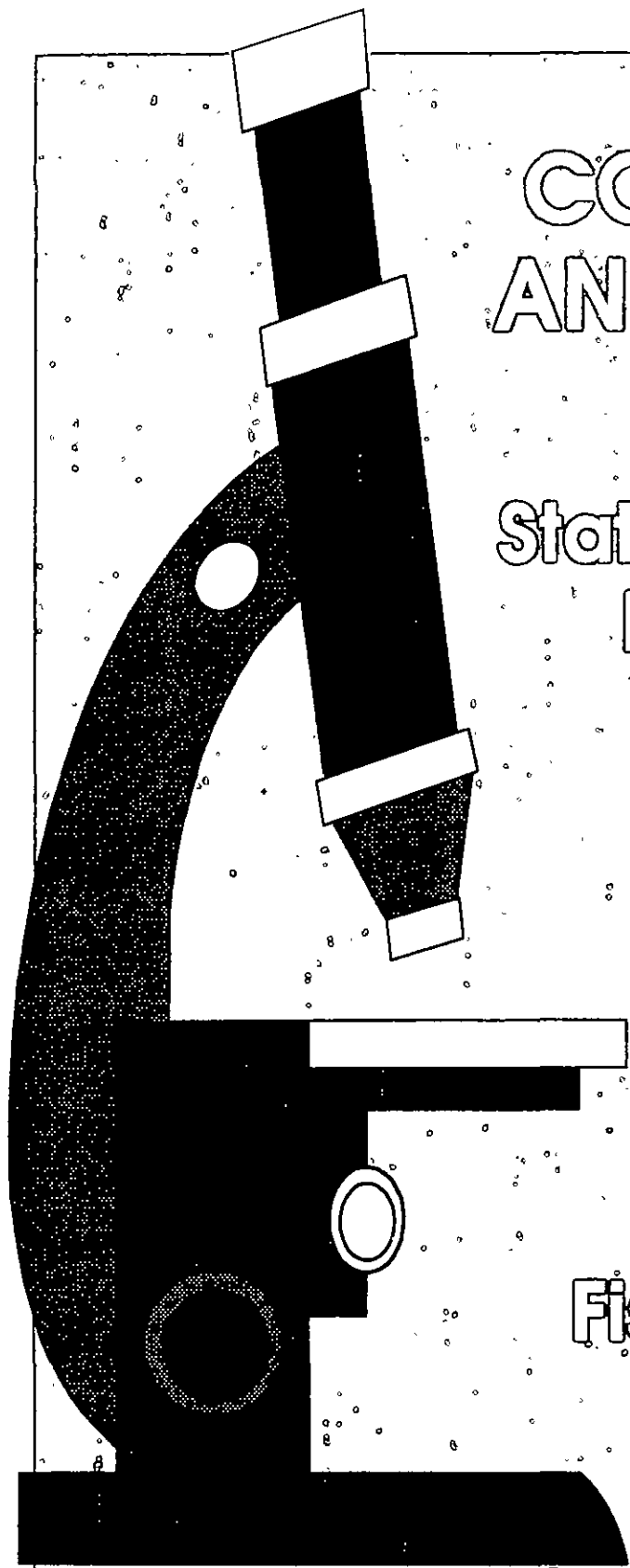


CONSOLIDATED ANNUAL REPORT

on State and Territorial Public Health Laboratories

Fiscal Year 1990

Association of State and Territorial
Public Health Laboratory Directors



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February 1992

**Association of State and Territorial
Public Health Laboratory Directors
1211 Connecticut Avenue, N.W., Suite 508
Washington, D.C. 20036**

This publication is based on data voluntarily submitted to ASTPHLD by the nation's state and territorial public health laboratories. These data were processed, analyzed, and published by the Public Health Foundation through a subcontract under Cooperative Agreement No. U60/CCU303019 with the Centers for Disease Control. The content of this publication does not necessarily reflect the views or policies of the Department of Health and Human Services.

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FOREWORD

The purpose of the Consolidated Annual Report (CAR) is to provide data to the members of the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD) for planning and laboratory management purposes and to other health organizations and government agencies interested in public health laboratories.

The CAR is the only resource containing quantitative information about the various procedures conducted by Association members. The Management and Information Systems Committee of the Association, after considerable deliberation, intends to enhance the CAR, making it more meaningful, timely, and useful not only for Association members but also for users in other health organizations and government agencies. The Committee will ensure that the CAR remains a valued resource document.

Special thanks are due the state and territorial public health laboratory directors and their staff for their continued efforts in providing data for this report. We are also indebted to our Project Officer, Carl H. Blank, Dr.P.H., Centers for Disease Control, for his support and helpful comments. The assistance of these individuals has enabled us to present this comprehensive picture of our public health laboratories.

Suggestions or comments on this report are invited. Please address communications to the Association of State and Territorial Public Health Laboratory Directors, 1211 Connecticut Avenue, N.W., Suite 508, Washington, D.C. 20036.

Jon Counts, Dr.P.H.
President
Association of State and Territorial
Public Health Laboratory Directors

INTRODUCTION

This, the twenty-sixth edition of the Consolidated Annual Report (CAR), provides quantitative information about laboratory personnel and services identified in 15 workload areas. In addition to tabular displays, this year's CAR also includes graphic displays. The information for the tables and all but one of the graphics was provided by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD), consisting of the public health laboratories in each of the 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. Information for the graphic on expenditures was collected by the Public Health Foundation in its annual survey of state health agencies.

The primary intent of the CAR is to aid Association members in planning, evaluating, budgeting, and effecting legislative activity at the state level. Principal users of this reporting system are *State and Territorial Laboratory Directors, State and Territorial Health Officials, and the Centers for Disease Control.*

Fifty-three of the 54 member laboratories provided data for this edition. The laboratory in New York did not report to the CAR for fiscal year 1990. National totals found in this edition, therefore, represent only 53 state and territorial public health laboratories.

The CAR deals with the personnel and workload activities of ASTPHLD. It omits those public health laboratory services provided by other state/territorial/local agencies. Therefore, this report understates the additional resources expended on public health laboratory services in nearly every state/territory having local health departments. If some type of activity is not reported in this CAR for a given Association member, it may indicate that a state or territorial agency other than the public health laboratory performs that service.

The basic unit of study in the Workload Reporting Section of the CAR is the laboratory specimen/sample. This is defined by ASTPHLD as any material received in the laboratory for testing in a workload category or subcategory or a material which is divided into aliquots for testing in multiple categories or subcategories and is counted as one specimen for each category or subcategory. Specimens collected from the same site on the same patient (or same environmental sample) at the same time, are counted as one specimen in each category or subcategory in which it is tested.

The types of procedures routinely used (those tests performed as a standard operating procedure on a specimen or sample) in Association laboratories are identified by category and subcategory in the 15 workload areas. The ASTPHLD provides workload data in this report only for those procedures routinely followed in their laboratories and excludes those procedures they are capable of performing but do not do on a routine basis.

The questionnaire for the FY 1990 CAR was composed of two sections: personnel and workload reporting. The personnel section requested the type and number of budgeted positions in five categories and defined these categories by turnover, vacancies, and workload area. All budgeted positions are defined in terms of full-time equivalent (FTE) or man-year equivalent because the standard work week differs among reporting laboratories in terms of number of hours worked. The workload reporting section requested specific data concerning routine laboratory procedures and the number of specimens/samples tested under each procedure.

CONTENTS

Table		Page
Summary		
	Figure 1: State public health laboratory program expenditures, by source of funds	2
	Figure 2: Number of state public health laboratory professional and technical personnel, by category	2
	Figure 3: Percentage distribution of state public health laboratory professional and technical personnel and specimens/samples tested, by selected category	3
	Figure 4: Number of state public health laboratory professional and technical personnel in selected categories	3
	Figure 5: Percentage change in the number of state public health laboratory pathogenic microbiology personnel	4
	Figure 6: Percentage change in the number of state public health laboratory immunology personnel	4
	Figure 7: Percentage change in the number of state public health laboratory environmental chemistry personnel	5
1	Number of specimens, by reporting category	6

Laboratory Diagnostic Workload

Bacteriology		
2	Bacteriology specimens	10
3	Nasopharyngeal specimens	11
4	Mycobacteria specimens	15
5	Enteric specimens	16
6	Gonococcus specimens	17
7	Anaerobic specimens	18
8	Other bacteriology specimens	19
Mycology		
9	Mycology specimens	21
Parasitology		
10	Parasitology specimens	22
11	Intestinal specimens	23
12	Other parasitology specimens	24
Virology		
13	Virology specimens	25
	Figure 8: Number of rabies cases in animals	26
14	Rabies specimens	27
15	Viral isolation specimens	28
16	Rickettsial identification specimens	30

Table		Page
17	HIV Identification specimens	31
18	Chlamydia specimens	32
19	Herpes simplex specimens	33
20	Other virology specimens	34
 Immunology		
	Figure 9: State public health laboratory immunology specimens, by category	35
21	Immunology specimens	36
22	Syphilis serology specimens	37
23	Bacterial serology specimens	38
24	Fungal serology specimens	39
25	Parasitic serology specimens	40
26	Viral and rickettsial serology specimens	41
27	HIV serology specimens	42
28	Other serology specimens	43
 Hematology/Immunoematology		
29	Hematology/immunoematology specimens	44
 Clinical Chemistry		
	Figure 10: State public health laboratory clinical chemistry specimens, by category	45
30	Clinical chemistry specimens	46
31	Clinical chemistry specimens and types of tests	47
32	Urinalysis specimens	49
33	Newborn screening	50
34	Hemoglobinopathy specimens	52
35	Other clinical chemistry specimens	53
 Pathology		
36	Pathology specimens	54
 Occupational Safety And Health		
37	Biological samples	55
 Toxicology		
	Figure 11: State public health laboratory toxicology specimens, by category	56
38	Biological samples	57
39	Blood samples	58
40	Urine samples	60
41	Other toxicology samples	62

Laboratory Environmental Workload

Environmental Microbiology		
	Figure 12: Number of environmental microbiology specimens	66
42	Environmental microbiology samples	67

Table		Page
43	Water samples	68
44	Dairy products samples	73
45	Food and beverage samples	74
46	Other environmental microbiology samples	75

Environmental Chemistry

	Figure 13: State public health laboratory environmental chemistry samples, by category	76
47	Environmental chemistry samples	77
48	Water samples	78
49	Solid and hazardous waste samples	80
50	Food samples	81
51	Body fluid and tissue samples	82
52	Air samples	83
53	Air pollution samples	84
54	Radiological analysis samples	85
55	Other environmental chemistry samples	86

Occupational Safety And Health

56	Environmental samples	87
----	---------------------------------	----

Toxicology

57	Physical samples	88
----	----------------------------	----

Other Laboratory Workloads

Laboratory Improvement Program (LIP)

58	Number of laboratories and LIP personnel	94
59	Clinical laboratories	95
60	Public health laboratories	100
61	Physicians' office laboratories	106
62	Dairy and food laboratories	111
63	Water laboratories	114
64	Other LIP activities for all types of laboratories	120

Biologics, Reagents, And Media Production

65	Production of biologics, reagents, and media for distribution	121
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Research And Development

66	Basic research	122
67	Applied research	123
68	Technical development	124

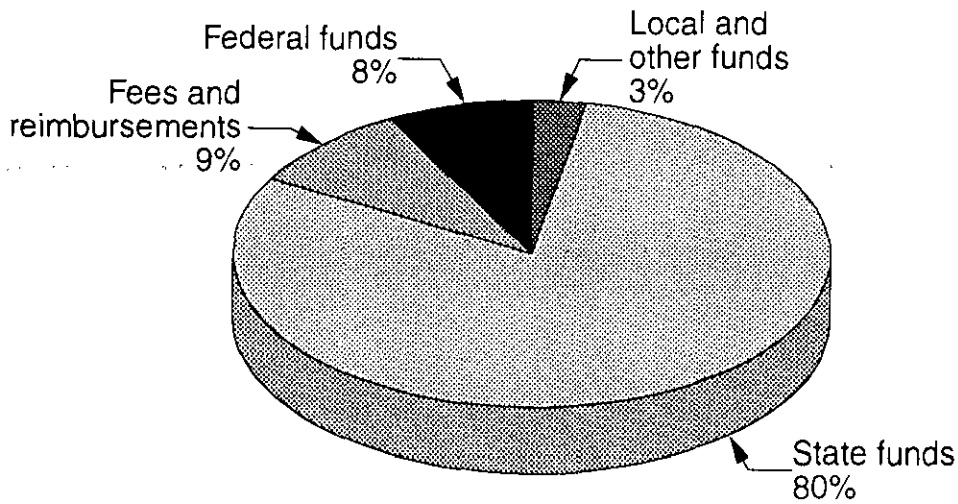
Laboratory Personnel And Staffing Patterns

69	Number of budgeted positions	126
70	Turnover	128
71	Staffing pattern of professional and technical personnel	129

Notes and Definitions	131
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SUMMARY

FIGURE 1.
STATE PUBLIC HEALTH LABORATORY PROGRAM EXPENDITURES,
BY SOURCE OF FUNDS, FISCAL YEAR 1989*

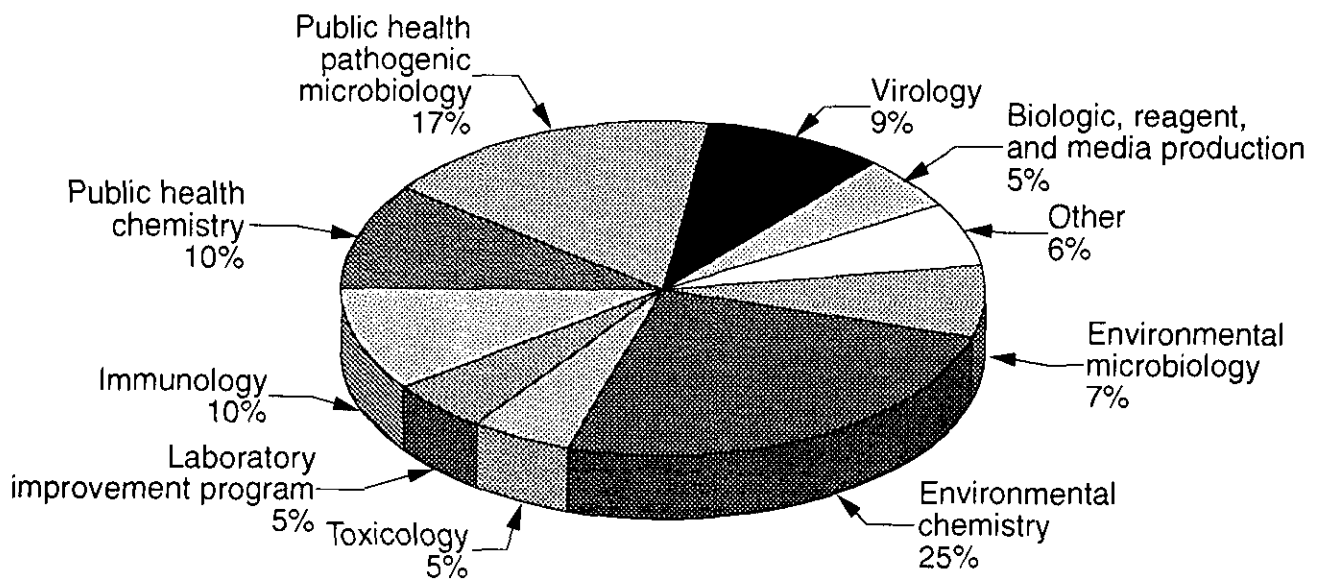


TOTAL: \$307.9 MILLION**

* Data were collected through the Public Health Foundation's annual survey of the nation's state health agencies.

** Laboratory expenditures were estimated for the state health agencies in Montana, Puerto Rico, and the Virgin Islands, which did not participate in the Foundation's FY 1989 Annual Survey.

FIGURE 2.
NUMBER OF STATE PUBLIC HEALTH LABORATORY PROFESSIONAL
AND TECHNICAL PERSONNEL, BY CATEGORY, FISCAL YEAR 1990



TOTAL: 4,043 PROFESSIONAL AND TECHNICAL PERSONNEL

FIGURE 3.
PERCENTAGE DISTRIBUTION OF STATE PUBLIC HEALTH LABORATORY PROFESSIONAL AND TECHNICAL PERSONNEL AND SPECIMENS/SAMPLES TESTED, BY SELECTED CATEGORY, FISCAL YEAR 1990

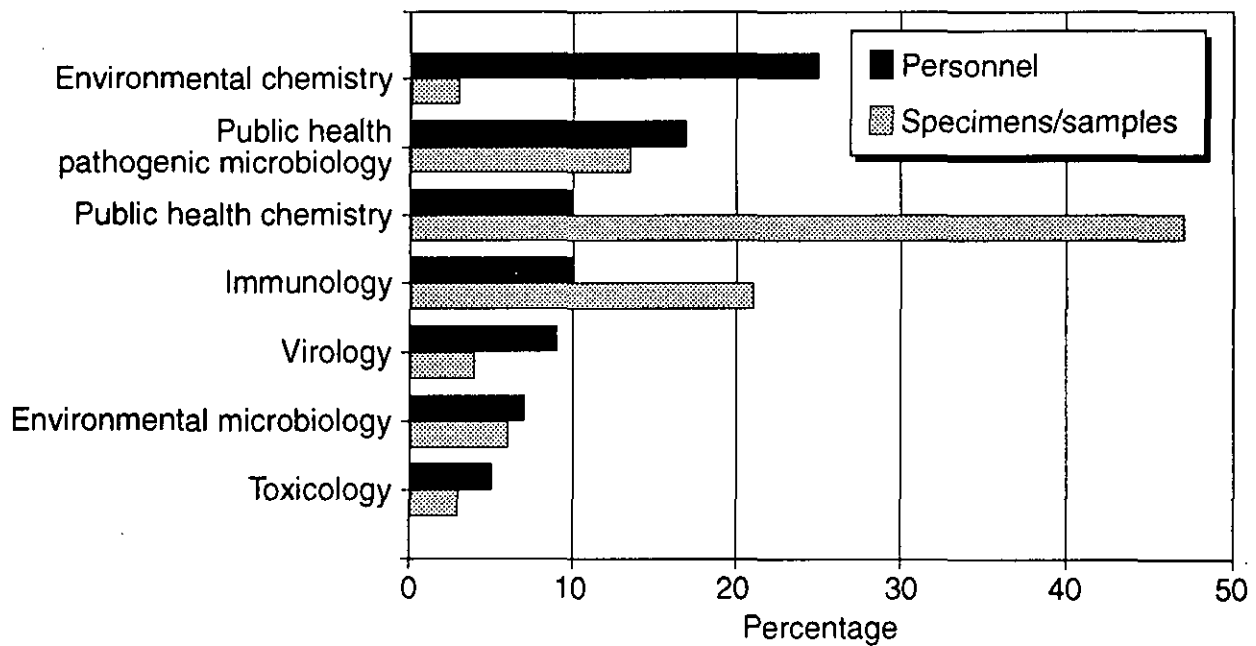


FIGURE 4.
NUMBER OF STATE PUBLIC HEALTH LABORATORY PROFESSIONAL AND TECHNICAL PERSONNEL IN SELECTED CATEGORIES, FISCAL YEARS 1985-1990

