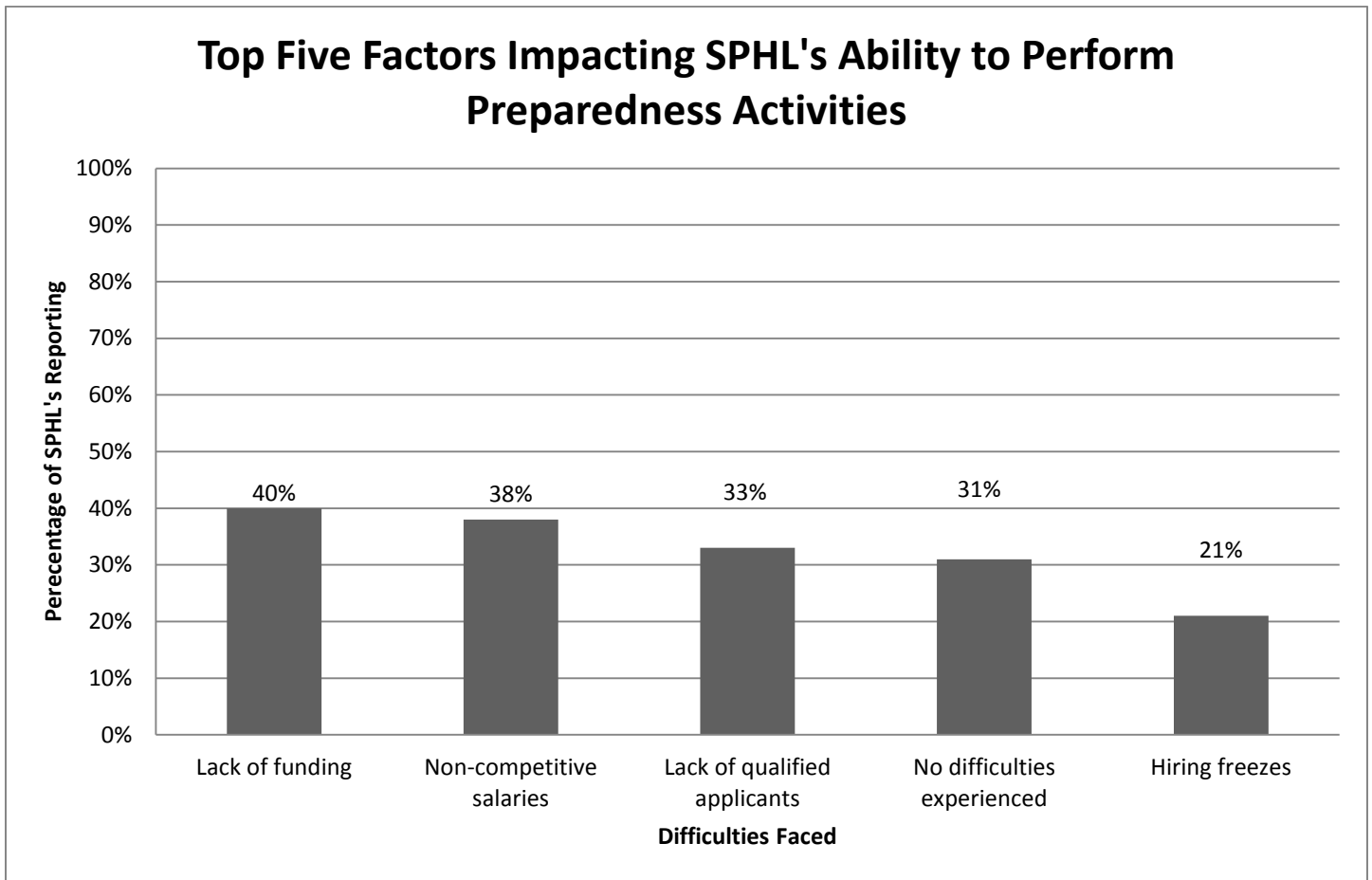
	Number of SPHLs	Percentage of SPHLs
Public Health Laboratory Director	36	69%
Bioterrorism (BT) Laboratory Coordinator	11	21%
Other-please provide contact name, email and phone number:	4	8%
Chemical Threat (CT) Laboratory Coordinator	1	2%

3. For preparedness specific positions, what factors affected your SPHL’s ability to carry out preparedness activities from August 10, 2011 to August 9, 2012?

Please check all that apply

	Number of SPHLs	Percentage of SPHLs
Lack of funding	21	40%
Non-competitive salaries	20	38%
Lack of qualified applicants	17	33%
No difficulties experienced	16	31%

Hiring freezes	11	21%
Other-please specify:	9	17%
Furloughs	3	6%
Lay-offs	2	4%



4. How many staff members are cross-trained in your SPHL?

Status	Total	Mean	Maximum	Number of SPHLs
Full Time	405	7.79	23	46
Part Time	39	0.76	14	12

4a. Does your SPHL have enough staffing capacity to work five, 12-hour days for six to eight weeks in response to an infectious disease outbreak, such as novel influenza A (H1N1)?

	Number of SPHLs	Percentage of SPHLs
Yes	39	75%
No	13	25%
Decline to respond	0	0%

5. Does your laboratory have a documented Continuity of Operations Plan (COOP) consistent with National Incident Management System (NIMS) guidelines?