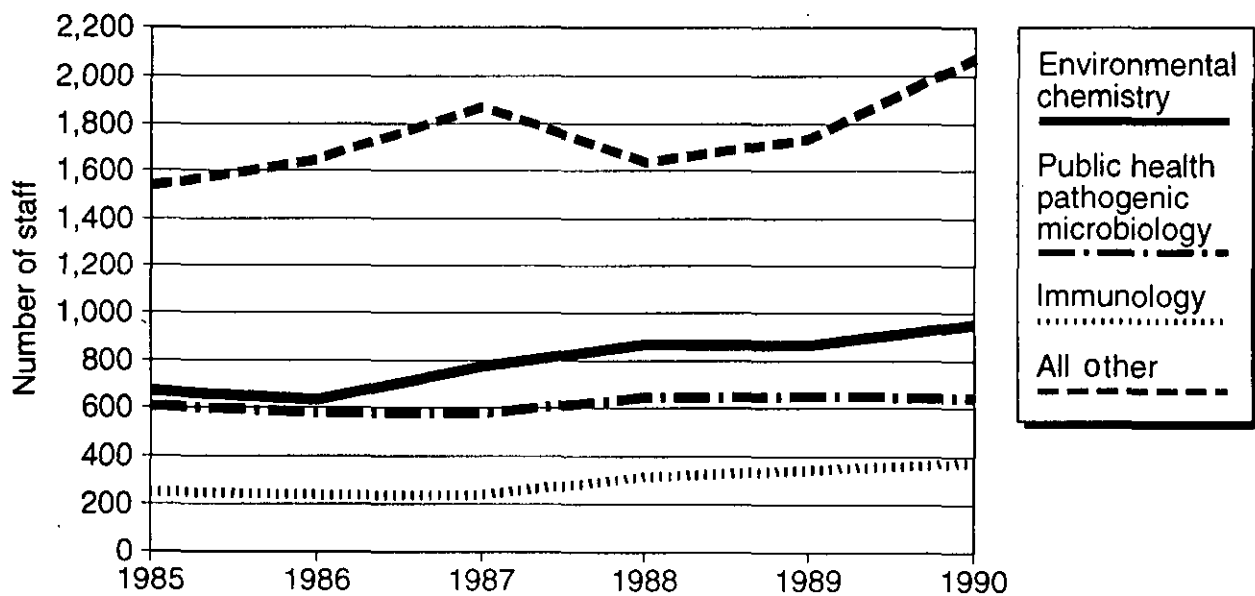


FIGURE 5.
 PERCENTAGE CHANGE IN THE NUMBER OF STATE PUBLIC
 HEALTH LABORATORY PATHOGENIC MICROBIOLOGY
 PERSONNEL, FISCAL YEARS 1985-1990

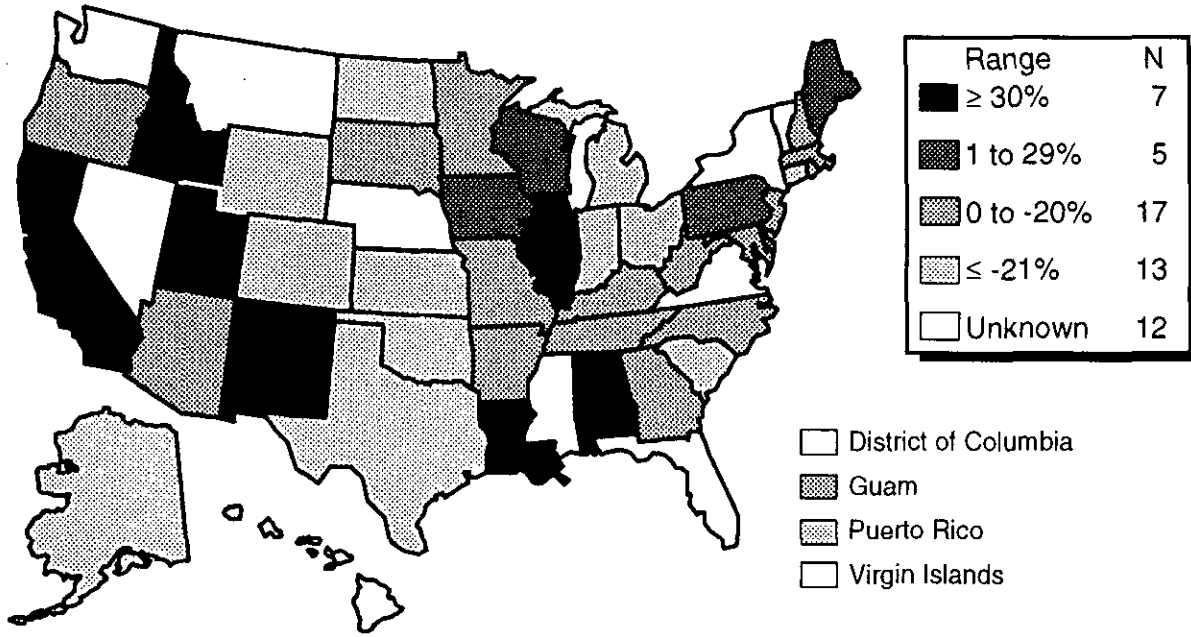


FIGURE 6.
 PERCENTAGE CHANGE IN THE NUMBER OF STATE PUBLIC
 HEALTH LABORATORY IMMUNOLOGY PERSONNEL,
 FISCAL YEARS 1985-1990

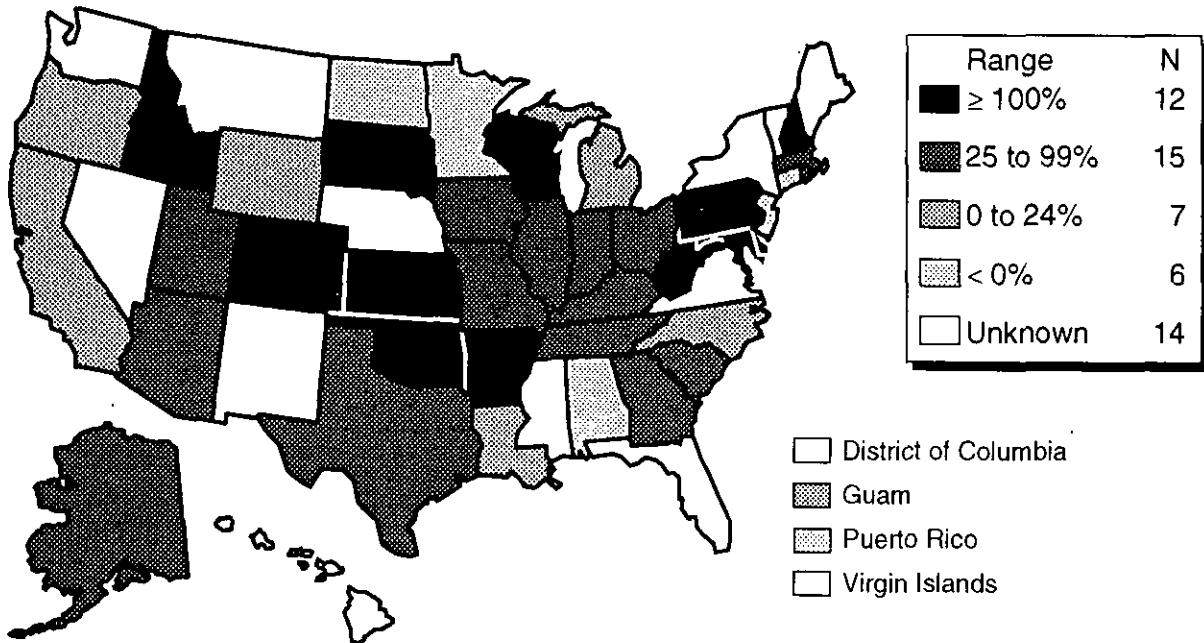


FIGURE 7.
 PERCENTAGE CHANGE IN THE NUMBER OF STATE PUBLIC HEALTH
 LABORATORY ENVIRONMENTAL CHEMISTRY PERSONNEL,
 FISCAL YEARS 1985-1990

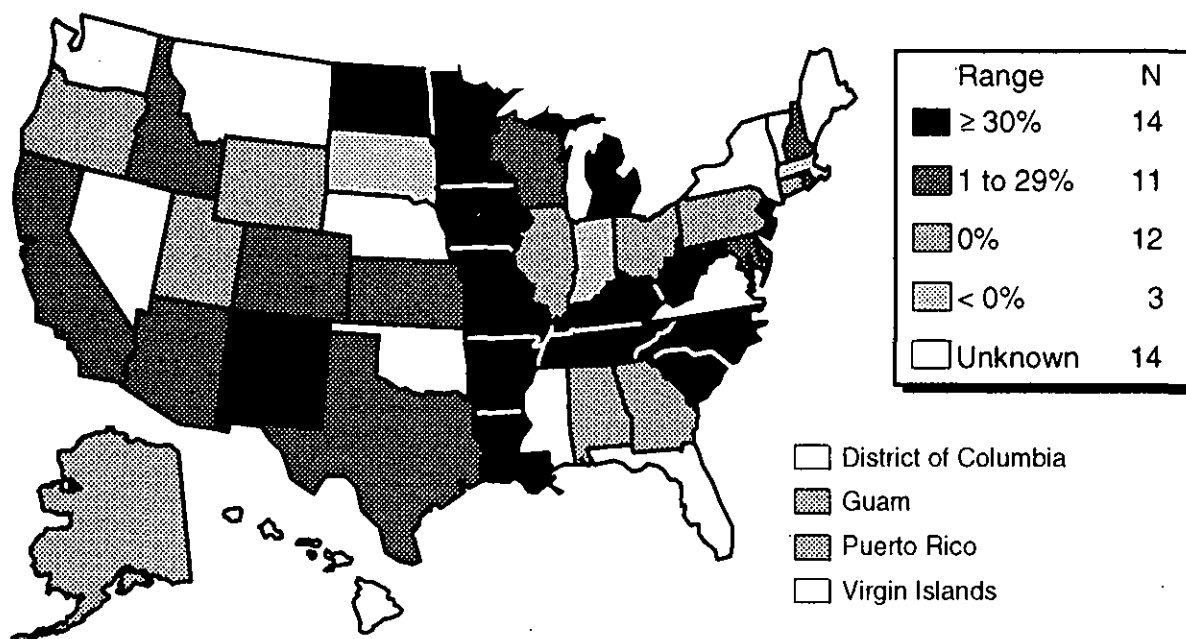


TABLE 1. NUMBER OF SPECIMENS, BY REPORTING CATEGORY

Lab & Region	Total Number of Specimens	Bacteriology		Mycology		Parasitology		Virology	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
No. of States Reporting	53	53		45		52		52	
TOTAL	39,344,847	4,932,318	12.54	66,490	0.17	318,159	0.81	1,507,967	3.83
AVERAGE	742,356	93,063		1,478		6,118		28,999	
NEW ENGLAND	2,056,124	198,018	9.63	4,223	0.21	11,197	0.54	43,776	2.13
Connecticut	476,305	37,312	7.83	1,598	0.34	1,747	0.37	12,018	2.52
Massachusetts	1,057,351	68,941	6.52	518	0.05	84	0.01	5,300	0.50
Maine	109,831	10,017	9.14	1,019	0.93	385	0.35	11,654	10.64
New Hampshire	54,788	10,999	20.08	588	1.07	90	0.16	10,382	18.95
Rhode Island	297,133	60,136	20.24	205	0.07	4,081	1.37	2,334	0.79
Vermont	60,916	10,811	17.42	297	0.49	4,810	7.90	2,188	3.59
MIDDLE ATLANTIC	1,201,253	167,397	13.94	160	0.01	1,626	0.14	18,151	1.51
New Jersey	768,716	158,986	20.68	160	0.02	1,489	0.19	14,859	1.83
New York*									
Pennsylvania	432,537	8,411	1.94	0	0.00	137	0.03	3,292	0.78
EAST NORTH CENTRAL	8,154,171	172,340	2.80	9,272	0.15	22,246	0.36	204,782	3.33
Illinois	1,640,472	55,335	3.37	689	0.04	2,717	0.17	12,752	0.78
Indiana	149,628	8,323	4.23	404	0.27	2,339	1.56	8,349	5.58
Michigan	1,612,666	44,438	2.76	2,206	0.14	8,296	0.51	21,938	1.36
Ohio	1,168,557	27,325	2.34	666	0.06	956	0.08	69,691	5.96
Wisconsin	1,582,848	38,919	2.46	5,307	0.34	7,938	0.50	92,052	5.82
WEST NORTH CENTRAL	2,680,930	277,879	10.36	3,717	0.14	22,398	0.84	164,975	6.15
Iowa	696,044	71,730	10.31	1,714	0.25	5,876	0.84	30,355	4.36
Kansas	337,082	35,354	10.48	1,112	0.33	5,452	1.62	23,512	6.98
Minnesota	437,447	73,153	16.72	444	0.10	2,933	0.67	12,391	2.83
Missouri	923,875	73,346	7.94	243	0.03	4,510	0.48	50,333	5.45
Nebraska	87,774	8,283	9.44	0	0.00	22	0.03	13,872	15.80
North Dakota	93,209	5,854	6.28	149	0.16	722	0.77	13,741	14.74
South Dakota	105,499	9,959	9.44	55	0.05	2,883	2.73	20,771	19.69
SOUTH ATLANTIC	9,912,238	1,683,766	18.99	19,875	0.20	109,425	1.09	379,638	3.82
Delaware	159,112	43,118	27.10	5,405	3.40	294	0.18	20,010	12.68
District of Columbia	430,742	58,195	13.51	0	0.00	0	0.00	14,577	3.38
Florida	2,512,844	813,131	24.40	1,714	0.07	54,720	2.18	80,475	3.20
Georgia	992,440	239,532	24.14	902	0.09	18,371	1.85	9,639	0.97
Maryland	3,087,501	428,085	13.87	5,748	0.19	18,153	0.59	59,081	1.91
North Carolina	1,136,970	25,334	2.23	1,481	0.13	5,754	0.51	62,327	5.48
South Carolina	599,891	87,073	14.51	1,358	0.23	3,869	0.64	47,013	7.84
Virginia	676,214	125,259	18.52	2,568	0.38	5,658	0.84	84,908	12.56
West Virginia	316,524	64,041	20.23	519	0.16	1,606	0.51	608	0.19
EAST SOUTH CENTRAL	2,959,940	768,467	25.99	8,067	0.27	15,632	0.53	94,336	3.19
Alabama	1,066,848	248,813	22.69	4,437	0.40	4,721	0.43	57,373	5.23
Kentucky	388,546	11,877	3.07	0	0.00	2,537	0.66	16,503	4.27
Mississippi	835,202	223,975	26.82	1,492	0.18	5,671	0.68	6,453	0.77
Tennessee	641,546	281,802	43.93	2,138	0.33	2,703	0.42	14,007	2.18
WEST SOUTH CENTRAL	6,151,771	741,008	12.05	5,320	0.09	20,256	0.33	112,654	1.83
Arkansas	479,453	94,946	19.80	2,015	0.42	1,369	0.29	1,115	0.23
Louisiana	737,834	145,797	19.76	0	0.00	7,755	1.05	1,551	0.21
Oklahoma	417,273	69,251	16.60	961	0.23	3,364	0.81	5,301	1.27
Texas	4,517,211	431,014	9.54	2,344	0.05	7,768	0.17	104,687	2.32
MOUNTAIN	2,770,967	207,209	7.48	1,576	0.06	11,559	0.42	109,550	3.95
Arizona	128,365	27,088	21.10	317	0.25	191	0.15	13,824	10.77
Colorado	1,616,238	15,287	0.95	71	0.00	2,580	0.16	14,736	0.91
Idaho	124,322	21,919	17.63	248	0.20	1,588	1.28	24,997	20.11
Montana	170,284	7,439	4.37	265	0.16	2,030	1.19	27,154	15.95
Nevada	88,670	31,570	35.60	31	0.03	2,107	2.38	0	0.00
New Mexico	279,578	27,821	9.95	409	0.15	2,198	0.79	15,413	5.51
Utah	259,906	18,210	7.01	119	0.05	765	0.29	6,274	2.41
Wyoming	103,604	57,875	55.86	116	0.11	102	0.10	7,152	6.90
PACIFIC	5,125,217	673,795	13.15	14,379	0.28	94,403	1.84	373,882	7.29
Alaska	110,174	60,151	54.60	285	0.26	3,076	2.79	6,776	6.15
California	2,968,689	496,103	16.71	13,800	0.46	81,571	2.75	246,095	8.29
Hawaii	226,700	73,897	32.60	199	0.09	398	0.18	7,452	3.29
Oregon	1,452,626	6,388	0.44	0	0.00	2,777	0.19	52,828	3.64
Washington	367,028	37,256	10.15	95	0.03	6,581	1.79	60,733	16.55
TERRITORIES	332,236	44,841	13.44	101	0.03	10,417	3.14	7,223	2.17
Guam	24,484	10,328	42.18	101	0.41	512	2.09	1,725	7.05
Puerto Rico	24,442	1,210	4.95	0	0.00	856	3.50	4,558	18.65
Virgin Islands	283,310	33,103	11.68	0	0.00	9,049	3.19	940	0.33

* New York did not report for fiscal year 1989.

TABLE 1. NUMBER OF SPECIMENS, BY REPORTING CATEGORY (continued)