	Number of SPHLs	Percentage of SPHLs
Yes, a state agency or department-wide COOP that includes the laboratory	27	52%
Yes, a laboratory specific COOP	20	38%
No, but the laboratory or state is developing a COOP	5	10%
Decline to respond	0	0%

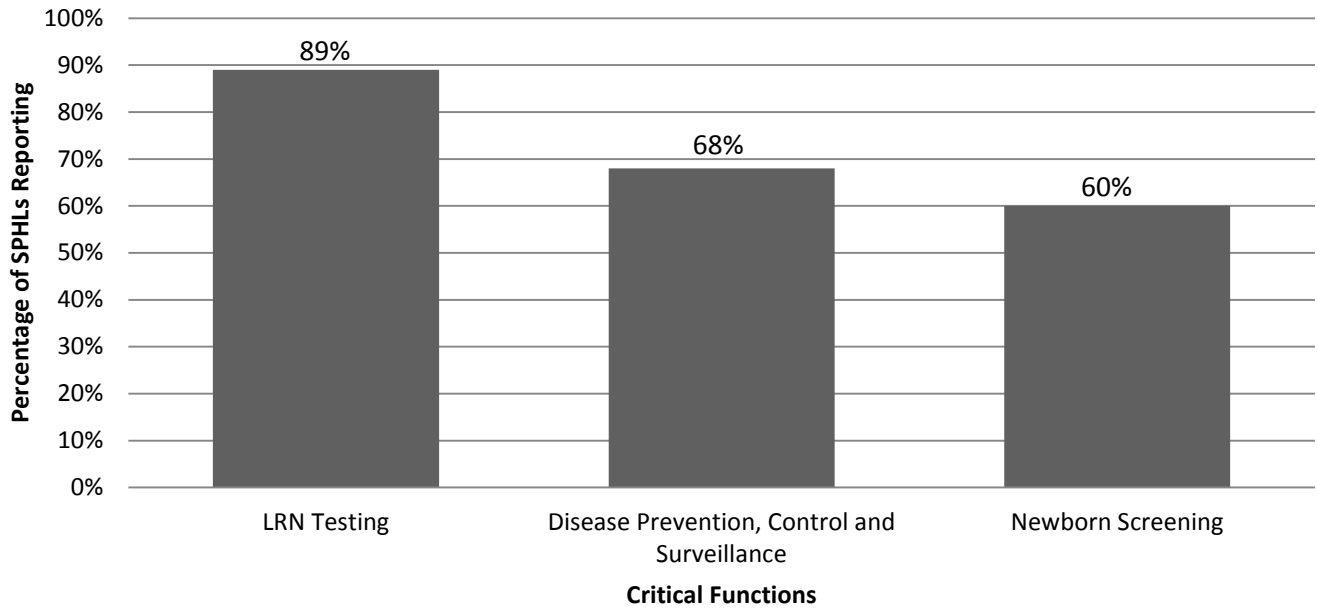
No, the state does not have a COOP plan which includes laboratory operations and plans	0	0%
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5a. If your laboratory had to shut down and only a portion of the staff were available to work, in terms of COOP, which test(s) do you regard as critical for your laboratory?

Please check all that apply. (n=47)

	Number of SPHLs	Percentage of SPHLs
LRN Testing	42	89%
Disease Prevention, Control and Surveillance	32	68%
Newborn Screening	28	60%
Environmental Health and Protection	22	47%
Food Safety	18	38%
Reference and Specialized Testing	16	34%
Other-please specify:	10	21%

Top Three Critical Tests



5b. From August 10, 2011 to August 9, 2012, did you evaluate the functionality of your COOP via a real event or an exercise? (n=47)

	Full Time	Percentages
Yes	27	57%
No	18	38%
Decline to respond	2	4%

6. Does your SPHL maintain a list of active sentinel clinical laboratories?

	Full Time	Percentages
Yes, for the entire state	48	92%
Yes, for your jurisdiction only (may not be the entire state)	4	8%
No	0	0%

7. How many active sentinel clinical laboratories are included in your database?

Total	Mean	Maximum	Number of SPHLs
4147	79.75	419	52

8. Please indicate what information is captured in your sentinel clinical laboratories database.

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
Name of laboratory	52	100%
Mailing Address	50	96%
Email Address of Primary Contact	48	92%
Telephone for Primary Contact	48	92%
Name and Title of Primary Contact	47	90%
Fax for Primary Contact	46	88%
Physical Address	45	87%
Biosafety Level	37	71%
24/7 Emergency Contact	33	63%
Status of Class II Biological Safety Cabinet	26	50%
CLIA number	22	42%
List of each method for receiving emergency alerts and communications	22	42%
Other-please specify:	16	31%
Total number of personnel currently competent to rule-out or refer a suspect biothreat agent	8	15%

Total number of personnel trained to perform high complexity microbiology testing	5	10%
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9. Please list the reason(s) for not maintaining a sentinel clinical laboratory database.

No reasons noted, 52 (100%) maintain an active sentinel clinical laboratory database.

10. How do you identify sentinel clinical laboratories?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
Use ASM, CDC LRN and APHL definition	45	87%
Use other definition, please specify:	9	17%
We do not identify sentinel laboratories	0	0%

11. Has your SPHL awarded a certificate of recognition to sentinel clinical laboratories in your state?

	Number of SPHLs	Percentage of SPHLs
No	21	40%
Yes, awarded the LRN Joint Leadership Committee (JLC) approved certificate	19	37%
Yes, awarded a state developed certificate	12	23%

12. How many sentinel clinical laboratories received a certificate?

Status	Total	Mean	Maximum	Number of SPHLs
LRN JLC Certificate	1105	58.16	147	19
State Certificate	720	60	138	12

13. Which performance measurement system do you have in place to assess the competency of sentinel clinical laboratories to rule-out and refer BT agents?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
College of American Pathologists (CAP) Laboratory Preparedness Exercise (LPX)	47	90%
State developed	12	23%
Other-please specify:	6	12%
Wisconsin State Laboratory of Hygiene Proficiency Testing (WSLHPT)/Challenge Set for Sentinel Laboratories	3	6%
None of the above	1	2%

13a. Do these competency assessments impact the renewal status or certification of sentinel clinical laboratories? (n=51)

	Number of SPHLs	Percentage of SPHLs
No	45	88%
Yes	6	12%

14. Have you utilized a rapid method (Health Alert Network (HAN), blast e-mail or fax) to send messages to your sentinel clinical laboratories and other partners?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
For outbreaks	44	85%
For training events, such as providing training calendar	38	73%
For routine updates	37	71%
Other-please specify:	23	44%
No	3	6%

14a. Does your laboratory have a plan in place to receive samples from a sentinel clinical laboratory during non-business hours?

	Number of SPHLs	Percentage of SPHLs
Yes-please specify:	49	94%
No	3	6%

14b. From August 10, 2011 to August 9, 2012, did your SPHL conduct an exercise or utilize a real event to evaluate the time for sentinel clinical laboratories to acknowledge receipt of an urgent message from your public health laboratory?

	Number of SPHLs	Percentage of SPHLs
Yes	41	79%
No	11	21%
Decline to respond	0	0%

15. From August 10, 2011 to August 9, 2012, did your laboratory sponsor any sentinel clinical laboratory training in your state?

- 44 SPHLs (85%) reported sponsoring sentinel clinical laboratory training in their state.

15a. Please indicate in the table below how many classes, facilities and laboratorians received training in rule-out testing, packaging and shipping, biosafety and a combination of subjects. The number of labs reporting at least one of each section is noted in parenthesis.

	Rule-out Testing Only	Packaging and Shipping Only	Biosafety Only	Combination of Prior	Other
Number of classes	61 (17)	188 (33)	32 (13)	208 (26)	41 (9)
Number of facilities that received training	604 (17)	1415 (33)	168 (13)	734 (25)	371 (9)
Number of sentinel clinical laboratorians trained	1721 (17)	3278 (33)	441 (13)	1560 (26)	867 (9)

16. Please indicate the number of preparedness exercises your SPHL conducted or participated in from August 10, 2011 to August 9, 2012. The number of labs reporting at least one of each section is noted in parenthesis.

	Table-top exercises	Drills	Functional exercise	Full-scale exercise	Real-life Events
Biological threat	42 (25)	62 (22)	44 (23)	27 (18)	256 (12)
Chemical threat	11 (9)	59 (16)	24 (14)	10 (8)	105 (6)
Radiological threat	6 (5)	12 (4)	10 (8)	6 (2)	2 (2)
Multi-Hazards	5 (5)	4 (3)	11 (7)	20 (17)	22 (4)
Pandemic flu	1 (1)	0 (0)	1 (1)	1 (1)	3 (3)

Continuity of Operations Plan (COOP)	4 (4)	7 (7)	4 (4)	3 (3)	4 (3)
Other	6 (3)	26 (9)	1 (1)	0 (0)	1 (1)

16a. Of the total number of exercises identified in question 16, please indicate how many were Homeland Security Exercise and Evaluation Program (HSEEP) compliant exercises?

Total	Mean	Maximum	Number of SPHLs
114	2.48	11	46

16b. How many preparedness exercises utilized Electronic Data Exchange (EDE) from your laboratory to preparedness partners?

Total	Mean	Maximum	Number of SPHLs
127	5.29	42	24

17. Please enter the number of specimens and samples submitted to the LRN section of your laboratory for threat agent testing by the following agencies from August 10, 2011 to August 9 2012.

Agency	Total	Mean	Maximum	Number of SPHLs
FBI	466	10.84	91	43
Local or Branch Public Health Laboratory	224	20.36	127	11
Local/State Law Enforcement	182	7.00	65	26

Civil Support Team	3	1.50	2	2
HAZMAT	109	8.38	53	13
Sentinel Clinical Laboratories	2256	48.00	315	47
Other	1082	51.52	396	21
Total number of samples submitted to laboratories for threat agent testing	4322	83.12	747	50

17a. From August 10, 2011 to August 9, 2012, please enter the total number of samples and specimens you accepted and tested in the LRN sections of your laboratory.

Clinical Specimens

	Total	Mean	Maximum	Number of SPHLs
Total Number Samples/Specimens <u>Accepted</u>	3990	79.80	1148	50
Biological Threat Agents <u>Tested</u>	2374	47.48	323	50
Chemical Threat Agents <u>Tested</u>	429	85.80	396	5
Radiological Threat Agents <u>Tested</u>	0	0	0	0
Other Analysis	1107	1107	1107	1

Environmental (non-clinical) Samples

	Total	Mean	Maximum	Number of SPHLs
Total Number Samples/Specimens <u>Accepted</u>	1273	27.67	459	46
Biological Threat Agents <u>Tested</u>	1320	30	366	44
Chemical Threat Agents <u>Tested</u>	247	12.35	90	20
Radiological Threat Agents <u>Tested</u>	10	3.33	5	3
Other Analysis	15	3.75	6	4

Food Samples

	Total	Mean	Maximum	Number of SPHLs
Total Number Samples/Specimens <u>Accepted</u>	222	14.80	76	15
Biological Threat Agents <u>Tested</u>	70	6.36	31	11
Chemical Threat Agents <u>Tested</u>	194	27.71	100	7
Radiological Threat Agents <u>Tested</u>	10	10.00	10	1
Other Analysis	33	11.00	24	3

18. Of the total number of environmental (non-clinical) samples tested in question 17a, how many were from the following categories?