Lab & Region (21)	Total Number of Specimens (22)	Environmental Microbiology		Environmental Chemistry		Occupational Safety and Health		Toxicology	
		Number (23)	Percent (24)	Number (25)	Percent (26)	Number (27)	Percent (28)	Number (29)	Percent (30)
No. of States Reporting	53	53		44		27		39	
TOTAL	39,344,847	2,347,745	5.97	1,075,709	2.73	104,451	0.27	1,235,033	3.14
AVERAGE	742,356	44,297		24,448		3,889		31,868	
NEW ENGLAND	2,056,124	81,321	3.96	115,263	5.61	8,001	0.39	425,811	20.70
Connecticut	476,305	18,213	3.82	32,127	6.75	5,266	1.11	81,128	17.03
Massachusetts	1,057,351	4,839	0.44	349	0.03	0	0.00	249,415	23.59
Maine	109,831	22,810	20.62	20,304	18.52	252	0.23	7,148	8.52
New Hampshire	54,788	1,487	2.71	2	0.00	2,379	4.34	13,543	24.72
Rhode Island	297,133	11,937	4.02	56,681	19.08	104	0.04	69,982	23.55
Vermont	80,916	22,435	27.60	6,800	8.40	0	0.00	4,395	5.31
MIDDLE ATLANTIC	1,201,253	8,262	0.52	8,357	0.70	2,188	0.18	224,513	18.69
New Jersey	788,716	6,144	0.80	8,357	1.09	2,188	0.28	218,580	28.43
New York*									
Pennsylvania	432,537	118	0.03	0	0.00	0	0.00	5,939	1.37
EAST NORTH CENTRAL	6,154,171	378,546	6.15	205,265	3.34	65,377	1.06	61,622	1.00
Illinois	1,640,472	39,319	2.40	6,897	0.41	1,839	0.11	18,787	1.02
Indiana	149,628	77,225	51.61	21,263	14.21	2,787	1.87	2,757	1.84
Michigan	1,812,686	125,787	7.80	54,807	3.40	0	0.00	0	0.00
Ohio	1,168,557	51,149	4.38	11,027	0.94	3,647	0.31	17,692	1.51
Wisconsin	1,582,848	85,088	5.38	111,471	7.04	57,094	3.61	24,388	1.54
WEST NORTH CENTRAL	2,680,930	280,003	10.44	149,642	5.58	11,031	0.41	24,310	0.91
Iowa	898,044	41,782	4.65	68,339	7.61	9,528	1.07	209	0.03
Kansas	337,082	45,450	13.48	13,528	4.01	408	0.12	0	0.00
Minnesota	437,447	13,538	3.09	22,119	5.06	538	0.12	0	0.00
Missouri	923,875	115,846	12.54	12,498	1.35	39	0.00	45	0.00
Nebraska	87,774	23,985	27.33	13,884	15.82	609	0.58	1,602	1.83
North Dakota	93,209	20,854	22.37	10,772	11.56	9	0.01	13,417	14.39
South Dakota	105,499	18,548	17.58	8,602	8.06	0	0.00	9,037	8.57
SOUTH ATLANTIC	9,912,238	614,218	6.20	291,793	2.94	11,484	0.12	257,380	2.60
Delaware	159,112	15,872	9.85	8,152	5.12	0	0.00	8,653	5.44
District of Columbia	430,742	209	0.05	239	0.06	0	0.00	79,312	18.41
Florida	2,512,844	288,968	11.50	35,821	1.43	839	0.03	26,220	1.04
Georgia	992,440	221	0.02	0	0.00	0	0.00	0	0.00
Maryland	3,087,501	133,870	4.34	213,739	6.92	9,554	0.31	65,811	2.13
North Carolina	1,138,970	50,537	4.44	32,115	2.82	81	0.01	25,414	2.24
South Carolina	599,891	12,328	2.06	0	0.00	1,210	0.20	51,970	8.66
Virginia	678,214	70,044	10.36	0	0.00	0	0.00	0	0.00
West Virginia	318,524	42,369	13.39	1,727	0.55	0	0.00	0	0.00
EAST SOUTH CENTRAL	2,959,940	182,403	6.16	23,694	0.80	2,151	0.07	10,843	0.37
Alabama	1,096,646	87,771	8.00	0	0.00	0	0.00	0	0.00
Kentucky	386,548	9,788	2.53	9,354	2.42	2,151	0.56	10,843	2.81
Mississippi	835,202	72,786	8.71	7,478	0.90	0	0.00	0	0.00
Tennessee	841,546	12,058	1.43	6,884	0.82	0	0.00	0	0.00
WEST SOUTH CENTRAL	6,161,771	484,887	7.88	104,080	1.69	2,709	0.04	88,825	1.41
Arkansas	478,453	80,846	16.86	12,187	2.54	1,721	0.36	1,068	0.22
Louisiana	737,834	82,887	12.59	29,084	3.94	18	0.00	69,354	9.40
Oklahoma	417,273	79,060	18.95	24,385	5.84	545	0.13	61	0.01
Texas	4,517,211	231,884	5.13	38,424	0.85	427	0.01	16,344	0.36
MOUNTAIN	2,770,987	140,829	5.08	73,248	2.64	1,510	0.05	133,058	4.80
Arizona	128,365	9,763	7.61	3,778	2.94	856	0.67	22	0.02
Colorado	1,818,238	24,736	1.53	21,366	1.32	0	0.00	106,729	6.60
Idaho	124,322	40,125	32.28	10,723	8.63	0	0.00	0	0.00
Montana	170,284	18,112	10.64	9,535	5.60	138	0.08	220	0.13
Nevada	88,670	11,480	12.95	5,276	5.95	0	0.00	0	0.00
New Mexico	279,578	16,533	5.91	12,815	4.58	0	0.00	8,442	3.02
Utah	259,906	7,496	2.88	9,753	3.75	516	0.20	4,138	1.59
Wyoming	103,804	12,584	12.15	0	0.00	0	0.00	13,507	13.04
PACIFIC	5,125,217	148,770	2.88	93,840	1.83	0	0.00	8,730	0.13
Alaska	110,174	151	0.14	0	0.00	0	0.00	2,667	2.42
California	2,968,889	113,507	3.82	29,434	0.99	0	0.00	3,987	0.13
Hawaii	226,700	12,872	5.68	56,841	25.07	0	0.00	76	0.03
Oregon	1,452,626	8,651	0.60	0	0.00	0	0.00	0	0.00
Washington	367,028	11,589	3.16	7,565	2.06	0	0.00	0	0.00
TERRITORIES	332,236	32,706	9.84	10,529	3.17	0	0.00	4,141	1.25
Guam	24,484	366	1.49	0	0.00	0	0.00	0	0.00
Puerto Rico	24,442	8,697	35.58	2,650	10.84	0	0.00	740	3.03
Virgin Islands	283,310	23,643	8.35	7,879	2.78	0	0.00	3,401	1.20

* New York did not report for fiscal year 1989.

TABLE 1. NUMBER OF SPECIMENS, BY REPORTING CATEGORY (continued)

Lab & Region (11)	Total Number of Specimens (12)	Immunology		Hematology/ Immunohematology		Clinical Chemistry		Pathology	
		Number (13)	Percent (14)	Number (15)	Percent (16)	Number (17)	Percent (18)	Number (19)	Percent (20)
No. of States Reporting	53	52		25		48		7	
TOTAL	39,344,847	8,078,129	20.63	777,942	1.98	18,480,739	46.97	422,185	1.07
AVERAGE	742,358	155,310		31,118		401,765		60,309	
NEW ENGLAND	2,058,124	333,555	16.22	15	0.00	835,148	40.62	0	0.00
Connecticut	478,305	120,045	25.20	15	0.00	168,836	35.03	0	0.00
Massachusetts	1,057,351	108,893	10.28	0	0.00	619,412	58.58	0	0.00
Maine	109,831	18,841	17.19	0	0.00	17,501	15.98	0	0.00
New Hampshire	54,788	15,320	27.96	0	0.00	0	0.00	0	0.00
Rhode Island	297,133	60,278	20.29	0	0.00	31,397	10.57	0	0.00
Vermont	60,916	10,380	17.04	0	0.00	0	0.00	0	0.00
MIDDLE ATLANTIC	1,201,263	230,813	19.21	30	0.00	541,756	45.10	0	0.00
New Jersey	788,716	228,111	29.67	0	0.00	129,842	16.89	0	0.00
New York*									
Pennsylvania	432,537	2,702	0.62	30	0.01	411,814	95.23	0	0.00
EAST NORTH CENTRAL	6,154,171	843,880	13.71	39,975	0.65	4,048,417	65.78	102,449	1.68
Illinois	1,840,472	54,443	3.32	0	0.00	1,449,894	88.38	0	0.00
Indiana	149,828	28,171	18.83	0	0.00	0	0.00	0	0.00
Michigan	1,812,668	324,701	20.13	0	0.00	1,030,513	83.90	0	0.00
Ohio	1,188,557	87,782	7.51	0	0.00	898,822	78.90	0	0.00
Wisconsin	1,582,848	348,783	22.04	39,975	2.53	669,388	42.29	102,449	6.47
WEST NORTH CENTRAL	2,880,930	393,110	14.66	13,017	0.49	1,341,048	50.02	0	0.00
Iowa	696,044	100,131	14.39	0	0.00	368,390	52.64	0	0.00
Kansas	337,082	63,811	18.93	0	0.00	148,455	44.04	0	0.00
Minnesota	437,447	32,283	7.38	0	0.00	280,048	64.02	0	0.00
Missouri	923,875	154,861	16.74	8,274	0.90	504,080	54.58	0	0.00
Nebraska	87,774	14,225	16.21	0	0.00	11,392	12.99	0	0.00
North Dakota	93,209	8,774	9.41	0	0.00	18,917	20.30	0	0.00
South Dakota	105,499	19,225	18.22	4,743	4.50	11,778	11.18	0	0.00
SOUTH ATLANTIC	9,912,238	2,386,702	24.08	384,453	3.88	3,498,619	35.30	297,085	3.00
Delaware	159,112	38,685	24.30	11,085	6.97	8,060	5.07	0	0.00
District of Columbia	430,742	141,234	32.79	61,409	14.26	63,804	14.81	11,763	2.73
Florida	2,512,844	814,664	32.42	81,005	2.43	535,487	21.31	0	0.00
Georgia	992,440	448,705	45.01	16,045	1.62	261,025	26.30	0	0.00
Maryland	3,087,501	303,550	9.83	148,687	4.76	1,853,168	53.54	50,077	1.62
North Carolina	1,138,970	214,459	18.86	22,212	1.95	625,872	48.25	171,404	16.08
South Carolina	689,891	147,042	24.51	28,321	4.72	219,707	36.62	0	0.00
Virginia	678,214	238,734	35.01	17,709	2.62	133,334	19.72	0	0.00
West Virginia	318,524	43,649	13.79	0	0.00	98,184	31.01	63,841	20.17
EAST SOUTH CENTRAL	2,959,940	897,902	30.34	96,892	3.27	861,753	29.11	0	0.00
Alabama	1,098,648	270,682	24.88	41,948	3.83	380,901	34.73	0	0.00
Kentucky	388,548	56,540	14.63	7,982	2.08	258,971	67.00	0	0.00
Mississippi	835,202	334,379	40.04	46,762	5.60	138,208	16.31	0	0.00
Tennessee	641,546	238,301	36.83	0	0.00	85,873	13.35	0	0.00
WEST SOUTH CENTRAL	6,151,771	1,180,077	19.18	75,415	1.23	3,338,740	54.27	0	0.00
Arkansas	479,453	137,809	28.74	7,794	1.63	138,585	28.90	0	0.00
Louisiana	737,834	197,399	26.75	3,459	0.47	190,622	25.82	0	0.00
Oklahoma	417,273	121,183	29.04	6,175	1.48	108,987	25.64	0	0.00
Texas	4,517,211	723,886	16.02	57,987	1.28	2,902,648	64.28	0	0.00
MOUNTAIN	2,770,987	473,505	17.09	558	0.02	1,695,738	57.59	22,631	0.82
Arizona	128,365	72,528	58.50	0	0.00	0	0.00	0	0.00
Colorado	1,816,238	177,438	10.98	0	0.00	1,253,295	77.54	0	0.00
Idaho	124,322	15,709	12.64	0	0.00	8,384	6.74	631	0.51
Montana	170,284	40,495	23.78	0	0.00	64,898	38.11	0	0.00
Nevada	88,870	37,408	42.19	0	0.00	798	0.90	0	0.00
New Mexico	279,578	51,897	18.56	0	0.00	122,050	43.68	22,000	7.87
Utah	259,906	68,322	25.52	0	0.00	148,313	58.29	0	0.00
Wyoming	103,604	11,710	11.30	558	0.54	0	0.00	0	0.00
PACIFIC	5,125,217	1,318,503	25.73	135,051	2.64	2,267,884	44.25	0	0.00
Alaska	110,174	37,068	33.64	0	0.00	0	0.00	0	0.00
California	2,968,689	963,141	32.44	135,051	4.55	886,000	29.84	0	0.00
Hawaii	226,700	74,965	33.07	0	0.00	0	0.00	0	0.00
Oregon	1,452,628	135,167	9.31	0	0.00	1,248,817	85.83	0	0.00
Washington	387,028	108,162	29.47	0	0.00	135,047	36.79	0	0.00
TERRITORIES	332,238	18,082	5.44	52,736	15.87	151,660	45.65	0	0.00
Guam	24,484	3,677	15.02	4,786	19.55	2,989	12.21	0	0.00
Puerto Rico	24,442	0	0.00	2,217	9.07	3,514	14.38	0	0.00
Virgin Islands	283,310	14,405	5.08	45,733	16.14	145,167	51.24	0	0.00

* New York did not report for fiscal year 1989.

***LABORATORY
DIAGNOSTIC
WORKLOAD***

TABLE 2. BACTERIOLOGY SPECIMENS

Lab & Region (1)	Total Bacteriology Specimens (2)	Type of specimen					
		Nasopharyngeal (3)	Mycobacteria (4)	Enteric (5)	Gonococcus (6)	Anaerobic (7)	Other Bacteriology (8)
TOTAL	4,932,256	233,123	418,997	182,978	3,920,486	5,560	182,134
AVERAGE	93,061	4,571	8,551	3,134	74,141	148	3,643
NEW ENGLAND	198,016	13,327	45,388	14,908	119,298	137	4,962
Connecticut	37,312	2,427	4,487	2,708	27,089	45	578
Massachusetts	68,941	1,581	33,000	8,578	23,600	23	2,161
Maine	10,017	432	3,652	359	5,342	21	211
New Hampshire	10,999	257	2,103	181	7,917	10	551
Rhode Island	60,136	8,418	1,380	1,181	48,329	3	845
Vermont	10,811	212	784	1,943	7,019	35	618
MIDDLE ATLANTIC	167,397	6,052	8,585	9,338	142,608	100	716
New Jersey	158,988	5,947	5,947	4,595	142,338	3	158
New York*							
Pennsylvania	8,411	105	2,638	4,743	270	97	558
EAST NORTH CENTRAL	172,340	5,269	23,157	17,549	98,473	456	27,438
Illinois	55,335	1,068	3,942	8,474	43,720	8	125
Indiana	6,323	727	2,933	1,352	196	38	1,079
Michigan	44,438	748	10,024	4,967	19,210	45	10,448
Ohio	27,325	567	1,046	564	19,157	170	5,821
Wisconsin	38,919	2,163	5,212	4,192	17,190	197	9,965
WEST NORTH CENTRAL	277,679	8,648	18,333	9,852	234,341	204	6,301
Iowa	71,730	2,893	1,740	2,149	62,409	186	2,373
Kansas	35,354	118	4,050	2,508	27,800	31	849
Minnesota	73,153	156	8,143	1,405	83,412	0	37
Missouri	73,348	3,185	0	2,541	65,272	0	2,338
Nebraska	8,283	6	412	22	7,682	0	181
North Dakota	5,854	1,855	1,889	288	1,474	6	262
South Dakota	9,959	327	2,099	959	6,312	1	261
SOUTH ATLANTIC	1,683,788	55,339	113,152	57,542	1,377,767	2,323	77,643
Delaware	43,116	3,102	1,138	608	34,424	0	3,844
District of Columbia	68,195	5,478	752	1,806	38,970	0	11,391
Florida	613,131	12,794	41,828	28,948	524,651	18	5,092
Georgia	239,532	4,711	13,518	2,597	213,433	109	5,184
Maryland	428,086	23,128	13,423	10,550	332,746	879	47,380
North Carolina	25,334	833	14,897	7,348	561	144	1,551
South Carolina	87,073	135	13,133	399	70,348	NA	3,058
Virginia	125,259	4,829	11,265	5,222	102,776	1,167	0
West Virginia	64,041	331	3,398	264	59,859	6	183
EAST SOUTH CENTRAL	786,467	28,943	58,593	7,499	630,425	1,196	39,811
Alabama	248,813	2,852	21,411	2,597	198,950	0	25,003
Kentucky	11,877	559	9,707	650	885	0	76
Mississippi	223,975	6,036	15,712	1,961	187,043	NA	13,223
Tennessee	281,802	19,496	11,783	2,291	245,547	1,198	1,509
WEST SOUTH CENTRAL	741,008	2,461	31,924	5,170	694,373	681	6,419
Arkansas	94,948	14	17,431	1,474	75,727	75	225
Louisiana	145,797	408	4,884	1,852	138,040	64	551
Oklahoma	69,251	1,145	5,857	1,283	60,554	120	312
Texas	431,014	896	3,752	581	420,052	402	5,331
MOUNTAIN	207,299	67,983	15,638	6,733	112,840	422	3,593
Arizona	27,088	478	2,319	787	23,251	8	247
Colorado	15,287	7,865	823	1,705	4,628	11	255
Idaho	21,919	2,328	2,522	1,214	14,747	14	1,094
Montana	7,439	393	1,754	979	3,653	NA	660
Nevada	31,570	878	1,571	1,149	27,302	23	647
New Mexico	27,821	306	5,408	351	20,970	381	425
Utah	18,210	0	1,241	459	16,245	0	265
Wyoming	57,875	55,737	0	89	2,044	5	0
PACIFIC	673,795	14,015	101,093	34,087	511,665	53	12,682
Alaska	60,151	560	6,183	1,359	51,783	30	236
California	498,103	11,750	78,818	27,141	370,790	NA	6,604
Hawaii	73,897	239	6,301	1,483	63,189	NA	2,695
Oregon	6,388	90	4,115	1,778	260	4	143
Washington	37,256	1,376	4,676	2,348	25,833	19	3,004
TERRITORIES	44,579	31,086	3,136	299	7,480	8	2,571
Guam	10,266	0	3,136	145	5,093	0	1,892
Puerto Rico	1,210	338	0	153	34	8	679
Virgin Islands	33,103	30,750	0	0	2,353	0	0

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 3. BACTERIOLOGY-Nasopharyngeal Specimens-Streptococcus Beta Hemolytic, Group A

Lab & Region (1)	Number of Specimens (2)	Type of procedure					Other (8)
		Culture (3)	FA (4)	Serogrouping (5)	Serotyping (6)	Bacitracin Disc (7)	
TOTAL	199,987	40	23	28	5	15	
AVERAGE	4,850						
NEW ENGLAND	10,838						
Connecticut	1,888	X	X	X		X	
Massachusetts	259	X	X				
Maine	3	X					
New Hampshire	108	X		X			
Rhode Island	8,380	X		X			
Vermont	0						
MIDDLE ATLANTIC	7						
New Jersey	0						
New York*							
Pennsylvania	7	X		X		X	
EAST NORTH CENTRAL	888						
Illinois	6	X					
Indiana	0						
Michigan	480	X				X	
Ohio	400			X			
Wisconsin	0						
WEST NORTH CENTRAL	7,204						
Iowa	2,034	X	X				
Kansas	30	X		X			
Minnesota	0						
Missouri	3,195	X	X	X			
Nebraska	8	X	X				
North Dakota	1,827		X				
South Dakota	312	X				X	
SOUTH ATLANTIC	43,517						
Delaware	3,102	X					
District of Columbia	5,476	X		X	X	X	
Florida	5,528	X				X	
Georgia	4,040	X	X				
Maryland	20,399	X		X		X	
North Carolina	203	X	X	X			
South Carolina	48	X	X	X			
Virginia	4,698	X	X	X		X	
West Virginia	25	X	X	X			
EAST SOUTH CENTRAL	27,620						
Alabama	2,043	X	X				
Kentucky	521	X	X	X			
Mississippi	6,038	X	X				
Tennessee	19,020		X				
WEST SOUTH CENTRAL	1,023						
Arkansas	0						
Louisiana	12	X		X			
Oklahoma	784	X	X	X			
Texas	247	X	X	X	X	X	
MOUNTAIN	85,698						
Arizona	59	X		X		X	
Colorado	7,726	X	X				
Idaho	1,203	X	X	X		X	
Montana	135	X		X		X	Quick Strep kit
Nevada	838	X		X		X	
New Mexico	0						
Utah	0						
Wyoming	55,737	X	X		X		
PACIFIC	12,313						
Alaska	405	X		X			
California	11,817	X	X	X	X	X	
Hawaii	239	X	X	X			
Oregon	0						
Washington	52	X	X				
TERRITORIES	31,081						
Guam	NA						
Puerto Rico	331	X		X		X	
Virgin Islands	30,750	X		X	X		

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 3. BACTERIOLOGY-Nasopharyngeal Specimens-Diphtheria (continued)

Lab & Region (1)	Number of Specimens (2)	Type of procedure				
		Direct Smear (3)	Culture (4)	Confirmatory Sugars (5)	Toxogenicity (6)	Other (7)
TOTAL	6,780	18	36	31	18	
AVERAGE	175					
NEW ENGLAND	32					
Connecticut	0					
Massachusetts	27	X	X	X	X	
Maine	0					
New Hampshire	2		X	X		
Rhode Island	3	X	X	X	X	
Vermont	0					
MIDDLE ATLANTIC	2					
New Jersey	0					
New York*						
Pennsylvania	2		X	X	X	
EAST NORTH CENTRAL	37					
Illinois	7		X			
Indiana	2		X			
Michigan	6		X	X	X	
Ohio	0					
Wisconsin	22		X	X	X	
WEST NORTH CENTRAL	28					
Iowa	5		X	X	X	
Kansas	1		X	X		
Minnesota	20	X	X		X	
Missouri	0					
Nebraska	0					
North Dakota	1	X	X	X		
South Dakota	1		X	X		
SOUTH ATLANTIC	6,632					
Delaware	0					
District of Columbia	0					
Florida	6,626		X	X	X	
Georgia	2		X			
Maryland	1	X	X	X		
North Carolina	NA	X	X	X		
South Carolina	3	X	X	X		
Virginia	0					
West Virginia	0					
EAST SOUTH CENTRAL	9					
Alabama	7	X	X	X		
Kentucky	0					
Mississippi	NA		X	X		
Tennessee	2	X	X	X	X	
WEST SOUTH CENTRAL	30					
Arkansas	3	X	X	X		
Louisiana	2		X	X		
Oklahoma	8	X	X	X	X	
Texas	17	X	X	X	X	
MOUNTAIN	67					
Arizona	20	X	X	X	X	
Colorado	20		X		X	
Idaho	4	X	X	X	X	
Montana	4		X	X	X	
Nevada	2	X	X	X		
New Mexico	17		X	X	X	
Utah	0					
Wyoming	0					
PACIFIC	22					
Alaska	7	X	X	X		
California	NA	X	X	X	X	
Hawaii	0					
Oregon	1		X	X		
Washington	14	X	X	X	X	
TERRITORIES	1					
Guam	NA					
Puerto Rico	1		X	X		
Virgin Islands	0					

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 3. BACTERIOLOGY-Nasopharyngeal Specimens-Pertussis (continued)

Lab & Region (1)	Number of Specimens (2)	Type of procedure				
		Culture (3)	FA (4)	Serological (5)	Biochemicals (6)	Other (7)
TOTAL	18,808	38	39	7	23	
AVERAGE	470					
NEW ENGLAND	2,310					
Connecticut	219	X	X			
Massachusetts	1,295	X	X	X	X	
Maine	429		X			
New Hampshire	120	X	X		X	
Rhode Island	35	X	X		X	
Vermont	212	X	X		X	
MIDDLE ATLANTIC	98					
New Jersey	0					
New York*						
Pennsylvania	98	X	X		X	
EAST NORTH CENTRAL	3,334					
Illinois	1,053	X	X		X	
Indiana	725	X	X		X	
Michigan	280	X	X	X	X	
Ohio	167	X	X			
Wisconsin	1,109	X	X		X	
WEST NORTH CENTRAL	574					
Iowa	255	X	X			
Kansas	85		X			
Minnesota	138	X			X	
Missouri	0					
Nebraska	0					
North Dakota	84	X	X			
South Dakota	14	X	X		X	
SOUTH ATLANTIC	8,269					
Delaware	0					
District of Columbia	0					
Florida	1,742	X	X	X		
Georgia	852	X	X			
Maryland	2,728	X	X		X	
North Carolina	630	X	X		X	
South Carolina	80	X	X		X	
Virginia	191		X			
West Virginia	306		X			
EAST SOUTH CENTRAL	1,116					
Alabama	802	X	X		X	
Kentucky	38		X			
Mississippi	NA	X				
Tennessee	275	X	X		X	
WEST SOUTH CENTRAL	1,383					
Arkansas	11	X	X		X	
Louisiana	392	X	X			
Oklahoma	348	X	X		X	
Texas	632	X	X	X	X	
MOUNTAIN	2,180					
Arizona	397	X	X			
Colorado	119	X	X			
Idaho	1,121	X	X			
Montana	254	X	X			
Nevada	0					
New Mexico	289	X	X		X	
Utah	0					
Wyoming	0					
PACIFIC	1,541					
Alaska	142	X	X	X		
California	NA	X	X	X	X	
Hawaii	NA	X	X		X	
Oregon	89	X				
Washington	1,310	X	X			
TERRITORIES	4					
Guam	NA					
Puerto Rico	4	X		X	X	
Virgin Islands	0					

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 3. BACTERIOLOGY-Nasopharyngeal Specimens-Other (continued)

Lab & Region (1)	Number of Specimens (2)	Disease/Type of procedure (3)
TOTAL	8,690	
AVERAGE	661	
NEW ENGLAND	347	
Connecticut	320	Legionnaire's disease (clinical & environmental)-FA, culture; Vincent's infection-smear; speciation-biochemicals
Massachusetts	0	
Maine	0	
New Hampshire	27	Urinary tract infection-culture, biochemicals, serogrouping
Rhode Island	0	
Vermont	0	
MIDDLE ATLANTIC	6,947	
New Jersey	6,947	Lyme, Legionella-IFA, culture, identification
New York*		
Pennsylvania	0	
EAST NORTH CENTRAL	1,032	
Illinois	0	
Indiana	0	
Michigan	0	
Ohio	0	
Wisconsin	1,032	Streptococcus throats-culture, FA, Bacitracin disc
WEST NORTH CENTRAL	842	
Iowa	599	Wounds/fluids-culture, gram stain, biochemicals; Legionella-culture, DFA, biochemicals
Kansas	0	
Minnesota	0	
Missouri	0	
Nebraska	0	
North Dakota	243	Legionnaire's-culture, FA
South Dakota	0	
SOUTH ATLANTIC	21	
Delaware	0	
District of Columbia	0	
Florida	0	
Georgia	17	Staphylococcus aureus-culture
Maryland	0	
North Carolina	0	
South Carolina	4	Haemophilus-culture, identification
Virginia	0	
West Virginia	0	
EAST SOUTH CENTRAL	199	
Alabama	0	
Kentucky	0	
Mississippi	0	
Tennessee	199	Streptococcus-culture; Staphylococcus-biochemicals; reference-serogrouping, FA
WEST SOUTH CENTRAL	25	
Arkansas	0	
Louisiana	0	
Oklahoma	25	Referred isolates/NP-conventional
Texas	0	
MOUNTAIN	38	
Arizona	0	
Colorado	0	
Idaho	0	
Montana	0	
Nevada	38	Haemophilus influenza-smear; Staphylococcus-culture, biochemicals, sensitivity
New Mexico	0	
Utah	0	
Wyoming	0	
PACIFIC	139	
Alaska	6	Meningitis, Haemophilus influenza-microscopic, culture, biochemicals, serogrouping
California	133	Adult botulism, infant botulism-animal toxin testing, cultural identification
Hawaii	0	
Oregon	0	
Washington	0	
TERRITORIES	NA	
Guam	NA	
Puerto Rico	0	
Virgin Islands	0	

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 4. BACTERIOLOGY-Mycobacteria Specimens

Lab & Region	Number of Specimens	Type of procedure								
		Direct Smear	Concentrate Smear	Culture	Direct Susceptibility- No. of Drugs	Indirect Susceptibility- No. of Drugs	Number of Bio-chemicals	Species Identification	Genetic Probes	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TOTAL	418,997	22	44	47	-	-	-	44	28	
AVERAGE	8,551									
NEW ENGLAND	45,386									
Connecticut	4,487	X	X	X	5	9	19	X	X	Radiometric-Bactec
Massachusetts	33,000		X	X	9	9	11	X	X	Test for growth rate, pigment production, growth at various temperatures
Maine	3,852	X	X	X	6	6	4,5,8	X	X	
New Hampshire	2,103	X	X	X			8			
Rhode Island	1,380		X	X		9	12	X	X	
Vermont	784		X	X			12	X		
MIDDLE ATLANTIC	8,585									
New Jersey	5,947	X	X	X		4	13	X	X	Radiometry
New York*										
Pennsylvania	2,638				6	6,9	3-13	X	X	
EAST NORTH CENTRAL	23,157									
Illinois	3,942		X	X	5	5	6	X	X	Bactec 460, drug susceptibility patterns
Indiana	2,933	X	X	X		6	6	X	X	HP microbial ID system
Michigan	10,024		X	X	5	9	12	X		
Ohio	1,046	X		X	10	10	10	X		
Wisconsin	5,212	X	X	X	5	5	12	X		
WEST NORTH CENTRAL	18,333									
Iowa	1,740		X	X	8	8	14	X		
Kansas	4,050		X	X	10	10	18	X		
Minnesota	8,143		X	X		4	10	X		
Missouri	0									
Nebraska	412	X	X	X		5	11			
North Dakota	1,889	X	X	X	10	10	15	X		
South Dakota	2,099		X	X		4	9	X		
SOUTH ATLANTIC	113,152									
Delaware	1,138		X	X						
District of Columbia	752	X		X		4	6	X	X	
Florida	41,828		X	X		7	12	X	X	
Georgia	13,518	X	X	X	9	9	11	X	X	
Maryland	13,423	X	X	X	11	11	15	X		Indirect susceptibility (M. marinum), rapid growers (9 drugs), Kirby Bauer, agar dilution
North Carolina	14,897		X	X	4	4	10	X	X	2nd line drugs (8), HPLC
South Carolina	13,133	X	X	X	4	6	10	X	X	Bactec
Virginia	11,265	X	X	X	4	4	15	X	X	Bactec
West Virginia	3,398		X	X		5	9	X		
EAST SOUTH CENTRAL	58,593									
Alabama	21,411		X	X	7	9	21	X	X	
Kentucky	9,707	X	X	X	8	8	9	X	X	Fluochrome smear
Mississippi	15,712		X	X	7	7	6	X	X	Bactec
Tennessee	11,763	X	X	X		5	12	X	X	
WEST SOUTH CENTRAL	31,924									
Arkansas	17,431		X	X	10	10	14	X		
Louisiana	4,884		X	X	4	4		X	X	
Oklahoma	5,857		X	X	5	5	9	X		
Texas	3,752					6	12	X	X	HPLC
MOUNTAIN	15,838									
Arizona	2,319		X	X	7	7	15	X	X	HPLC
Colorado	823		X	X						
Idaho	2,522	X	X	X		5	10	X	X	
Montana	1,754		X	X	6	6	10	X		
Nevada	1,571		X	X	4	7	15	X		Bactec
New Mexico	5,408		X	X	4	4	7	X		Bactec nap test
Utah	1,241	X		X	11	11	18	X	X	
Wyoming	0									
PACIFIC	101,093									
Alaska	6,183	X	X	X	3	3	2-8	X	X	
California	79,818	X	X	X	5	5-9	10	X	X	
Hawaii	6,301	X	X	X		7	11	X	X	
Oregon	4,115		X	X	7	7	10	X	X	
Washington	4,876		X	X		5	6	X	X	Bactec, direct smear
TERRITORIES	3,136									
Guam	3,136	X	X	X						Hansen - MI BI
Puerto Rico	0									
Virgin Islands	0									

* New York did not report for fiscal year 1990.

TABLE 5. BACTERIOLOGY-Enteric Specimens

Lab & Region	Number of Specimens	Type of procedure							
		Primary Plating	Enrichment Plating	Biochemicals	FA	Sero-grouping	Sero-typing	Phage Typing, S. typhi	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
TOTAL	162,976	51	52	52	6	48	46	2	
AVERAGE	3,134								
NEW ENGLAND	14,908								
Connecticut	2,708	X	X	X		X	X		Mouse bioassay, C. perfringens spore count
Massachusetts	8,678	X	X	X		X	X		
Maine	359	X	X	X		X	X		
New Hampshire	161	X	X	X		X	X		
Rhode Island	1,161	X	X	X		X	X		
Vermont	1,943	X	X	X		X	X		
MIDDLE ATLANTIC	9,338								
New Jersey	4,595	X	X	X		X	X		Selected susceptibility, testing of isolates
New York*									
Pennsylvania	4,743	X	X	X		X	X		
EAST NORTH CENTRAL	17,649								
Illinois	6,474	X	X	X		X	X		
Indiana	1,352	X	X	X	X	X	X		
Michigan	4,967	X	X	X			X		
Ohio	564	X	X	X		X			
Wisconsin	4,192	X	X	X		X	X		K-B susceptibility testing
WEST NORTH CENTRAL	9,852								
Iowa	2,149	X	X	X		X	X		
Kansas	2,508	X	X	X			X		
Minnesota	1,405	X	X	X		X	X		
Missouri	2,541	X	X	X			X		
Nebraska	22		X	X	X	X			
North Dakota	269	X	X	X		X	X		
South Dakota	959	X	X	X		X	X		
SOUTH ATLANTIC	67,642								
Delaware	608	X	X	X		X	X		
District of Columbia	1,806	X	X	X		X	X		
Florida	28,948	X	X	X		X	X		
Georgia	2,597	X	X	X		X	X		
Maryland	10,550	X	X	X		X	X		
North Carolina	7,348	X	X	X	X	X	X		Antibiotic susceptibility for Campylobacter ID
South Carolina	399	X	X	X		X	X		
Virginia	5,222	X	X	X		X	X		
West Virginia	264	X	X	X		X	X		
EAST SOUTH CENTRAL	7,499								
Alabama	2,597	X	X	X		X	X		
Kentucky	850	X	X	X		X	X		
Mississippi	1,961	X	X	X		X	X		
Tennessee	2,291	X	X	X		X	X		
WEST SOUTH CENTRAL	5,170								
Arkansas	1,474	X	X	X		X	X		
Louisiana	1,862	X	X	X		X	X		Complete serotyping for Salmonella
Oklahoma	1,263	X	X	X		X	X		
Texas	581	X	X	X	X	X	X		
MOUNTAIN	6,733								
Arizona	787	X	X	X		X	X		
Colorado	1,705	X	X	X		X	X		
Idaho	1,214	X	X	X		X	X		
Montana	979	X	X	X	X	X			
Nevada	1,149	X	X	X		X			Sensitivities
New Mexico	351	X	X	X		X	X		
Utah	459	X	X	X		X	X		Verotoxin assays
Wyoming	89	X	X	X					
PACIFIC	34,087								
Alaska	1,359	X	X	X		X	X		
California	27,141	X	X	X	X	X	X	X	Sensitivity tests
Hawaii	1,483	X	X	X		X	X	X	
Oregon	1,778	X	X	X		X	X		
Washington	2,348	X	X	X		X	X		Latex agglutination, primary plating, reference work DNA probes, plasmids
TERRITORIES	298								
Guam	145	X	X	X		X	X		
Puerto Rico	153	X	X	X		X			
Virgin Islands	0								

* New York did not report for fiscal year 1990.

TABLE 6. BACTERIOLOGY-Gonococcus Specimens

Lab & Region	Number of Specimens	Type of procedure							
		Smear	Culture	Oxidase Reaction	FA	Bio-chemical	Beta-Lactamase	Disc Diffusion Antibiotics	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
TOTAL	3,929,486	44	63	62	33	48	62		
AVERAGE	74,141								
NEW ENGLAND	119,296								
Connecticut	27,089	X	X	X	X	X	X		Susceptibility
Massachusetts	23,800	X	X	X	X	X	X	Penicillin, Cefoxitin, Spectinomycin, Cefotaxime	
								Tetracycline, Ceftriaxone	
Maine	5,342	X	X	X	X	X	X	Tetracycline, Penicillin, Spectinomycin	Genprobe
New Hampshire	7,917	X	X	X		X	X	Penicillin, Tetracycline, Ceftriaxone	Co-agglut., nucleic acid probes
Rhode Island	49,329	X	X	X	X	X	X		Agglutination
Vermont	7,019	X	X	X	X	X	X	Tetracycline	
MIDDLE ATLANTIC	142,906								
New Jersey	142,336		X	X		X	X	Penicillin, Spectinomycin, Tetracycline	Ceftriaxone
New York*									
Pennsylvania	270	X	X	X		X	X	Penicillin, Tetracycline, Erythromycin, Ceftriaxone, Spectinomycin, Ciprofloxacin, Colistin	Temperature studies
EAST NORTH CENTRAL	98,473								
Illinois	43,720	X	X	X		X	X	Penicillin, Spectinomycin, Tetracycline	Co-agglutination
Indiana	196	X	X	X	X	X	X		
Michigan	18,210	X	X	X		X	X	Penicillin, Tetracycline, Spectinomycin	
Ohio	19,157	X	X	X		X	X	Tetracycline, Penicillin	
Wisconsin	17,190	X	X	X		X	X		
WEST NORTH CENTRAL	234,341								
Iowa	82,409	X	X	X	X	X	X	Penicillin, Tetracycline	Vancomycin
Kansas	27,800		X	X	X	X	X	Penicillin, Streptomycin, Ceftriaxone	
Minnesota	63,412		X	X		X	X	Penicillin, Tetracycline, Spectinomycin	EIA
Missouri	65,272	X	X	X	X	X	X	Penicillin, Tetracycline, Spectinomycin	Gram stain
Nebraska	7,882	X	X	X	X	X	X		
North Dakota	1,474	X	X	X		X	X		Abbott EIA (Gonozyme), Phadebact monoclonal GC
South Dakota	6,312		X	X			X		Latex agglutination, DNA probe
SOUTH ATLANTIC	1,377,767								
Delaware	34,424	X	X	X	X		X		
District of Columbia	38,970	X	X	X		X	X	Penicillin, Tetracycline	Genetic probes
Florida	524,851	X	X	X		X	X	Tetracycline, Penicillin, Spectinomycin, Ceftriaxone	
Georgia	213,433	X	X	X		X	X	Penicillin, Tetracycline, Spectinomycin, Ceftriaxone	Coagglutination (Phadebact)
Maryland	332,745	X	X	X	X	X	X	Penicillin, Tetracycline, Spectinomycin, Ceftriaxone	Co-agglutination
North Carolina	561	X	X	X	X	X	X	Penicillin	Genetic probe, monoclonal antibody/EIA
South Carolina	70,348	X	X	X	X	X	X	Penicillin, Tetracycline, Spectinomycin, Ceftriaxone	
Virginia	102,776	X	X	X	X	X	X	Penicillin, Tetracycline, Spectinomycin	
West Virginia	59,859	X	X	X	X	X	X	Penicillin, Spectinomycin, Tetracycline, Ceftriaxone	Male smears for gram stain
EAST SOUTH CENTRAL	830,425								
Alabama	196,950	X	X	X	X	X	X	Penicillin, Tetracycline, Ceftriaxone	
Kentucky	886	X	X	X	X	X	X	Penicillin, Tetracycline	
Mississippi	187,043	X	X	X		X	X	Tetracycline, Penicillin, Ceftriaxone, Spectinomycin	Coagglutination
Tennessee	245,547		X	X	X	X	X	Penicillin, Tetracycline	
WEST SOUTH CENTRAL	694,373								
Arkansas	75,727	X	X	X	X	X	X	Penicillin	
Louisiana	138,040	X	X	X		X		Penicillin, Tetracycline, Spectinomycin, Ceftriaxone	
Oklahoma	80,554	X	X	X	X	X	X	Penicillin, Spectinomycin, Tetracycline	Quaterm rapid test
Texas	420,052	X	X	X	X	X	X	Penicillin, Spectinomycin, Tetracycline	
MOUNTAIN	112,840								
Arizona	23,251	X	X	X	X	X	X		EIA
Colorado	4,828		X	X	X	X	X	Penicillin, Ceftriaxone, Spectinomycin, Tetracycline, Ciprofloxacin	
Idaho	14,747	X	X	X	X	X	X		
Montana	3,653		X	X	X	X	X	Penicillin, Tetracycline, Ceftriaxone, Spectinomycin	
Nevada	27,302	X	X	X			X	Tetracycline, Spectinomycin	Agglutination - Gonogen
New Mexico	20,970		X	X			X	Penicillin, Tetracycline, Spectinomycin, Ceftriaxone	DNA probe
Utah	16,245	X	X	X	X	X	X		
Wyoming	2,044		X	X	X	X	X		
PACIFIC	511,865								
Alaska	51,783	X	X	X	X	X	X	Penicillin, Spectinomycin, Tetracycline, Ceftriaxone	Genetic probes, monoclonal antibodies
California	370,790	X	X	X	X	X	X	Penicillin, Spectinomycin, Ceftriaxone	Tetracycline
Hawaii	63,199	X	X	X	X	X	X		
Oregon	280	X	X	X	X	X	X		
Washington	25,833	X	X	X	X	X	X	Penicillin, Tetracycline, Spectinomycin	
TERRITORIES	7,480								
Guam	5,093	X	X	X		X	X		
Puerto Rico	34	X	X	X		X	X	Penicillin, Tetracycline	
Virgin Islands	2,353	X	X				X		

* New York did not report for fiscal year 1990.