	Total	Mean	Maximum	Number of SPHLs
Threat letter/package with unknown powder	476	10.58	98	45
Threat letter/package with other sample type	32	2.91	12	11
Food/beverage samples	236	15.73	100	15
USPS samples (clean-up, Biohazard Detection Systems (BDS), etc.)	3	3.00	3	1
Other	504	21.91	120	23

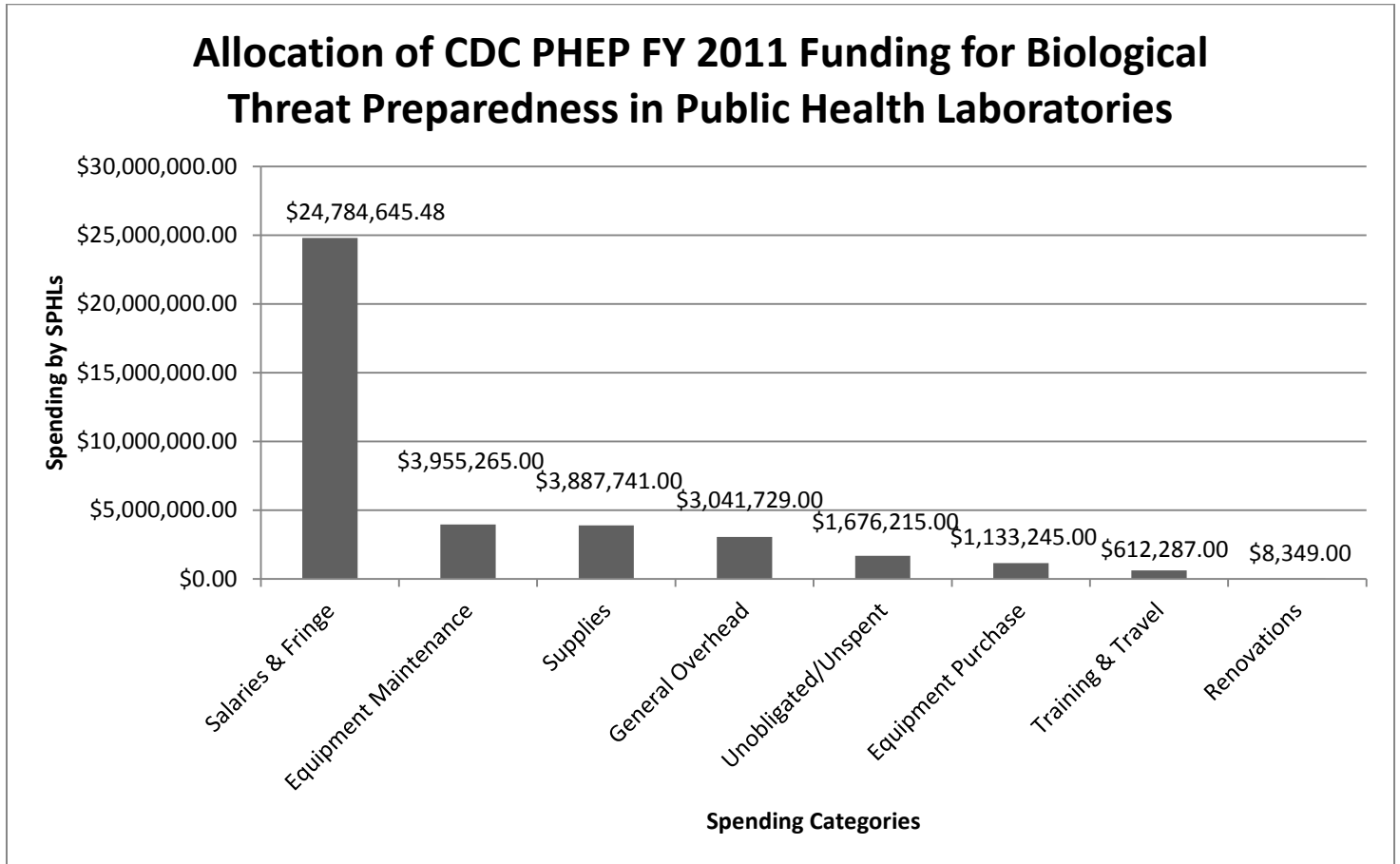
18a. Does your SPHL currently have the capacity in place to assure the timely transportation (pick-up and delivery) of samples 24/7/365 days to the appropriate public health LRN Reference Laboratory?

	Number of SPHLs	Percentage of SPHLs
Yes	49	94%
No	2	4%
Decline to respond	1	2%

19. From August 10, 2010 to August 9, 2011, how much biological threat preparedness funding did your laboratory receive?

	Total	Mean	Maximum	Number of SPHLs
CDC Public Health Preparedness (PHEP) Cooperative Agreement	\$45,746,617.48	\$879,742.64	\$2,831,734.00	52
Non-CDC Federal	\$1,346,120.00	\$149,568.89	\$400,000.00	9
State	\$1,703,729.00	\$189,303.22	\$500,000.00	9
Other	\$1,113,770.85	\$222,754.17	\$522,990.00	5

19a. From August 10, 2011 to August 9, 2012, how much of the allocated CDC PHEP Cooperative Agreement funds were used for the following activities? Do not include funds received for influenza preparedness or carryover funds from previous years.



20. From August 10, 2011 to August 9, 2012, how much CDC biological laboratory threat preparedness funding did you provide to the following types of laboratories in your state?

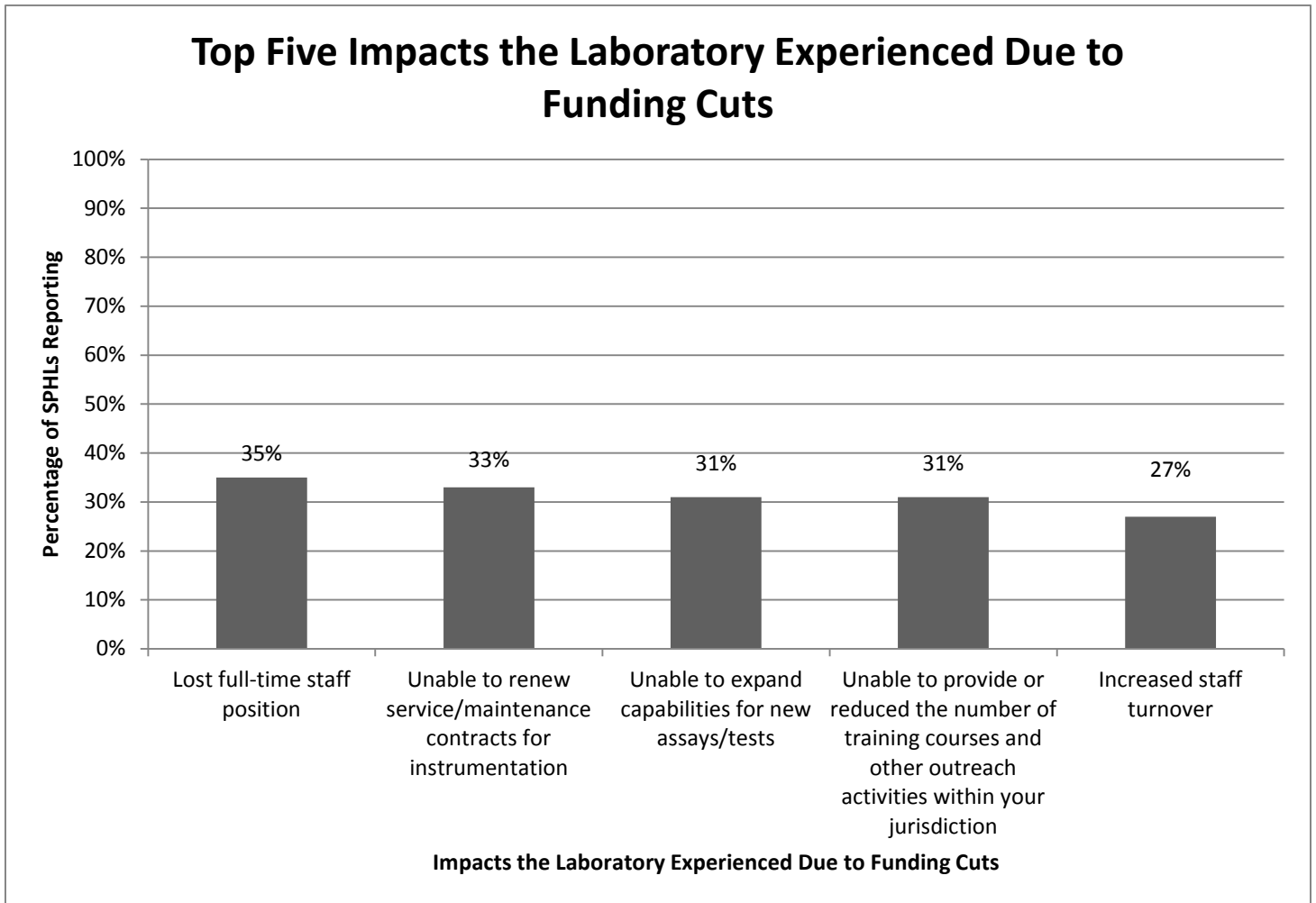
	Total	Mean	Max	Number of SPHLs
Branch state public health laboratory (SPHL)	\$4,929,023.00	\$985,804.60	\$2,739,496.00	5
Local public health laboratory (LPHL)	\$2,128,537.00	\$425,707.40	\$1,354,796.00	5
Clinical (hospital, university or private) laboratory	\$265,607.00	\$53,121.40	\$208,125.00	5
Veterinary laboratory	\$122,942.00	\$40,980.67	\$98,942.00	3
Agricultural laboratory	\$117,238.00	\$58,619.00	\$92,238.00	2
Food laboratory	\$542,602.00	\$271,301.00	\$532,602.00	2
Other laboratory	0	0	0	0

22. Please choose the *top five* impacts of any funding cuts your laboratory has experienced from August 10, 2011 to August 9, 2012.

	Number of SPHLs	Percentage of SPHLs
Lost full-time staff position	18	35%
Unable to renew service/maintenance contracts for instrumentation	17	33%
Unable to expand capabilities for new assays/tests	16	31%

Unable to provide or reduced the number of training courses and other outreach activities within your jurisdiction	16	31%
Increased staff turnover	14	27%
Unable to participate in national meetings/conferences	13	25%
Unable to attend training courses	12	23%
Unable to purchase reagents and supplies	12	23%
Unable to purchase critical equipment (e.g. PCR instrumentation, Automated Extractors, Biosafety Cabinets)	9	17%
Combined staff positions	9	17%
SPHL did not experience any preparedness funding cuts from August 10, 2011 to August 9, 2012	7	13%
Unable to purchase and upgrade Laboratory Information Management System (LIMS)	7	13%
Reduced 24/7 capability	6	12%
Experienced no change in laboratory operations	5	10%
Other-please specify:	5	10%
Unable to participate in exercises	4	8%
Increased sample turnaround time	4	8%
Lost part-time staff position	4	8%
Delayed or cancelled planned facility improvements	4	8%

More than double the overtime from the previous fiscal year	1	2%
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23. For August 10, 2011 to August 9, 2012, what source of funding did you use to provide support to the sentinel clinical laboratories?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
Did not provide funding to sentinel clinical laboratories	30	58%

HHS/ASPR Hospital Preparedness Program (HPP) Cooperative Agreement	17	33%
CDC Public Health Emergency Preparedness (PHEP) Cooperative Agreement	11	21%
State funding	3	6%
Other-please specify:	0	0%

24. From August 10, 2011 to August 9, 2012, how much chemical threat preparedness funding did your laboratory receive from your state?