TABLE 7. BACTERIOLOGY-Anaerobic Specimens

Lab & Region	Number of Specimens	Type of Technique		Type of procedure						
		Pre-Reduced Media	Gas Chromatography	Gram Stain	Plating	Sub-Culture	Bio-chemical	FA	GLC	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TOTAL	5,580	30	22	41	41	42	41	7	22	
AVERAGE	148									
NEW ENGLAND	137									
Connecticut	45		X	X	X	X	X	X	X	
Massachusetts	23			X	X	X	X		X	Mouse neutralization test
Maine	21	X	X	X	X	X	X		X	
New Hampshire	10	X		X	X	X	X			
Rhode Island	3	X		X	X	X	X			
Vermont	35			X	X	X	X		X	
MIDDLE ATLANTIC	100									
New Jersey	3			X	X	X	X			
New York*										
Pennsylvania	97	X		X	X	X				
EAST NORTH CENTRAL	456									
Illinois	8									C. perfringens toxins
Indiana	36	X	X	X	X	X	X		X	
Michigan	45	X	X	X	X	X	X		X	
Ohio	170	X	X	X	X	X	X		X	Botulism culture/neutralization
Wisconsin	197	X	X	X	X	X	X		X	
WEST NORTH CENTRAL	204									
Iowa	168	X	X	X	X	X	X		X	
Kansas	31	X		X	X	X	X			
Minnesota	0									
Missouri	0									
Nebraska	0									
North Dakota	6	X		X	X	X	X			
South Dakota	1	X		X	X	X	X			
SOUTH ATLANTIC	2,323									
Delaware	0									
District of Columbia	0									
Florida	18	X		X	X	X	X			
Georgia	109		X	X	X	X	X		X	
Maryland	879		X	X	X	X	X	X	X	Mouse inoculation
North Carolina	144	X	X	X	X	X	X	X	X	Drug susceptibility
South Carolina	NA		X	X	X	X	X		X	C. difficile toxin
Virginia	1,187	X	X	X	X	X	X		X	
West Virginia	6			X	X	X	X			
EAST SOUTH CENTRAL	1,196									
Alabama	0									
Kentucky	0									
Mississippi	NA				X	X	X			Micro scan
Tennessee	1,196	X	X	X	X	X	X		X	
WEST SOUTH CENTRAL	681									
Arkansas	75	X	X	X	X	X	X		X	
Louisiana	64	X	X	X	X	X	X		X	
Oklahoma	120	X		X	X	X	X			
Texas	402	X	X	X	X	X	X	X	X	Botulinal/Difficile toxin testing
MOUNTAIN	422									
Arizona	8	X	X	X	X	X	X			
Colorado	11	X		X	X	X	X			
Idaho	14			X	X	X	X			
Montana	NA			X	X	X	X			
Nevada	23	X		X	X	X	X			
New Mexico	361	X	X	X	X	X	X	X	X	
Utah	0									
Wyoming	5	X		X	X	X	X			
PACIFIC	53									
Alaska	30	X		X	X	X	X			API systems
California	NA	X	X	X	X	X	X	X	X	
Hawaii	NA		X	X		X	X			
Oregon	4	X	X	X	X	X	X		X	
Washington	19	X	X	X	X	X	X	X	X	Antibiogram, FAME
TERRITORIES	8									
Guam	0									
Puerto Rico	8	X		X	X	X	X			
Virgin Islands	0									

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 8. BACTERIOLOGY-Other Bacteriology Specimens

Lab & Region (1)	Number of Specimens (2)	Disease/Type of procedure (3)
TOTAL	182,134	
AVERAGE	3,643	
NEW ENGLAND	4,962	
Connecticut	576	Genital smears-stain; nosocomial infections-phage typing; clinical cultures-FA, culture
Massachusetts	2,161	Legionnaires'-FA, cult, bioch; Meningococcal typing, H. influenzae typing, S. pneumoniae typing-Quellung Reaction, biochemical, gram stain
Maine	211	Campylobacter, miscellaneous reference-CDC methodologies
New Hampshire	551	Urinary tract infection, wound infection, meningitis, septicemia-serogrouping, culture, smear, biochemicals
Rhode Island	845	Septicemia, meningitis, wounds-culture, biochemicals
Vermont	618	Legionellosis-culture, DFA
MIDDLE ATLANTIC	716	
New Jersey	158	Streptococci, gram negative and gram positive bacilli-conventional biochemicals
New York*		
Pennsylvania	558	Legionellosis-culture, biochemicals, FA; botulism-mouse neutralization; Lyme disease-culture
EAST NORTH CENTRAL	27,436	
Illinois	125	Staphylococcus aureus, Bacillus cereus-culture, biochemicals
Indiana	1,079	Identification-biochemicals, GLC, Staphylococcus phage typing-plating; Legionella-plating, IFA, GLC
Michigan	10,446	Pseudomembranous colitis-cell cytotoxicity/neutralization; toxic shock-reverse passive latex agglutination; Legionellosis-culture, FA; food poisoning-culture
Ohio	5,821	Ureaplasma-culture; Legionnaire's-culture, FA
Wisconsin	9,965	Legionellosis, Legionella infection-culture, DFA; Lyme, Brucella, Tularemia, bones for transplant-culture, toxic shock syndrome, botulism-culture, toxin testing; Septicemia cudecarditis-antibiotic dilution sensitivities; actinomycosis-culture, FA; Septicemia-serum bactericidal test, blood cultures; C. difficile-latex, toxin B, culture, miscellaneous cultures-culture, sensitivities; miscellaneous serogrouping-serogrouping, lancefield
WEST NORTH CENTRAL	6,301	
Iowa	2,373	Lyme disease-culture, FA; Leptospira-culture; botulism-toxin assay
Kansas	849	Legionellosis-culture
Minnesota	37	Legionella-culture, FA; Clostridia botulinum-culture, animal toxicity tests
Missouri	2,338	B. pertussis, F. tularensis-culture, biochemical ID, DFA; N meningitidis-culture, serogrouping; H. influenzae-culture, serotyping; Legionnaires-culture, FA; Diphtheria-culture, confirmatory sugars; Pertussis-culture, FA, biochemicals; all others-culture
Nebraska	181	Hospital specimens-subculture, identification
North Dakota	262	Miscellaneous-isolation, identification; MIC's-autoscan IV
South Dakota	261	Pulmonary, wound, urinary, eye/ear-culture, biochemical, gram stain
SOUTH ATLANTIC	77,643	
Delaware	3,844	Urine-culture, sensitivity
District of Columbia	11,391	Urinary infection, wound-culture, biochemical, susceptibility
Florida	5,092	Eye/ear/spinal fluid/blood/urine/other exudates & body fluids, reference culture-smear, culture, sensitivity testing-dac; Rheumatic fever prophylaxis-microbial inhibition
Georgia	5,184	Haemophilus ducreyi-gram stain; Group B Streptococcus-culture, lancefield grouping; Trichomonas, yeast-Sellers' stain; miscellaneous bacteria-gram stain, culture, biochemicals, GLC
Maryland	47,360	Food poisoning-culture, biochemicals, & animal injections; urinary tract infection-culture, counts, sensitivity; misc. body sites-culture, stain, biochemicals, sensitivity
North Carolina	1,551	Legionellosis-culture, FA, serology
South Carolina	3,058	Legionella, urinary tract infections, direct smears, drug susceptibility tests, zoo cultures-plating, biochemical, FA
Virginia	0	
West Virginia	183	Reference culture-identification, biochemical
EAST SOUTH CENTRAL	39,811	
Alabama	25,003	Urinary tract infection-isolation/identification by biochemicals, microscan
Kentucky	76	Miscellaneous culture-biochemical, coagulase, smear, serogrouping; Legionnaire's disease-DFA
Mississippi	13,223	Misc. waters-primary & enrichment plating, biochemicals, serotyping, subculture, serogrouping; misc. cultures-plating, selective subculture, biochemicals; urine culture-plating, subculture, biochemicals, bacterial sensitivity testing
Tennessee	1,509	Misc. aerobic & Capnophilic-DFA, culture; clinicals including fastidious organisms-gram smears, biochemicals, serotyping/serogrouping
WEST SOUTH CENTRAL	6,419	
Arkansas	225	Blood cultures, spinal fluids, Staphylococcus, misc. gram stain, culture, biochemicals; Legionella-culture, serology
Louisiana	551	
Oklahoma	312	Blood/urine/wound/CSF isolates-conventional methodologies
Texas	5,331	
MOUNTAIN	3,593	
Arizona	247	Legionella, Yersinia-DFA-culture; Francisella tularensis-culture, gram stain, biochemical, serotyping; Leptospirosis-darkfield; Borrelia-blood smears
Colorado	255	H. influenzae-culture; food poisoning-Staphylococcus aureus toxin assay, Clostridia perfringens toxin assay
Idaho	1,094	Urine culture-API, microscan; other cultures-King battery
Montana	680	Miscellaneous bacterial specimens-conventional biochemicals
Nevada	647	Various other pathogens-Culture, smear, biochemicals, sensitivities
New Mexico	425	Legionellosis, plague-DFA, culture
Utah	265	Pneumonia, Meningitis, Septicemia-culture, typing, biochemicals
Wyoming	0	
PACIFIC	12,682	
Alaska	238	Reference cultures-microscopic, biochemicals, subculture
California	6,804	Plague-direct/conc. smear, culture, direct/indirect drug susceptibility, biochemicals, species ID, genetic probes; Legionnaire's-culture, FA; relapsing fever-animals, culture; miscellaneous-culture
Hawaii	2,695	Leptospirosis-culture, darkfield; Streptococcal-culture
Oregon	143	N. meningitis, H. influenzae-culture, typing, botulism-culture, animal inoculation; environmental cultures-plate count; food outbreaks-culture
Washington	3,004	Botulism-biochemicals, mouse neutralization; plague, Tularemia-FA, biochemicals; Brucellosis-biochemicals; Legionella-culture, FA; relapsing fever-darkfield; Lyme-EIA; Yersinia-biochemicals; FAME; T. Pallidum-FA
TERRITORIES	2,571	
Guam	1,892	Trichomonas, Monka-Hansen MI BI
Puerto Rico	679	Urinary tract infection, sputum, miscellaneous-plating, biochemical
Virgin Islands	0	

* New York did not report for fiscal year 1990.

TABLE 8. BACTERIOLOGY-Other Bacteriology Specimens (continued)

Lab & Region (4)	Reference culture/Type of procedure (5)
NEW ENGLAND	
Connecticut	
Massachusetts	Identification of gram positive/negative bacteria- conventional procedures using CDC protocols (no rapid methods or kits used)
Maine	
New Hampshire	Clinical sample isolates-culture, serogrouping, biochemicals
Rhode Island	Miscellaneous-culture, biochemicals
Vermont	Respiratory, CNS, wound, miscellaneous-standard bacteriology procedures
MIDDLE ATLANTIC	
New Jersey	
New York*	
Pennsylvania	Miscellaneous bacterial culture-gram stain, biochemicals, serogrouping, serotyping
EAST NORTH CENTRAL	
Illinois	N meningitidis, H. influenza-serogrouping, conventional tests; aerobic actinomycetes, anaerobic organisms-conventional biochemicals; B. pertussis-conventional biochemicals, DFA; aerobic nonenteric organisms-conventional tests, biochemicals, S. aureus isolates-phage typing, Legionella pneumophila, enteric isolates-DFA, conventional tests
Indiana	
Michigan	Reference culture identification of aerobic bacteria-culture, biochemicals, GLC; molecular biology-plasmid analysis, GLC; urine cultures-conventional techniques; Staphylococcus phage typing-plate lysis
Ohio	Staphylococcus, aerobic-culture
Wisconsin	Aerobes, facultative, and anaerobes-conventional CDC & VPI methods
WEST NORTH CENTRAL	
Iowa	Miscellaneous gram negative and gram positive, proficiency specimens-biochemical, gram stain
Kansas	Reference bacteria, miscellaneous-conventional
Minnesota	
Missouri	
Nebraska	
North Dakota	Miscellaneous-isolation, identification
South Dakota	Miscellaneous reference cultures-gram stain, plating, subculture, biochemical
SOUTH ATLANTIC	
Delaware	Reference-culture, identification; miscellaneous-culture, identification, sensitivity
District of Columbia	
Florida	
Georgia	
Maryland	Phage typing-phage plating; Streptococcus group-precipitin test; reference cultures-culture, biochemicals, serology
North Carolina	Streptococcus/Staphylococcus-smear, culture, biochemicals, serology; Campylobacter-smear, culture, biochemicals, drug susceptibility; miscellaneous-smear, culture, biochemicals
South Carolina	Miscellaneous referred isolates-biochemicals, serology, FA, GLC, Typhoid, Cholera isolate
Virginia	
West Virginia	
EAST SOUTH CENTRAL	
Alabama	
Kentucky	
Mississippi	
Tennessee	Haemophilus, Listeria, Francisella, Legionella, Brucella, Neisseria, misc gram positive/negative microorganisms-culture, gram smear, biochemicals, serotyping, serogrouping
WEST SOUTH CENTRAL	
Arkansas	
Louisiana	Identification of gram negative rods-conventional biochemicals, King Weaver; identification of gram positive rods-conventional biochemicals, Hollis Weaver schema, non-beta hemolytic streptococci-conventional biochemicals
Oklahoma	Miscellaneous referred isolates-conventional
Texas	Enteric-biochemical, serological; miscellaneous-biochemical, serological, GLC
MOUNTAIN	
Arizona	H. influenza, N. meningitis, gram positive cocci & pavilli-culture, gram stain, biochemicals
Colorado	Neisseria meningitis-serotyping; gram positive/negative bacilli, gram positive cocci-identification
Idaho	Reference cultures-API, microscan, King battery
Montana	
Nevada	Various other pathogens- Smear, culture, biochemicals, sensitivities
New Mexico	Gram negative rods, gram positive rods-biochemical
Utah	Enteric pathogens-biochemicals, typing; Legionella-culture, FA; other organisms for identification-culture, biochemicals, typing
Wyoming	
PACIFIC	
Alaska	N. Meningitidis-culture, biochemicals, serogrouping H. influenza-culture, biochemicals, serotyping; S. pneumoniae-culture; N. gonorrhoeae-culture, bioch., oxidase, beta lactamase, Penicillinase, genetic probe; aerobic bacterial infection-gram stains, primary cult., bioch., coagulase, serogrouping
California	Mycobacteriology & enteric bacteriology-direct & conc. smear, culture, direct & indirect susceptibility, biochemicals, species ID, genetic probes; aerobic/anaerobic bacteriology-species ID
Hawaii	Miscellaneous-culture
Oregon	Gram positive/negative organisms-culture, biochemicals, misc. organisms for staining-gram/FA stains
Washington	Gram negative/positive rods, gram negative/positive cocci-biochemicals, FAME
TERRITORIES	
Guam	Cervical culture-culture; ear, wound culture-biochemical; urine cultures-culture, colony count
Puerto Rico	
Virgin Islands	

* New York did not report for fiscal year 1990.

TABLE 9. MYCOLOGY SPECIMENS

Lab & Region (1)	Number of Specimens (2)	Type of procedure						Animal Inoculation (8)	Other (9)
		Microscopic Wet Mounts (3)	Microscopic Stains (4)	Culture (5)	FA (6)	Biochemicals (7)			
TOTAL	88,490	45	42	45	4	44	8		
AVERAGE	1,478								
NEW ENGLAND	4,223								
Connecticut	1,598	X	X	X		X		Differentiation media	
Massachusetts	518	X	X	X		X		Exoantigen test	
Maine	1,019	X	X	X					
New Hampshire	588	X	X	X		X		Cryptococcal antigen	
Rhode Island	205	X	X	X		X			
Vermont	297	X	X	X		X		Hair culture, slide, amino acid requirements	
MIDDLE ATLANTIC	180								
New Jersey	180	X	X	X		X		Slide cultures, hair test	
New York*									
Pennsylvania	0								
EAST NORTH CENTRAL	9,272								
Illinois	689	X	X	X		X		Exoantigen tests	
Indiana	404	X	X	X		X	X	Exoantigen tests	
Michigan	2,206	X	X	X		X			
Ohio	666	X	X	X		X	X		
Wisconsin	5,307	X	X	X	X	X	X		
WEST NORTH CENTRAL	3,717								
Iowa	1,714	X	X	X		X		Microimmunodiffusion	
Kansas	1,112	X	X	X		X		Immunodiffusion	
Minnesota	444	X	X	X		X		Exoantigen, temperature studies	
Missouri	243	X	X	X		X			
Nebraska	0								
North Dakota	149	X	X	X		X		Abbott yeast identification	
South Dakota	65	X		X		X			
SOUTH ATLANTIC	19,675								
Delaware	5,405	X	X	X		X			
District of Columbia	0								
Florida	1,714	X	X	X		X			
Georgia	902	X	X	X		X			
Maryland	5,748	X	X	X		X		Hair perforation test, slide culture	
North Carolina	1,481	X	X	X		X			
South Carolina	1,358	X	X	X	X	X	X	Exoantigen	
Virginia	2,588	X	X	X		X	X		
West Virginia	619	X	X	X		X			
EAST SOUTH CENTRAL	8,067								
Alabama	4,437	X	X	X		X	X	Exoantigen	
Kentucky	0								
Mississippi	1,492	X	X	X		X		Hair culture	
Tennessee	2,138	X	X	X		X			
WEST SOUTH CENTRAL	5,320								
Arkansas	2,015	X	X	X		X			
Louisiana	0								
Oklahoma	981	X	X	X		X		Exoantigen	
Texas	2,344	X	X	X		X			
MOUNTAIN	1,576								
Arizona	317	X		X		X		Exoantigen	
Colorado	71	X	X	X		X			
Idaho	248	X	X	X	X	X		Exoantigen test, digestion	
Montana	265	X	X	X		X			
Nevada	31	X	X	X		X			
New Mexico	409	X	X	X		X		Exoantigen, immunodiffusion	
Utah	119	X	X	X		X	X		
Wyoming	116	X	X	X		X			
PACIFIC	14,379								
Alaska	285	X	X	X		X			
California	13,800	X	X	X	X	X	X		
Hawaii	199	X	X	X		X			
Oregon	0								
Washington	95	X	X	X		X		Exoantigen	
TERRITORIES	101								
Guam	101	X		X		X			
Puerto Rico	0								
Virgin Islands	0								

* New York did not report for fiscal year 1990.

TABLE 10. PARASITOLOGY SPECIMENS

Lab & Region (1)	Total Parasitology Specimens (2)	Type of specimen	
		Intestinal (3)	Other (4)
TOTAL	918,159	294,831	23,328
AVERAGE	6,118	6,670	630
NEW ENGLAND	11,197	11,096	101
Connecticut	1,747	1,703	44
Massachusetts	84	31	53
Maine	385	385	0
New Hampshire	90	89	1
Rhode Island	4,081	4,078	3
Vermont	4,810	4,810	0
MIDDLE ATLANTIC	1,626	1,498	128
New Jersey	1,489	1,405	84
New York*			
Pennsylvania	137	93	44
EAST NORTH CENTRAL	22,246	22,194	52
Illinois	2,717	2,704	13
Indiana	2,339	2,333	6
Michigan	8,296	8,293	3
Ohio	956	956	0
Wisconsin	7,838	7,908	30
WEST NORTH CENTRAL	22,398	22,299	99
Iowa	5,878	5,798	78
Kansas	5,452	5,440	12
Minnesota	2,933	2,928	5
Missouri	4,510	4,510	0
Nebraska	22	22	0
North Dakota	722	719	4
South Dakota	2,883	2,883	0
SOUTH ATLANTIC	108,425	107,995	430
Delaware	294	289	5
District of Columbia	0	0	0
Florida	54,720	54,673	47
Georgia	18,371	18,351	20
Maryland	18,153	18,084	69
North Carolina	5,754	5,675	79
South Carolina	3,889	3,810	59
Virginia	5,658	5,514	144
West Virginia	1,606	1,600	6
EAST SOUTH CENTRAL	15,632	15,608	24
Alabama	4,721	4,715	6
Kentucky	2,537	2,537	0
Mississippi	5,671	5,671	0
Tennessee	2,703	2,685	18
WEST SOUTH CENTRAL	20,256	15,055	5,201
Arkansas	1,389	1,382	7
Louisiana	7,755	7,755	0
Oklahoma	3,384	1,334	2,030
Texas	7,788	4,604	3,164
MOUNTAIN	11,559	11,442	117
Arizona	191	188	3
Colorado	2,580	2,580	0
Idaho	1,586	1,504	82
Montana	2,030	2,025	5
Nevada	2,107	2,105	2
New Mexico	2,198	2,182	16
Utah	765	758	7
Wyoming	102	102	0
PACIFIC	94,403	77,227	17,176
Alaska	3,076	3,051	25
California	81,571	64,489	17,082
Hawaii	398	398	0
Oregon	2,777	2,772	5
Washington	6,581	6,517	64
TERRITORIES	10,417	10,417	0
Guam	512	512	0
Puerto Rico	856	856	0
Virgin Islands	9,049	9,049	0

* New York did not report for fiscal year 1990.