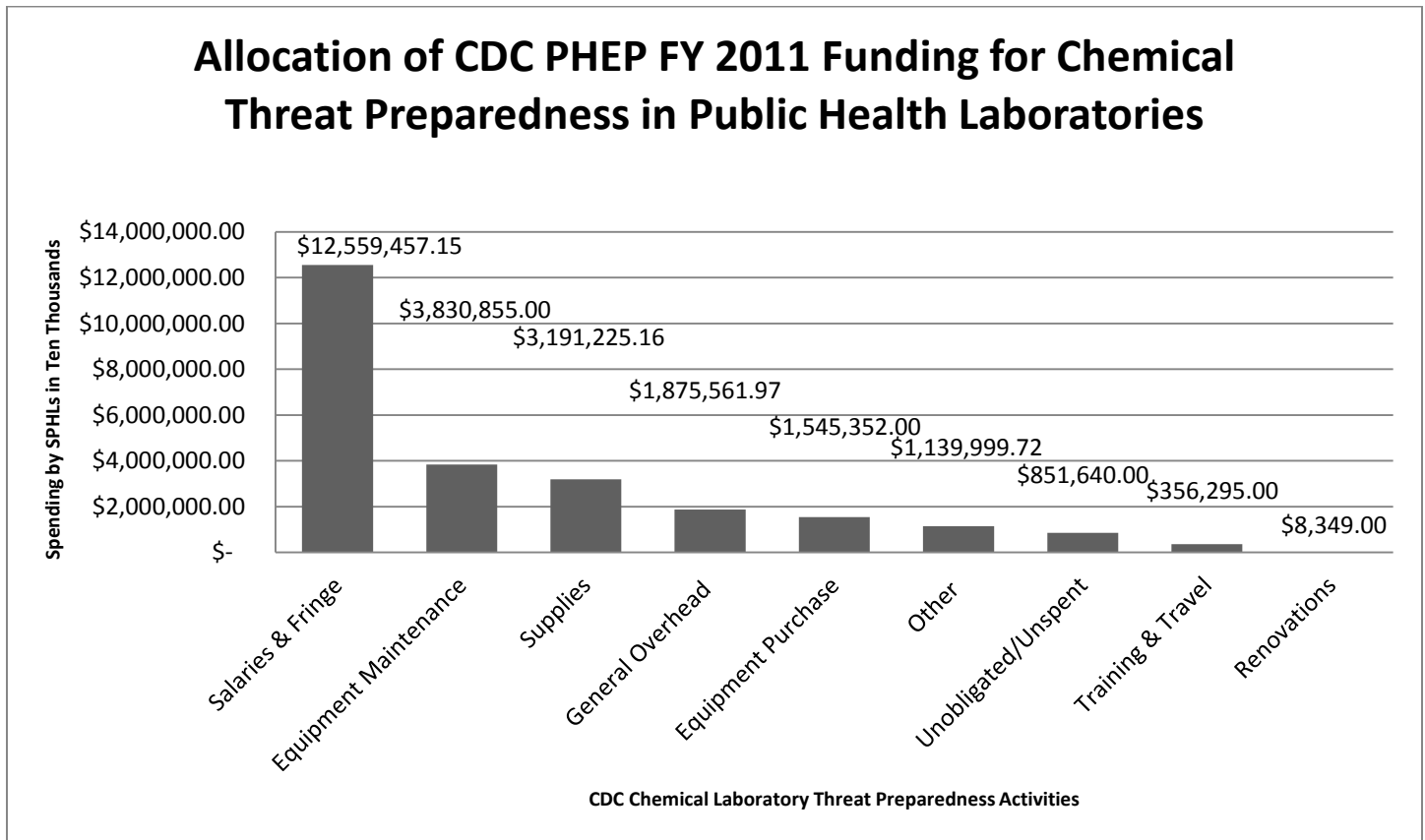
	Total	Mean	Maximum	Number of SPHLs
CDC Public Health Preparedness (PHEP) Cooperative Agreement	\$25,358,735.00	\$507,174.70	\$1,502,584.00	50
Non-CDC Federal	\$1,680,055.00	\$240,007.86	\$789,555.00	7
State	\$606,009.00	\$101,001.50	\$200,000.00	6
Other	\$570,244.00	\$285,122.00	\$565,244.00	2

24a. From August 10, 2011 to August 9, 2012, how much CDC PHEP Cooperative Agreement funding did your SPHL receive to maintain and enhance chemical threat activities?

	Total	Mean	Max	Number of Labs
Funding for Level 2 Activities	\$14,281,744	\$366,198.60	\$991,800	39

Funding for Level 1 Activities	\$9,714,135	\$971,413.50	\$1,502,584	10
Funding for Level 3 Activities	\$1,362,856	\$68,142.8	\$250,526	20

24b. From August 10, 2011 to August 9, 2012, how much of the allocated CDC chemical laboratory threat preparedness funds were used for the following activities? Please do not include carryover funds received from previous years.



25. From August 10, 2011 to August 9, 2012, how much CT PHEP funding did you provide to the following types of laboratories in your state?

	Total	Mean	Max	Number of SPHLs

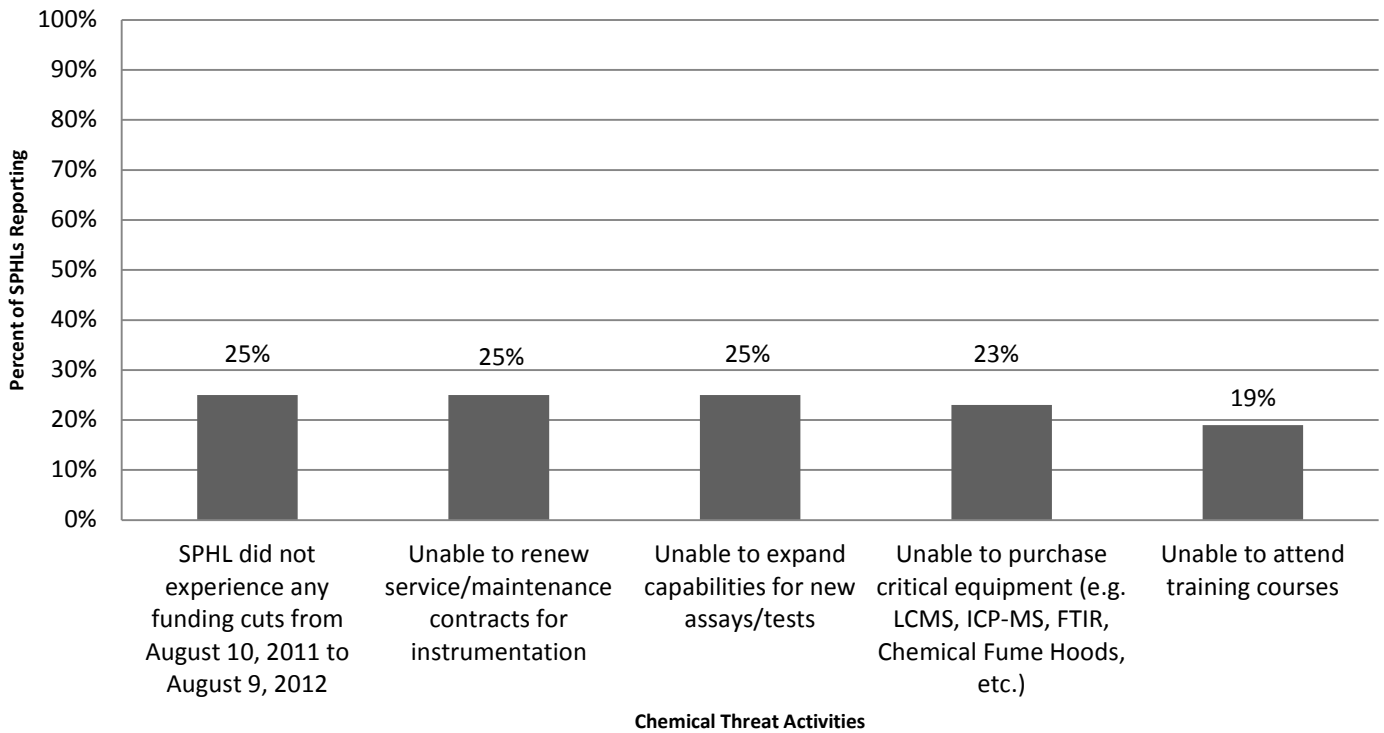
Branch state public health laboratory (SPHL)	\$1,032,954.00	\$1,032,954.00	\$1,032,954.00	1
Agricultural laboratory	\$45,946.00	\$22,973.00	\$41,000.00	2
Clinical (hospital, university or private) laboratory	\$12,500.00	\$12,500.00	\$12,500.00	1
Veterinary laboratory	0.00	0.00	0.00	0
Food laboratory	0.00	0.00	0.00	0
Other laboratory	0.00	0.00	0.00	0

27. From August 10, 2011 to August 9, 2012, for chemical threat activities, please select the top five impacts of any funding cuts your laboratory has experienced.

	Number of SPHLs	Percentage of SPHLs
SPHL did not experience any funding cuts from August 10, 2011 to August 9, 2012	13	25%
Unable to renew service/maintenance contracts for instrumentation	13	25%
Unable to expand capabilities for new assays/tests	13	25%
Unable to purchase critical equipment (e.g. LCMS, ICP-MS, FTIR, Chemical Fume Hoods, etc.)	12	23%
Unable to attend training courses	10	19%
Unable to participate in national meetings/conferences	10	19%
Unable to hire staff due to lack of funds	9	17%

Lost full-time staff position	9	17%
Unable to provide or reduced the number of training courses and other out-reach activities within your jurisdiction	9	17%
Combined staff positions	8	15%
Reduced ability to provide 24/7 analysis coverage	8	15%
Other-please specify:	7	13%
Increased staff turnover	6	12%
Unable to purchase and upgrade Laboratory Information Management System (LIMS)	6	12%
Experienced no change in laboratory operations	5	10%
Unable to purchase reagents and supplies	5	10%
Delayed or canceled planned facility improvements	4	8%
Unable to meet the LRN-C Level 2 requirements/qualifications	3	6%
Increased sample turnaround time	3	6%
Unable to participate in exercises	1	2%
Reduced state courier services	1	2%
Lost part-time staff position	0	0%
Dropped an LRN-C CT Level	0	0%
Significantly increased overtime	0	0%

Top Five Impacts of Funding Cuts for Chemical Threat Activities



28. From August 10, 2011 to August 9, 2012, did you increase, decrease or maintain your LRN-C capability?

	Number of SPHLs	Percentage of SPHLs
Maintain	32	62%
Increase	18	35%
Decline to respond	1	2%
Decrease	1	2%

28a. How did you increase your capability?