TABLE 11. PARASITOLOGY-Intestinal Specimens

Lab & Region (1)	Number of Specimens (2)	Type of procedure					Other (7)
		Gross (3)	Direct (Includes Pinworms) (4)	Concentrate Smear (5)	Stained Smear (6)		
TOTAL	294,831	28	45	50	43		
AVERAGE	5,670						
NEW ENGLAND	11,096						
Connecticut	1,703	X	X	X	X		
Massachusetts	31	X	X	X	X		
Maine	385	X	X				
New Hampshire	89		X	X	X	Cryptosporidium	
Rhode Island	4,078		X	X			
Vermont	4,810	X	X	X	X	Worm identification	
MIDDLE ATLANTIC	1,498						
New Jersey	1,405	X		X	X		
New York*							
Pennsylvania	93	X	X	X	X	Flotation for cryptosporidia	
EAST NORTH CENTRAL	22,194						
Illinois	2,704	X	X	X	X		
Indiana	2,333	X	X	X	X		
Michigan	8,293		X	X	X		
Ohio	956		X	X	X		
Wisconsin	7,908	X	X	X	X	EIisa for Giardia	
WEST NORTH CENTRAL	22,299						
Iowa	6,798	X	X	X	X		
Kansas	5,440		X	X	X		
Minnesota	2,928	X	X	X	X		
Missouri	4,510		X	X	X	FA for cryptosporidium	
Nebraska	22		X	X	X		
North Dakota	718	X	X	X	X	Fluorochrome for cryptosporidium	
South Dakota	2,883		X	X	X		
SOUTH ATLANTIC	107,995						
Delaware	288	X	X	X	X		
District of Columbia	0						
Florida	54,673		X	X	X		
Georgia	18,351		X	X	X	Worm identification	
Maryland	18,084		X	X	X		
North Carolina	5,675	X	X	X	X	Mounted/stained worms/segments, Cryptosporidium species-conc., stain	
South Carolina	3,810	X	X	X	X	Cryptosporidium, worm identification, proglottid	
Virginia	5,514	X	X	X	X	FA	
West Virginia	1,600		X	X	X		
EAST SOUTH CENTRAL	15,608						
Alabama	4,715		X	X			
Kentucky	2,537	X	X	X	X		
Mississippi	5,671		X	X	X		
Tennessee	2,685		X	X	X	DFA (Cryptosporidium)	
WEST SOUTH CENTRAL	15,055						
Arkansas	1,362	X	X	X	X	Tape worm	
Louisiana	7,755		X	X	X		
Oklahoma	1,334	X	X	X	X	Cold acid-fast stain	
Texas	4,604	X	X	X	X		
MOUNTAIN	11,442						
Arizona	186	X	X	X	X		
Colorado	2,580			X	X		
Idaho	1,504	X	X	X	X		
Montana	2,025	X	X	X			
Nevada	2,105	X	X	X	X		
New Mexico	2,182			X	X	Acid fast for cryptosporidium	
Utah	758	X	X	X	X		
Wyoming	102		X	X			
PACIFIC	77,227						
Alaska	3,051	X	X	X	X		
California	64,489	X	X	X	X		
Hawaii	398	X	X	X	X		
Oregon	2,772			X	X		
Washington	8,517					Sputum	
TERRITORIES	10,417						
Guam	512		X	X			
Puerto Rico	856			X		Acid-fast stain	
Virgin Islands	9,049			X			

* New York did not report for fiscal year 1990.

TABLE 12. PARASITOLOGY-Other Parasitology Specimens

Lab & Region (1)	Number of Specimens (2)	Type of specimen			
		Malaria (3)	Trichinosis (4)	Toxoplasmosis (5)	Other (6)
TOTAL	23,328	31	6	8	
AVERAGE	630				
NEW ENGLAND	101				
Connecticut	44	X	X		Material for identification, arthropod identification
Massachusetts	53	X			Arthropods
Maine	0				
New Hampshire	1	X			
Rhode Island	3	X			
Vermont	0				
MIDDLE ATLANTIC	128				
New Jersey	84	X			Morphology identification
New York*					
Pennsylvania	44	X	X		Tick identification, Babesia
EAST NORTH CENTRAL	52				
Illinois	13	X			Adult worm identification
Indiana	6				Larvae, insects, fibers, mites, ticks
Michigan	3	X			
Ohio	0				
Wisconsin	30				Borrelia in ticks, tick identification
WEST NORTH CENTRAL	99				
Iowa	78	X			Tick identification, sputum for Pneumocystis carinii, gross arthropod identification
Kansas	12	X			Arthropod identification
Minnesota	5	X			
Missouri	0				
Nebraska	0				
North Dakota	4	X			
South Dakota	0				
SOUTH ATLANTIC	430				
Delaware	6				Trichomonas
District of Columbia	0				
Florida	47	X		X	
Georgia	20	X			Ectoparasites
Maryland	69	X	X		Acanthamoebae culture, cryptosporidium species, pneumocystis smear
North Carolina	79	X			Arthropod identification, water (Giardia)
South Carolina	59	X			
Virginia	144		X	X	
West Virginia	6				Insect identification
EAST SOUTH CENTRAL	24				
Alabama	6	X			
Kentucky	0				
Mississippi	0				
Tennessee	18	X			
WEST SOUTH CENTRAL	5,201				
Arkansas	7	X			Ectoparasites
Louisiana	0				
Oklahoma	2,030	X		X	Cryptosporidium
Texas	3,164	X			Urine, worm
MOUNTAIN	117				
Arizona	5	X		X	
Colorado	0				
Idaho	82	X	X	X	External parasites
Montana	6	X			
Nevada	2				Arthropod identification
New Mexico	16	X			
Utah	7	X			
Wyoming	0				
PACIFIC	17,176				
Alaska	25	X			
California	17,082	X	X	X	Pinworm preparations, proglottids, reference specimens
Hawaii	0				
Oregon	5	X			Proglottids, pinworms, cryptosporidium
Washington	64	X			Arthropods
TERRITORIES	0				
Guam	0				
Puerto Rico	0				
Virgin Islands	0				

* New York did not report for fiscal year 1990.

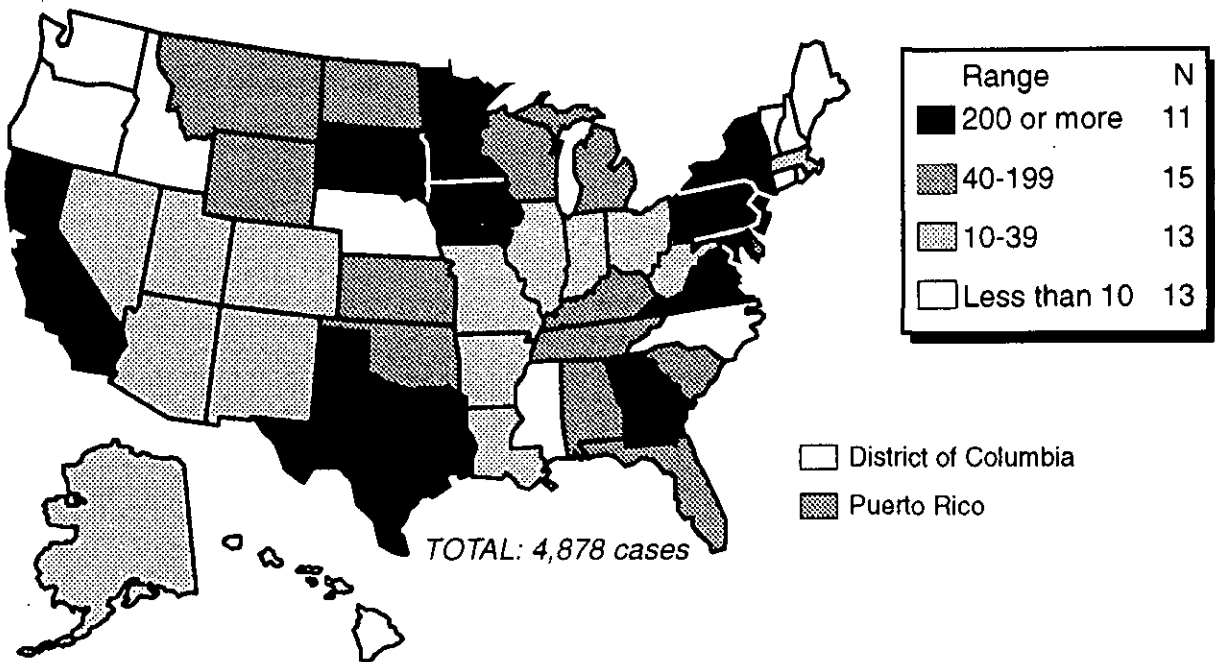
TABLE 13. VIROLOGY SPECIMENS

Lab & Region (1)	Total Virology Specimens (2)	Rabies (3)	Viral Isolation (4)	Rickettsial Identification (5)	HIV Identification (6)	Chlamydia (7)	Herpes Simplex (8)	Other (9)
TOTAL	1,507,967	75,922	195,836	10,598	4,234	1,088,942	66,322	66,113
AVERAGE	28,999	1,615	4,776	1,768	847	25,324	2,073	3,306
NEW ENGLAND	43,776	1,106	8,883	0	0	27,333	6,380	74
Connecticut	12,018	318	6,006	0	0	0	5,694	0
Massachusetts	5,300	217	1,230	0	0	3,567	266	0
Maine	11,554	152	1,565	0	0	9,837	NA	0
New Hampshire	10,382	294	17	0	0	9,577	420	74
Rhode Island	2,334	47	0	0	0	2,287	0	0
Vermont	2,188	78	65	0	0	2,045	0	0
MIDDLE ATLANTIC	18,151	5,739	5,931	25	0	744	48	5,664
New Jersey	14,859	3,333	5,093	25	0	744	NA	5,664
New York*								
Pennsylvania	3,292	2,406	838	0	0	0	48	0
EAST NORTH CENTRAL	204,782	11,079	75,337	2,341	1,260	98,081	12,690	3,994
Illinois	12,752	2,571	2,674	0	0	2,191	2,798	2,520
Indiana	8,349	2,225	196	0	0	5,380	568	0
Michigan	21,938	2,035	1,137	0	12	18,106	2,580	68
Ohio	69,691	2,368	60,299	2,341	0	22	3,255	1,408
Wisconsin	92,052	1,880	11,031	0	1,248	74,402	3,491	0
WEST NORTH CENTRAL	184,975	6,540	18,569	0	447	126,427	5,061	7,931
Iowa	30,355	649	12,235	0	447	13,823	2,510	591
Kansas	23,512	0	1,254	0	0	21,148	1,110	0
Minnesota	12,391	2,120	1,895	0	0	7,442	934	0
Missouri	50,333	2,321	2,708	0	0	37,972	NA	7,332
Nebraska	13,872	812	0	0	0	12,980	0	0
North Dakota	13,741	403	259	0	0	12,994	85	0
South Dakota	20,771	135	218	0	0	19,988	422	8
SOUTH ATLANTIC	378,838	18,915	13,815	237	85	304,483	22,948	18,355
Delaware	20,010	288	1,727	99	0	17,779	0	117
District of Columbia	14,577	375	0	0	0	14,202	0	0
Florida	60,475	4,257	2,776	0	0	71,829	1,613	0
Georgia	9,639	2,080	3,879	0	0	0	3,680	0
Maryland	59,081	5,801	1,110	15	85	47,353	4,848	71
North Carolina	52,327	1,337	2,870	0	0	50,526	7,594	0
South Carolina	47,013	2,379	1,008	123	0	21,453	3,883	18,167
Virginia	84,908	1,790	245	0	0	81,341	1,532	0
West Virginia	608	608	0	0	0	0	0	0
EAST SOUTH CENTRAL	94,336	7,373	1,855	0	0	62,822	944	21,342
Alabama	57,373	2,931	91	0	0	33,091	0	21,260
Kentucky	16,503	1,843	499	0	0	14,079	NA	62
Mississippi	6,453	594	0	0	0	5,859	0	0
Tennessee	14,007	2,005	1,265	0	0	9,793	944	0
WEST SOUTH CENTRAL	112,654	12,474	10,236	7,995	0	79,232	337	2,380
Arkansas	1,115	1,115	0	0	0	0	0	0
Louisiana	1,551	1,495	56	0	0	0	0	0
Oklahoma	5,301	3,420	1,614	0	0	0	267	0
Texas	104,687	6,444	8,566	7,995	0	79,232	70	2,380
MOUNTAIN	109,550	4,280	7,210	0	0	93,072	4,686	302
Arizona	13,824	2,348	3,618	0	0	6,452	1,408	0
Colorado	14,736	515	0	0	0	14,221	0	0
Idaho	24,997	313	781	0	0	23,278	625	0
Montana	27,154	0	959	0	0	24,758	1,437	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	15,413	679	1,261	0	0	12,789	424	260
Utah	6,274	425	591	0	0	4,422	794	42
Wyoming	7,152	0	0	0	0	7,152	0	0
PACIFIC	373,882	8,179	54,200	0	2,442	295,808	13,228	25
Alaska	6,776	141	2,582	0	0	2,391	1,662	0
California	246,095	7,594	48,407	0	2,442	177,788	9,849	15
Hawaii	7,452	69	1,076	0	0	5,521	786	0
Oregon	52,826	111	858	0	0	51,847	0	10
Washington	60,733	264	1,277	0	0	58,261	931	0
TERRITORIES	7,223	237	0	0	0	940	0	6,046
Guam	1,725	0	0	0	0	0	0	1,725
Puerto Rico	4,558	237	0	0	0	0	0	4,321
Virgin Islands	940	0	0	0	0	940	0	0

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

FIGURE 8.
NUMBER OF RABIES CASES IN ANIMALS, 1990



Source: Centers for Disease Control, as reported by the state and territorial public health laboratories.

TABLE 14. VIROLOGY-Rabies Specimens

Lab & Region	Number of Specimens	Type of procedure				
		Stained Smear	FRA	Animal Inoculation	RFFIT	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)
TOTAL	76,922	9	45	22	5	
AVERAGE	1,816					
NEW ENGLAND	1,106					
Connecticut	318		X			
Massachusetts	217		X			
Maine	152		X			
New Hampshire	294		X			
Rhode Island	47		X			
Vermont	78		X			
MIDDLE ATLANTIC	5,739					
New Jersey	3,333		X	X		
New York*						
Pennsylvania	2,406		X			
EAST NORTH CENTRAL	11,079					
Illinois	2,571		X			
Indiana	2,225	X	X			
Michigan	2,035	X		X		
Ohio	2,368		X			
Wisconsin	1,880		X	X	X	
WEST NORTH CENTRAL	6,540					
Iowa	649		X	X		
Kansas	0					
Minnesota	2,120		X	X		
Missouri	2,321		X			
Nebraska	912		X			
North Dakota	403		X			Mouse neuroblast culture
South Dakota	135		X			
SOUTH ATLANTIC	18,915					
Delaware	288		X	X		
District of Columbia	375	X	X			
Florida	4,257		X			
Georgia	2,080		X			
Maryland	5,801		X	X	X	
North Carolina	1,337		X	X		
South Carolina	2,379		X	X		
Virginia	1,790		X	X		
West Virginia	608		X	X	X	
EAST SOUTH CENTRAL	7,373					
Alabama	2,931	X	X	X		
Kentucky	1,843	X	X	X		
Mississippi	594	X	X			
Tennessee	2,005	X	X	X		
WEST SOUTH CENTRAL	12,474					
Arkansas	1,115		X			
Louisiana	1,495	X	X		X	
Oklahoma	3,420		X	X		
Texas	6,444		X	X		Monoclonal typing
MOUNTAIN	4,280					
Arizona	2,348		X	X		
Colorado	515		X	X		
Idaho	313	X				
Montana	0					
Nevada	0					
New Mexico	679		X			
Utah	425		X	X		
Wyoming	0					
PACIFIC	8,179					
Alaska	141		X	X		
California	7,594		X	X	X	
Hawaii	69		X			
Oregon	111		X			
Washington	264		X	X		
TERRITORIES	237					
Guam	0					
Puerto Rico	237		X			
Virgin Islands	0					

* New York did not report for fiscal year 1990.

TABLE 15. VIROLOGY-Viral Isolation Specimens

Lab & Region	Number of Specimens	Type of specimen						Other
		Enteric	Arbovirus (Human Origin)	Arbovirus (Non-human Origin)	Respiratory	Exanthem		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
TOTAL	195,838	38	18	15	40	34		
AVERAGE	4,778							
NEW ENGLAND	8,883							
Connecticut	6,006	X			X	X		
Massachusetts	1,230	X	X		X	X	CMV, CMV study	
Maine	1,565	X		X	X			
New Hampshire	17				X			
Rhode Island	0							
Vermont	85				X			
MIDDLE ATLANTIC	6,831							
New Jersey	5,093	X	X	X	X	X	CNS, STD	
New York*								
Pennsylvania	838	X			X	X		
EAST NORTH CENTRAL	75,337							
Illinois	2,874	X	X	X	X			
Indiana	196	X			X	X		
Michigan	1,137	X				X	Urine, sterile fluid/tissue, ref. cult., direct specimen slides stains	
Ohio	60,299	X	X	X	X	X	Urine, CSF	
Wisconsin	11,031	X			X	X	Urine, autopsy/biopsy, eye swabs	
WEST NORTH CENTRAL	18,569							
Iowa	12,235	X	X	X	X	X	Blood cells	
Kansas	1,254	X			X	X		
Minnesota	1,895	X			X	X	Transplant, CNS	
Missouri	2,708	X	X	X	X	X	Tissue, urine, CFS, throat, stool	
Nebraska	0							
North Dakota	259	X	X		X	X		
South Dakota	218	X	X		X	X	Urine, CSF	
SOUTH ATLANTIC	13,615							
Delaware	1,727	X		X	X			
District of Columbia	0							
Florida	2,776	X	X	X	X	X		
Georgia	3,879	X			X	X	Lesions, ocular, and other tissue	
Maryland	1,110	X	X	X	X	X		
North Carolina	2,870	X	X	X	X	X	Genital specimens, body tissues/fluids	
South Carolina	1,008	X	X		X	X	Mycoplasma	
Virginia	245	X			X	X	Autopsy material	
West Virginia	0							
EAST SOUTH CENTRAL	1,855							
Alabama	91				X			
Kentucky	499	X	X		X	X	Autopsy material	
Mississippi	0							
Tennessee	1,265	X			X	X		
WEST SOUTH CENTRAL	10,236							
Arkansas	0							
Louisiana	56				X			
Oklahoma	1,614	X			X	X	CSF, autopsy (brain, lung, liver), urine, blood	
Texas	8,566	X	X	X	X	X		
MOUNTAIN	7,210							
Arizona	3,618	X	X	X	X	X		
Colorado	0							
Idaho	781				X	X		
Montana	959	X	X		X	X		
Nevada	0							
New Mexico	1,261	X	X	X	X	X	CSF	
Utah	591	X			X	X	Tissue, urine, CSF	
Wyoming	0							
PACIFIC	64,200							
Alaska	2,582	X	X	X	X	X	Myocardial, central nervous, miscellaneous	
California	48,407	X		X	X	X	Autopsy, CSF, blood	
Hawaii	1,076	X			X	X		
Oregon	858	X			X	X	CMV	
Washington	1,277	X			X	X	CSF, urine, eye, reference	
TERRITORIES	0							
Guam	0							
Puerto Rico	0							
Virgin Islands	0							

* New York did not report for fiscal year 1990.