Please check all that apply. (n=18)

	Number of SPHLs	Percentage of SPHLs
Added one LRN-C method	12	67%
Added CT Equipment	8	44%
Added CT Personnel	3	17%
Other-please specify:	2	11%
Added more than two LRN-C methods	0	0%

Added two LRN-C methods	0	0%
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28b. How did you decrease your capability?

Please check all that apply. (n=1)

	Number of SPHLs	Percentage of SPHLs
Lost CT Personnel	1	100%
Unable to maintain service agreement(s) on current equipment	0	0%
Dropped a CT level	0	0%
Other-please specify:	0	0%
Unable to purchase new equipment required to add methods	0	0%
Lost CT Equipment	0	0%
Dropped two LRN-C methods	0	0%
Dropped more than two LRN-C methods	0	0%
Dropped one LRN-C method	0	0%

29. As of August 9, 2012, your CT laboratory qualified for which appropriate proficiency tests administered by the CDC National Center for Environmental Health?

Please check no more than 2 answer options.

	Number of SPHLs	Percentage of SPHLs
Qualified for SCPaS	32	62%
Qualified for more than 8 Core Methods	28	54%
Qualified for less than 8 Core Methods	12	23%
Qualified for only 8 Core Methods	6	12%
Not qualified	2	4%

30. Has your CT laboratory been certified or accredited by any of the following?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
CLIA	34	65%
None	14	27%
CAP	6	12%
ISO	0	0%

30a. Is your CT laboratory planning to become certified or accredited within the next 12 months by any of the following?

Please check all that apply (n=14)

	Number of SPHLs	Percentage of SPHLs
No	7	50%
CLIA	5	36%
CAP	2	14%
ISO	1	7%

31. Is your SPHL responsible for radiological testing?

Please check all that apply.

	Number of SPHLs	Percentage of SPHLs
Yes, SPHL responsible for radiological testing of environmental samples (e.g. air, soil, water)	27	52%
No	25	48%
Yes, SPHL responsible for radiological testing of food samples	19	37%
Yes, SPHL responsible for radiological testing of clinical samples	6	12%

32. In your laboratory, how many radioanalytical chemists or other analytical chemists work on methods for the analysis or research of radionuclides in clinical samples?

	Full time	Part Time
Total	6	1.1
Mean	1	.18
Max	4	.5
Number of Labs	3	3

33. From August 10, 2011 to August 9, 2012, how much radiological threat preparedness funding did your laboratory receive?

	Total	Mean	Maximum	Number of SPHLs
Non-CDC Federal	\$1,278,704.00	\$426,235	\$785,704.00	3
State	\$601,028.00	\$150,257	\$324,813.00	4
Other	\$90,397	\$30,132.33	\$49,389.00	3
CDC Public Health Emergency Preparedness (PHEP) Cooperative Agreement	0.00	0.00	0.00	0

33a. From August 10, 2011 to August 9, 2012, how much of the allocated CDC radiological laboratory threat preparedness funds were used for the following activities?

Not applicable, 0 SPHLs received CDC PHEP Cooperative Agreement funds for the RT preparedness.

34. From August 10, 2011 to August 9, 2012, how much RT PHEP funding did you provide to the following types of laboratories in your state?

Zero (0) SPHLs received CDC PHEP Cooperative Agreement funds for RT preparedness.

36. From August 10, 2011 to August 9, 2012, for radiological threat activities, please select the top five impacts of any funding cuts your laboratory has experienced. (n=27)

	Number of SPHLs	Percentage of SPHLs
Other	7	26%
Experienced no change in laboratory operations	6	22%
Unable to attend training courses	5	19%
Unable to hire staff due to lack of funds	5	19%
Unable to participate in national meetings/conferences	5	19%
Unable to purchase critical equipment (e.g. LCS, HPGe, NaI Gamma, ICP-MS, BSCs, etc.)	4	15%
SPHL did not experience any funding cuts from August 10, 2011 to August 9, 2012	4	15%
Unable to expand capabilities for new assays/tests	4	15%
Lost full-time staff position	3	11%

Increased sample turnaround time	3	11%
Unable to purchase reagents and supplies	2	7%
Reduced ability to provide 24/7 analysis coverage	2	7%
Delayed or canceled planned facility improvements	1	4%
Significantly increased overtime	1	4%
Combined staff positions	1	4%
Unable to respond to an event	0	0%
Lost part-time staff position	0	0%
Unable to participate in radiological exercises	0	0%
Reduced state courier services	0	0%
Unable to purchase and upgrade Laboratory Information Management System (LIMS)	0	0%
Increased staff turnover	0	0%
Unable to provide or reduced the number of training courses and other outreach activities within your jurisdiction	0	0%
Unable to renew service/maintenance contracts for instrumentation	0	0%

Common responses for other include:

No Funding

37. Has your RT laboratory been certified or accredited by any of the following?

Please check all that apply. (n=27)

	Number of SPHLs	Percentage of SPHLs
None	19	70%
NRC	5	19%
CLIA	2	7%
CAP	1	4%
ISO	0	0%

38. Is your RT laboratory planning to become certified or accredited within the next 12 months by any of the following? (n=27)

	Number of SPHLs	Percentage of SPHLs
No	25	93%
CLIA	1	4%

ISO	1	4%
CAP	1	4%
NRC	0	0%

Please see the additional documents for the stories.