TABLE 15. VIROLOGY-Viral Isolation Specimens (continued)

Lab & Region (9)	Number of Specimens (10)	Type of procedure									
		Tissue Culture Hoests (11)	Eggs (12)	Animal Hoests (13)	HA/HI (14)	CF (15)	Neutralization Tests (16)	FA-Original Specimens (17)	FA-Other (18)	HAD/HADI (19)	Other (20)
TOTAL	195,836	40	18	18	38	20	35	28	38	31	
AVERAGE	4,776										
NEW ENGLAND	8,883										
Connecticut	6,006	X			X		X	X	X	X	EIA
Massachusetts	1,230	X			X		X		X	X	
Maine	1,565	X									
New Hampshire	17	X			X				X		
Rhode Island	0										
Vermont	66							X			
MIDDLE ATLANTIC	5,931										
New Jersey	5,093	X	X	X	X	X	X	X	X	X	
New York*	0										
Pennsylvania	838	X	X		X		X		X	X	
EAST NORTH CENTRAL	75,337										
Illinois	2,674	X			X		X	X		X	
Indiana	196	X	X		X	X	X		X	X	
Michigan	1,137	X	X		X		X	X	X	X	EIA
Ohio	60,299	X		X	X		X		X	X	EIA
Wisconsin	11,031	X	X	X	X		X	X	X	X	
WEST NORTH CENTRAL	18,569										
Iowa	12,235	X	X	X	X	X	X		X	X	
Kansas	1,254	X	X	X	X		X		X		
Minnesota	1,895	X			X		X	X	X	X	
Missouri	2,708	X			X		X	X	X	X	EIA, latex agglutination
Nebraska	0										
North Dakota	259	X			X	X	X		X	X	
South Dakota	218	X			X	X	X	X	X	X	
SOUTH ATLANTIC	13,816										
Delaware	1,727	X	X	X		X		X			
District of Columbia	0										
Florida	2,776	X	X	X	X	X	X	X	X	X	
Georgia	3,879	X	X		X		X	X	X	X	ELISA, electromicroscopy
Maryland	1,110	X	X	X	X	X	X	X	X	X	EIA
North Carolina	2,870	X	X	X	X	X	X	X	X	X	Antigen detection
South Carolina	1,008	X	X	X	X	X	X	X	X		
Virginia	245	X	X	X	X	X	X		X		
West Virginia	0										
EAST SOUTH CENTRAL	1,855										
Alabama	91	X			X		X			X	
Kentucky	499	X			X	X	X		X		
Mississippi	0										
Tennessee	1,265	X		X	X		X	X	X	X	
WEST SOUTH CENTRAL	10,238										
Arkansas	0										
Louisiana	56	X			X	X		X	X		
Oklahoma	1,614	X			X		X	X	X	X	
Texas	8,566	X	X	X	X	X	X		X	X	Electron microscopy, EIA
MOUNTAIN	7,210										
Arizona	3,618	X		X	X	X	X	X	X	X	
Colorado	0										
Idaho	781	X			X	X		X	X		
Montana	959	X					X	X	X	X	
Nevada	0										
New Mexico	1,261	X		X	X	X	X	X	X	X	EIA
Utah	591	X		X	X		X		X	X	Immunoperoxidase
Wyoming	0										
PACIFIC	54,200										
Alaska	2,582	X	X	X	X	X	X	X	X	X	EIA, FIAX
California	48,407	X					X	X	X	X	In situ EIA
Hawaii	1,078	X	X		X	X	X		X	X	
Oregon	858	X			X	X	X	X	X	X	
Washington	1,277	X	X	X	X		X	X	X	X	
TERRITORIES	0										
Guam	0										
Puerto Rico	0										
Virgin Islands	0										

* New York did not report for fiscal year 1990.

TABLE 16. VIROLOGY-Rickettsial Identification Specimens

Lab & Region	Number of Specimens	Type of specimen		Type of procedure			
		Tick	Other	Tissue Culture	FA	Eggs	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	10,598	4		1	4	0	
AVERAGE	1,766						
NEW ENGLAND	0						
Connecticut	0						
Massachusetts	0						
Maine	0						
New Hampshire	0						
Rhode Island	0						
Vermont	0						
MIDDLE ATLANTIC	25						
New Jersey	25	X			X		
New York*							
Pennsylvania	0						
EAST NORTH CENTRAL	2,341						
Illinois	0						
Indiana	0						
Michigan	0						
Ohio	2,341	X		X	X		
Wisconsin	0						
WEST NORTH CENTRAL	0						
Iowa	0						
Kansas	0						
Minnesota	0						
Missouri	0						
Nebraska	0						
North Dakota	0						
South Dakota	0						
SOUTH ATLANTIC	237						
Delaware	99		Serum				CF
District of Columbia	0						
Florida	0						
Georgia	0						
Maryland	15		Skin biopsy for RMSF		X		
North Carolina	0						
South Carolina	123	X					Identification, hemolymph
Virginia	0						
West Virginia	0						
EAST SOUTH CENTRAL	0						
Alabama	0						
Kentucky	0						
Mississippi	0						
Tennessee	0						
WEST SOUTH CENTRAL	7,995						
Arkansas	0						
Louisiana	0						
Oklahoma	0						
Texas	7,995	X	Flea		X		Hemolymph Giemsa stain, Microtus inoculation
MOUNTAIN	0						
Arizona	0						
Colorado	0						
Idaho	0						
Montana	0						
Nevada	0						
New Mexico	0						
Utah	0						
Wyoming	0						
PACIFIC	0						
Alaska	0						
California	0						
Hawaii	0						
Oregon	0						
Washington	0						
TERRITORIES	0						
Guam	0						
Puerto Rico	0						
Virgin Islands	0						

* New York did not report for fiscal year 1990.

TABLE 17. VIROLOGY-HIV Identification Specimens

Lab & Region (1)	Number of Specimens (2)	Type of procedure	
		Culture (3)	Other (4)
TOTAL	4,234	4	
AVERAGE	847		
NEW ENGLAND	0		
Connecticut	0		
Massachusetts	0		
Maine	0		
New Hampshire	0		
Rhode Island	0		
Vermont	0		
MIDDLE ATLANTIC	0		
New Jersey	0		
New York*			
Pennsylvania	0		
EAST NORTH CENTRAL	1,260		
Illinois	0		
Indiana	0		
Michigan	12	X	
Ohio	0		
Wisconsin	1,248		P24 antigen, EIA
WEST NORTH CENTRAL	447		
Iowa	447	X	P24, EIA
Kansas	0		
Minnesota	0		
Missouri	0		
Nebraska	0		
North Dakota	0		
South Dakota	0		
SOUTH ATLANTIC	85		
Delaware	0		
District of Columbia	0		
Florida	0		
Georgia	0		
Maryland	85	X	Antigen
North Carolina	0		
South Carolina	0		
Virginia	0		
West Virginia	0		
EAST SOUTH CENTRAL	0		
Alabama	0		
Kentucky	0		
Mississippi	0		
Tennessee	0		
WEST SOUTH CENTRAL	0		
Arkansas	0		
Louisiana	0		
Oklahoma	0		
Texas	0		
MOUNTAIN	0		
Arizona	0		
Colorado	0		
Idaho	0		
Montana	0		
Nevada	0		
New Mexico	0		
Utah	0		
Wyoming	0		
PACIFIC	2,442		
Alaska	0		
California	2,442	X	PCR, antigen detection, RIPA
Hawaii	0		
Oregon	0		
Washington	0		
TERRITORIES	0		
Guam	0		
Puerto Rico	0		
Virgin Islands	0		

* New York did not report for fiscal year 1990.

TABLE 18. VIROLOGY-Chlamydia Specimens

Lab & Region	Number of Specimens	Number of Positive Specimens	Type of procedure				
			Tissue Culture	Direct Specimen	EIA	IFA	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	1,088,942	90,898	19	13	34	11	
AVERAGE	25,324	2,272					
NEW ENGLAND	27,333	2,107					
Connecticut	0	0					
Massachusetts	3,587	378			X		
Maine	9,837	692			X	X	Genprobe (DNA probe)
New Hampshire	9,577	655		X			Nucleic acid probe
Rhode Island	2,287	249			X		
Vermont	2,045	133		X	X		
MIDDLE ATLANTIC	744	4					
New Jersey	744	4	X				
New York*							
Pennsylvania	0	0					
EAST NORTH CENTRAL	98,081	7,560					
Illinois	2,191	209			X		
Indiana	5,360	565	X		X		
Michigan	16,106	978	X		X		Probe
Ohio	22	0	X				
Wisconsin	74,402	5,808	X		X	X	
WEST NORTH CENTRAL	128,427	10,355					
Iowa	13,923	1,102	X	X	X		
Kansas	21,148	1,282	X		X		
Minnesota	7,442	755			X		
Missouri	37,972	4,468			X		
Nebraska	12,980	NA			X		
North Dakota	12,994	963	X	X		X	DFA syva microtrak
South Dakota	19,988	1,785			X		DNA probe
SOUTH ATLANTIC	304,483	22,628					
Delaware	17,779	1,499	X		X		
District of Columbia	14,202	1,314			X		
Florida	71,829	NA			X		
Georgia	0	0					
Maryland	47,353	4,240	X	X	X		
North Carolina	60,626	4,890	X		X		
South Carolina	21,453	2,901	X		X		
Virginia	81,341	7,784			X		
West Virginia	0	0					
EAST SOUTH CENTRAL	62,822	7,279					
Alabama	33,091	4,238			X		
Kentucky	14,079	1,052			X		
Mississippi	5,859	981			X		
Tennessee	8,793	1,008			X		
WEST SOUTH CENTRAL	79,232	8,784					
Arkansas	0	0					
Louisiana	0	0					
Oklahoma	0	0					
Texas	79,232	8,784	X		X	X	Antigen detection
MOUNTAIN	93,072	8,882					
Arizona	6,452	659	X		X	X	
Colorado	14,221	1,394			X	X	
Idaho	23,278	1,845		X			
Montana	24,758	1,148	X	X		X	
Nevada	0	0					
New Mexico	12,789	1,276	X	X	X	X	
Utah	4,422	622	X	X			
Wyoming	7,152	1,938			X	X	
PACIFIC	295,808	23,211					
Alaska	2,391	158	X			X	DNA probe
California	177,788	16,001	X	X	X	X	DNA probe
Hawaii	5,521	392		X	X		
Oregon	51,847	2,787		X			
Washington	68,261	3,875		X	X		Mouse inoculation
TERRITORIES	940	86					
Guam	0	0					
Puerto Rico	0	0					
Virgin Islands	940	86			X		

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 19. VIROLOGY-Herpes Simplex Specimens

Lab & Region (1)	Number of Specimens (2)	Number of Positive Specimens (3)	Type of procedure	
			Cell Culture (4)	Other (5)
TOTAL	66,322	21,800	36	
AVERAGE	2,073	641		
NEW ENGLAND	6,380	1,744		
Connecticut	5,694	1,620	X	PAP
Massachusetts	266	76	X	FA
Maine	NA	NA	X	Direct FA
New Hampshire	420	148	X	Culture amplified direct EIA, FA
Rhode Island	0	0		
Vermont	0	0		
MIDDLE ATLANTIC	48	134		
New Jersey	NA	92	X	Direct FA
New York*				
Pennsylvania	48	42	X	FA
EAST NORTH CENTRAL	12,690	3,535		
Illinois	2,796	313	X	Complement fixation, latex agglutination
Indiana	568	255	X	
Michigan	2,580	849	X	
Ohio	3,255	1,102	X	
Wisconsin	3,491	1,016	X	
WEST NORTH CENTRAL	5,061	2,225		
Iowa	2,510	981	X	
Kansas	1,110	727	X	
Minnesota	934	393	X	
Missouri	NA	NA	X	EIA
Nebraska	0	0		
North Dakota	85	9	X	
South Dakota	422	115	X	DFA
SOUTH ATLANTIC	22,948	6,174		
Delaware	0	0		
District of Columbia	0	0		
Florida	1,613	261	X	DFA, CF, suckling mice
Georgia	3,680	1,642	X	EIA on cell culture
Maryland	4,646	525	X	FA
North Carolina	7,594	1,764	X	
South Carolina	3,883	1,389	X	Slides for FA
Virginia	1,532	593	X	
West Virginia	0	0		
EAST SOUTH CENTRAL	944	499		
Alabama	0	0		
Kentucky	NA	110	X	Direct FA
Mississippi	0	0		
Tennessee	944	389	X	Direct Fluorescent Antibody
WEST SOUTH CENTRAL	337	115		
Arkansas	0	0		
Louisiana	0	0		
Oklahoma	267	88	X	
Texas	70	27	X	DFA
MOUNTAIN	4,688	1,399		
Arizona	1,406	557	X	Final detection by IFA
Colorado	0	0		
Idaho	625	167	X	
Montana	1,437	288	X	
Nevada	0	0		
New Mexico	424	153	X	
Utah	794	234	X	
Wyoming	0	0		
PACIFIC	13,228	5,975		
Alaska	1,662	554	X	Herpes Simplex virus antibody (IgG/IgM)
California	9,849	4,923	X	DFA
Hawaii	786	116	X	
Oregon	0	0		
Washington	931	382	X	
TERRITORIES	0	0		
Guam	0	0		
Puerto Rico	0	0		
Virgin Islands	0	0		

* New York did not report for fiscal year 1990.

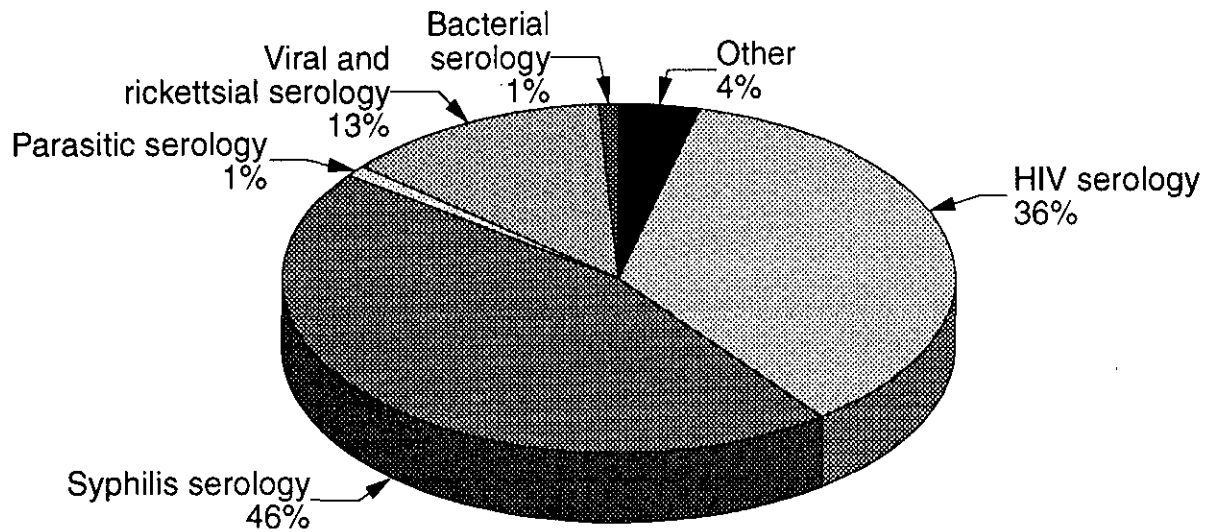
NOTE: NA = Data not available.

TABLE 20. VIROLOGY-Other Virology Specimens

Lab & Region (1)	Number of Specimens (2)	Disease/Type of procedure (3)
TOTAL	68,113	
AVERAGE	3,306	
NEW ENGLAND	74	
Connecticut	0	
Massachusetts	0	
Maine	0	
New Hampshire	74	CMV-tissue culture; Rotavirus, RSV-EIA
Rhode Island	0	
Vermont	0	
MIDDLE ATLANTIC	5,664	
New Jersey	5,664	Hepatitis B virus, Rotavirus-EIA
New York*		
Pennsylvania	0	
EAST NORTH CENTRAL	3,994	
Illinois	2,520	Measles-IFA; Rubella-IFA, latex; polio I,II,III, psittacosis-complement fixation; mumps, cytomegalic, Q fever-IFA
Indiana	0	
Michigan	69	Rotavirus-EIA (stool)
Ohio	1,406	Arthropods-EIA, neutralization, cell culture
Wisconsin	0	
WEST NORTH CENTRAL	7,931	
Iowa	591	Clostridium diffila toxin assay-cell culture
Kansas	0	
Minnesota	0	
Missouri	7,332	Hepatitis-EIA
Nebraska	0	
North Dakota	0	
South Dakota	8	Rotavirus-EIA
SOUTH ATLANTIC	18,355	
Delaware	117	Rotavirus-Elisa
District of Columbia	0	
Florida	0	
Georgia	0	
Maryland	71	Retrovirus-EIA
North Carolina	0	
South Carolina	18,167	Hepatitis, HTLV-1, Parvovirus, RSV-miscellaneous procedures
Virginia	0	
West Virginia	0	
EAST SOUTH CENTRAL	21,342	
Alabama	21,260	Hepatitis B-EIA
Kentucky	82	Other FA slides-direct FA
Mississippi	0	
Tennessee	0	
WEST SOUTH CENTRAL	2,380	
Arkansas	0	
Louisiana	0	
Oklahoma	0	
Texas	2,380	Bird bloods-enzyme immunoassay (arbovirus)
MOUNTAIN	302	
Arizona	0	
Colorado	0	
Idaho	0	
Montana	0	
Nevada	0	
New Mexico	260	Rotavirus, canine parvovirus, canine heart worm, feline leukemia virus-EIA
Utah	42	Human Papilloma virus-dot blot
Wyoming	0	
PACIFIC	25	
Alaska	0	
California	15	HTLV-1#-PCR, isolation
Hawaii	0	
Oregon	10	Measles-cell culture
Washington	0	
TERRITORIES	6,046	
Guam	1,725	Rubella, Hepatitis B-EIA
Puerto Rico	4,321	Hepatitis, Rubella-Abbott (EIA); Rubella-Whittaker (EIA)
Virgin Islands	0	

* New York did not report for fiscal year 1990.

FIGURE 9.
STATE PUBLIC HEALTH LABORATORY IMMUNOLOGY SPECIMENS,
BY CATEGORY, FISCAL YEAR 1990



TOTAL: 8.1 MILLION SPECIMENS

TABLE 21. IMMUNOLOGY SPECIMENS

Lab & Region (1)	Total Immunology Specimens (2)	Syphilia Serology (3)	Bacterial Serology (4)	Fungal Serology (5)	Parasitic Serology (6)	Viral and Rickettsial Serology (7)	HIV Serology (8)	Other (9)
TOTAL	8,078,129	3,682,680	102,149	31,859	47,134	1,030,269	2,895,388	288,980
AVERAGE	156,310	70,819	2,432	1,055	1,571	21,920	57,907	11,958
NEW ENGLAND	333,555	108,230	18,013	852	3,250	59,290	134,491	11,629
Connecticut	120,045	23,961	8,429	0	1,815	24,577	63,263	0
Massachusetts	108,693	52,386	1,859	473	0	12,570	29,776	11,629
Maine	18,841	2,222	283	147	959	7,459	7,792	0
New Hampshire	15,320	2,888	782	0	11	3,018	8,823	0
Rhode Island	80,278	23,849	6,517	0	0	6,058	23,854	0
Vermont	10,380	2,926	163	32	466	5,610	1,183	0
MIDDLE ATLANTIC	230,813	118,468	1,058	1,152	1,689	18,508	91,940	0
New Jersey	228,111	115,835	58	1,152	1,689	18,107	91,270	0
New York*								
Pennsylvania	2,702	633	998	0	0	401	670	0
EAST NORTH CENTRAL	843,880	163,142	58,169	4,672	19,401	156,252	409,398	44,948
Illinois	54,443	32,548	333	1,599	154	304	16,003	3,502
Indiana	28,171	9,549	348	444	153	3,433	14,244	0
Michigan	324,701	63,833	904	1,111	0	20,324	226,450	12,279
Ohio	87,782	10,832	485	105	126	11,926	64,308	0
Wisconsin	348,783	36,580	54,099	1,313	18,968	120,265	88,393	29,185
WEST NORTH CENTRAL	393,110	128,614	9,082	3,642	2,570	45,579	201,607	2,036
Iowa	100,131	21,789	8,341	3,319	2,513	12,385	51,784	0
Kansas	63,811	42,879	78	113	0	6,874	13,867	0
Minnesota	32,283	29,032	5	99	1	1,811	0	1,335
Missouri	154,661	22,451	0	0	0	7,648	124,664	0
Nebraska	14,225	6,201	0	0	0	3,195	4,324	505
North Dakota	8,774	955	2	6	52	3,494	4,225	40
South Dakota	19,225	5,307	636	105	4	10,174	2,843	156
SOUTH ATLANTIC	2,386,702	1,360,653	15,378	2,654	11,805	201,134	718,187	76,881
Delaware	38,665	26,676	398	0	0	1,093	9,111	1,387
District of Columbia	141,234	84,581	0	0	298	0	48,757	9,598
Florida	814,684	496,241	294	0	1,034	67,766	249,328	0
Georgia	448,705	287,806	7,482	79	826	21,028	72,084	67,400
Maryland	303,550	182,834	2,858	793	6,346	5,229	118,015	7,476
North Carolina	214,459	122,789	1,846	529	2,464	58,303	26,528	0
South Carolina	147,042	68,945	287	907	693	18,195	58,984	1,021
Virginia	236,734	95,245	2,213	346	144	17,619	121,167	0
West Virginia	43,849	15,536	0	0	0	13,901	14,212	0
EAST SOUTH CENTRAL	897,902	527,260	45	1,920	723	48,461	217,370	102,123
Alabama	270,882	202,680	0	1,427	282	4,746	39,822	27,725
Kentucky	56,540	24,493	31	0	441	23,463	8,112	0
Mississippi	334,379	198,990	2	0	0	0	61,178	74,211
Tennessee	236,301	101,097	12	493	0	20,252	114,260	187
WEST SOUTH CENTRAL	1,180,077	629,996	1,447	2,580	4,353	232,102	294,552	15,047
Arkansas	137,809	79,184	77	887	15	373	57,488	5
Louisiana	197,399	74,471	321	221	1,627	119,118	1,840	0
Oklahoma	121,183	42,830	23	0	0	7,565	65,073	5,892
Texas	723,686	433,511	1,026	1,672	2,711	105,045	170,371	9,350
MOUNTAIN	473,505	105,188	1,047	4,258	790	63,348	281,443	17,433
Arizona	72,526	19,961	21	4,120	370	25,490	22,564	0
Colorado	177,438	23,005	106	0	0	4,269	150,059	0
Idaho	15,709	5,663	23	16	0	338	8,669	0
Montana	40,495	4,911	892	72	420	10,331	17,835	6,234
Nevada	37,408	13,277	0	0	0	9,830	10,519	3,782
New Mexico	51,897	27,085	0	50	0	7,834	17,128	0
Utah	66,322	8,245	6	0	0	0	50,854	7,417
Wyoming	11,710	3,039	0	0	0	5,456	3,215	0
PACIFIC	1,318,503	535,923	1,932	10,229	2,553	205,585	545,396	18,885
Alaska	37,068	16,185	1	0	14	7,333	8,669	4,866
California	963,141	460,611	1,395	10,030	2,529	154,837	333,739	0
Hawaii	74,965	8,016	337	0	10	41,384	25,218	0
Oregon	135,167	29,998	134	199	0	1,348	91,489	12,019
Washington	108,162	21,113	65	0	0	683	86,301	0
TERRITORIES	18,082	17,108	0	0	0	0	974	0
Guam	3,677	2,703	0	0	0	0	974	0
Puerto Rico	0	0	0	0	0	0	0	0
Virgin Islands	14,405	14,405	0	0	0	0	0	0

* New York did not report for fiscal year 1990.

TABLE 22. IMMUNOLOGY-Syphilis Serology Specimens

Lab & Region (1)	Number of Specimens (2)	Type of procedure											Other (14)
		VDRL (3)	RPR (4)	ART (5)	USR (6)	RST (7)	FTA-ABS (8)	AFTA-ABS (9)	FTA-ABS (IgM) (10)	DFATP (11)	MHA-TP (12)	Dark-field (13)	
TOTAL	3,682,580	47	39	2	4	3	43	0	4	8	24	8	
AVERAGE	70,819												
NEW ENGLAND	108,230												
Connecticut	23,961	X	X	X		X	X			X		X	
Massachusetts	52,386	X	X				X				X		
Maine	2,222	X	X				X						
New Hampshire	2,886	X	X				X			X			
Rhode Island	23,849	X	X				X						
Vermont	2,928	X	X				X			X			
MIDDLE ATLANTIC	116,468												
New Jersey	115,835	X	X		X	X	X				X		
New York*													
Pennsylvania	633	X	X				X						
EAST NORTH CENTRAL	153,142												
Illinois	32,548	X	X				X						
Indiana	9,549	X	X				X						
Michigan	63,633				X					X	X		
Ohio	10,832	X					X						
Wisconsin	36,580	X					X		X		X	X	
WEST NORTH CENTRAL	128,614												
Iowa	21,789	X					X		X				
Kansas	42,879	X					X						
Minnesota	29,032	X			X		X			X		X	
Missouri	22,451	X	X				X				X		
Nebraska	6,201		X								X		
North Dakota	955	X				X	X					X	
South Dakota	5,307	X	X								X		
SOUTH ATLANTIC	1,360,653												
Delaware	26,676	X	X				X				X	X	HATTS
District of Columbia	84,581		X				X				X		
Florida	496,241	X	X				X		X		X		
Georgia	287,808	X	X										FTA-ABS (DS)
Maryland	162,834	X	X				X		X	X			
North Carolina	122,789	X	X				X			X	X		
South Carolina	68,945	X	X				X				X		
Virginia	95,245	X	X				X				X		
West Virginia	15,536		X								X		
EAST SOUTH CENTRAL	527,260												
Alabama	202,680	X	X								X		
Kentucky	24,493	X	X				X						
Mississippi	198,990	X	X				X						
Tennessee	101,097	X	X				X				X		
WEST SOUTH CENTRAL	629,996												
Arkansas	79,184	X	X				X			X	X		
Louisiana	74,471	X					X				X		
Oklahoma	42,830	X	X				X						
Texas	433,511	X	X				X				X	X	
MOUNTAIN	105,186												
Arizona	19,961	X					X				X		
Colorado	23,005	X					X						
Idaho	5,663	X			X		X						
Montana	4,911	X					X						
Nevada	13,277	X	X				X				X		
New Mexico	27,085	X	X								X		
Utah	8,245	X	X				X						
Wyoming	3,039		X				X						
PACIFIC	535,923												
Alaska	16,185	X	X				X						
California	460,811	X	X				X				X	X	
Hawaii	8,016	X	X				X						
Oregon	29,998	X	X				X						
Washington	21,113	X	X								X		Total protein, FTA ABS (DF)
TERRITORIES	17,108												
Guam	2,703	X					X					X	
Puerto Rico	0												
Virgin Islands	14,405	X	X	X									

* New York did not report for fiscal year 1990.

TABLE 23. IMMUNOLOGY-Bacterial Serology Specimens

Lab & Region	Number of Specimens	Type of specimen					
		Brucellosis	Tularemia	Streptococcal Antibodies	Leptospirosis	Salmonellosis	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	102,149	29	31	3	11	8	
AVERAGE	2,432						
NEW ENGLAND	16,013						
Connecticut	6,429	X	X		X	X	Legionella pneumophila, Bordetella pertussis, Lyme disease
Massachusetts	1,859	X	X				Legionella, Pertussis
Maine	263						Legionella AB, Legionella A6
New Hampshire	782						Legionella, Lyme disease
Rhode Island	6,517	X				X	
Vermont	163	X	X				Legionellosis
MIDDLE ATLANTIC	1,056						
New Jersey	58	X	X		X		
New York*							
Pennsylvania	998						Legionellosis, Lyme disease
EAST NORTH CENTRAL	56,169						
Illinois	333	X	X				Lyme disease, Legionella
Indiana	348	X	X				Legionella, Lyme disease
Michigan	904						Legionella, Pertussis, Diphtheria
Ohio	485						Legionnaire's, Lyme
Wisconsin	54,099	X	X	X		X	Legionellosis, Lyme, Mycoplasma pneumonia, Ureaplasma urealyticum
WEST NORTH CENTRAL	9,062						
Iowa	8,341	X	X		X		
Kansas	78	X	X				
Minnesota	5		X				Legionellosis
Missouri	0						
Nebraska	0						
North Dakota	2	X	X			X	Weil-Felix
South Dakota	638	X	X				Legionella, Lyme
SOUTH ATLANTIC	15,376						
Delaware	398					X	Shigellosis
District of Columbia	0						
Florida	294						Legionella
Georgia	7,482	X	X				Legionnaires, Lyme disease
Maryland	2,858						Legionella, DPT, Streptococcal enzymes
North Carolina	1,846	X	X				Legionellosis
South Carolina	287						Legionella
Virginia	2,213	X	X	X	X		Lyme disease, Legionnaire's disease
West Virginia	0						
EAST SOUTH CENTRAL	45						
Alabama	0						
Kentucky	31	X	X			X	Legionnaire's
Mississippi	2	X	X	X			
Tennessee	12	X	X				Legionella
WEST SOUTH CENTRAL	1,447						
Arkansas	77	X	X			X	Weil-Felix, Legionella
Louisiana	321	X	X		X		Legionella, Lyme disease
Oklahoma	23	X	X				
Texas	1,026	X	X		X		Legionella
MOUNTAIN	1,047						
Arizona	21	X	X				Lyme
Colorado	105	X	X				Legionella
Idaho	23	X	X				
Montana	892	X	X		X		Legionellosis, Borrellosis
Nevada	0						
New Mexico	0						
Utah	6		X				
Wyoming	0						
PACIFIC	1,932						
Alaska	1		X				
California	1,395	X	X		X	X	Legionellosis, Pertussis, Lyme
Hawaii	337				X		Legionellosis
Oregon	134	X	X		X		
Washington	65	X	X		X		
TERRITORIES	0						
Guam	0						
Puerto Rico	0						
Virgin Islands	0						

* New York did not report for fiscal year 1990.

TABLE 24. IMMUNOLOGY-Fungal Serology Specimens

Lab & Region	Number of Specimens	Type of specimen						
		Blastomycosis (3)	Coccidioidomycosis (4)	Histoplasmosis (5)	Cryptococcosis (6)	Aspergillosis (7)	Candidiasis (8)	Other (9)
TOTAL	31,659	24	27	26	20	19	6	
AVERAGE	1,055							
NEW ENGLAND	652							
Connecticut	0							
Massachusetts	473				X	X		
Maine	147				X	X		
New Hampshire	0							
Rhode Island	0							
Vermont	32		X	X				
MIDDLE ATLANTIC	1,152							
New Jersey	1,152	X	X	X	X	X	X	
New York*								
Pennsylvania	0							
EAST NORTH CENTRAL	4,572							
Illinois	1,599	X	X	X		X		
Indiana	444	X	X	X	X	X	X	
Michigan	1,111	X	X	X				
Ohio	105	X	X	X	X	X		
Wisconsin	1,313	X	X	X	X			
WEST NORTH CENTRAL	3,642							
Iowa	3,319	X	X	X	X			
Kansas	113		X	X				
Minnesota	99	X	X	X	X	X	X	Farmer's lung
Missouri	0							
Nebraska	0							
North Dakota	6	X	X	X		X		
South Dakota	105	X	X	X	X	X		
SOUTH ATLANTIC	2,654							
Delaware	0							
District of Columbia	0							
Florida	0							
Georgia	79	X	X	X				
Maryland	793				X			
North Carolina	529	X	X	X	X	X		
South Carolina	907	X	X	X	X	X	X	
Virginia	346	X	X	X	X			
West Virginia	0							
EAST SOUTH CENTRAL	1,920							
Alabama	1,427	X	X	X		X		
Kentucky	0							
Mississippi	0							
Tennessee	493	X	X	X	X	X	X	
WEST SOUTH CENTRAL	2,580							
Arkansas	887	X	X	X	X	X		
Louisiana	221	X	X	X	X	X		
Oklahoma	0							
Texas	1,672	X	X	X	X	X		
MOUNTAIN	4,258							
Arizona	4,120		X					
Colorado	0							
Idaho	16	X	X	X		X		
Montana	72	X	X	X	X	X	X	Sporothrix
Nevada	0							
New Mexico	50	X	X	X	X	X		
Utah	0							
Wyoming	0							
PACIFIC	10,229							
Alaska	0							
California	10,030	X	X	X	X			Miscellaneous fungi
Hawaii	0							
Oregon	199	X	X	X				
Washington	0							
TERRITORIES	0							
Guam	0							
Puerto Rico	0							
Virgin Islands	0							

* New York did not report for fiscal year 1990.

TABLE 25. IMMUNOLOGY-Parasitic Serology Specimens

Lab & Region	Number of Specimens	Type of specimen					
		Trichinosis	Toxoplasmosis	Amebiasis	Echinococcosis	Trypanosomiasis	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	47,134	6	29	11	2	1	
AVERAGE	1,571						
NEW ENGLAND	3,250						
Connecticut	1,815		X				
Massachusetts	0						
Maine	958		X				
New Hampshire	11		X				
Rhode Island	0						
Vermont	466		X				
MIDDLE ATLANTIC	1,689						
New Jersey	1,689	X	X	X			
New York*	0						
Pennsylvania	0						
EAST NORTH CENTRAL	19,401						
Illinois	154		X				
Indiana	153		X				
Michigan	0						
Ohio	126		X	X			
Wisconsin	18,968		X				
WEST NORTH CENTRAL	2,570						
Iowa	2,513		X	X			
Kansas	0						
Minnesota	1	X					
Missouri	0						
Nebraska	0						
North Dakota	52		X				
South Dakota	4		X				
SOUTH ATLANTIC	11,805						
Delaware	0						
District of Columbia	298		X				
Florida	1,034		X				
Georgia	826		X				
Maryland	8,346	X	X	X			
North Carolina	2,484		X	X			
South Carolina	693	X	X	X	X		
Virginia	144		X				
West Virginia	0						
EAST SOUTH CENTRAL	723						
Alabama	282		X				
Kentucky	441		X				
Mississippi	0						
Tennessee	0						
WEST SOUTH CENTRAL	4,353						
Arkansas	15		X	X			VLM
Louisiana	1,627		X	X			
Oklahoma	0						
Texas	2,711		X	X			
MOUNTAIN	790						
Arizona	370		X				
Colorado	0						
Idaho	0						
Montana	420	X	X	X	X	X	Toxocara, Echinococcus, Cysticercosis
Nevada	0						
New Mexico	0						
Utah	0						
Wyoming	0						
PACIFIC	2,553						
Alaska	14		X				
California	2,529	X	X	X			Miscellaneous
Hawaii	10		X				
Oregon	0						
Washington	0						
TERRITORIES	0						
Guam	0						
Puerto Rico	0						
Virgin Islands	0						

* New York did not report for fiscal year 1990.

TABLE 26. IMMUNOLOGY-Viral and Rickettsial Serology Specimens

Lab & Region	Number of Specimens	Type of specimen					Other
		Respiratory	CNS	STD (Includes Herpes)	Exanthem		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
TOTAL	1,030,259	39	37	42	41		
AVERAGE	21,820						
NEW ENGLAND	59,290						
Connecticut	24,577	X	X	X	X		
Massachusetts	12,570	X	X	X	X	Babesia, unknown fever, Psittacosis, CMV, Parvo virus, measles, EBV, Rickettsia, Rubella, Hepatitis A/B	
Maine	7,459	X	X	X	X	EBV, mycoplasma, CNV, CNS screen, Herpes Simplex Virus, mumps, other respiratory screen, Rubella, Rubeola, VZ, Lyme, Influenza A, B	
New Hampshire	3,018	X	X	X	X		
Rhode Island	8,058					Sera	
Vermont	5,610	X	X	X	X	Hepatitis	
MIDDLE ATLANTIC	18,508						
New Jersey	18,107	X	X	X	X		
New York*							
Pennsylvania	401	X	X		X		
EAST NORTH CENTRAL	158,252						
Illinois	304			X	X		
Indiana	3,433	X	X	X	X	Hepatitis	
Michigan	20,324	X	X	X	X	CMV, Rocky Mountain Spotted fever group, Hepatitis B surface Ag, anti HBSAg, anti HBCAg, LCM, mumps	
Ohio	11,928	X		X	X		
Wisconsin	120,265	X	X	X	X	Rubella, Hepatitis, Epstein-Barr Virus, Cytomegalovirus	
WEST NORTH CENTRAL	45,579						
Iowa	12,385	X	X	X	X	Chlamydia GP	
Kansas	8,874	X	X	X	X		
Minnesota	1,811	X	X	X	X	Transplant	
Missouri	7,648	X	X	X	X		
Nebraska	3,195					Rubella (premarital, prenatal, diagnostic)	
North Dakota	3,494	X	X	X	X	Rubella Immune status	
South Dakota	10,174	X	X	X	X	Hepatitis B	
SOUTH ATLANTIC	201,134						
Delaware	1,093	X		X			
District of Columbia	0						
Florida	87,786	X	X	X	X	Hepatitis A, Hepatitis B surface antigen, Hepatitis BC antibody	
Georgia	21,028	X	X	X	X	Hepatitis	
Maryland	5,229					Rocky Mountain Spotted fever	
North Carolina	58,303	X	X	X	X		
South Carolina	18,195	X	X	X	X	Rubella, Rocky Mountain Spotted fever	
Virginia	17,819	X	X	X	X	Hepatitis	
West Virginia	13,901			X		Rubella, Arbovirus, Herpes Simplex Virus, Hepatitis A & B	
EAST SOUTH CENTRAL	48,461						
Alabama	4,746	X	X	X	X	Enteroviruses, CMV, serum	
Kentucky	23,463	X	X	X	X	Hepatitis B surf. antibody/antigen, hepatitis B anti-core, Rubella, other virology, IFA Rickettsia	
Mississippi	0						
Tennessee	20,252	X	X	X	X		
WEST SOUTH CENTRAL	232,102						
Arkansas	373	X	X	X	X		
Louisiana	119,119	X	X	X	X		
Oklahoma	7,565				X		
Texas	105,045	X	X	X	X		
MOUNTAIN	63,348						
Arizona	25,490	X	X	X	X	Enteric	
Colorado	4,269	X	X	X	X		
Idaho	338	X	X	X	X		
Montana	10,331	X	X	X	X	Chronic fatigue	
Nevada	9,830			X			
New Mexico	7,834	X	X	X	X		
Utah	0						
Wyoming	5,456			X	X		
PACIFIC	205,585						
Alaska	7,333	X	X	X	X	Hepatitis	
California	154,837	X	X	X	X	Arbovirus, HTLV I & II, Q fever, Hepatitis, Rocky Mountain Spotted fever, Rubella pre-marital	
Hawaii	41,384	X	X	X	X		
Oregon	1,348	X	X	X	X		
Washington	683	X	X	X	X	GI, cardiovascular	
TERRITORIES	0						
Guam	0						
Puerto Rico	0						
Virgin Islands	0						

* New York did not report for fiscal year 1990.

TABLE 27. IMMUNOLOGY-HIV Serology Specimens

Lab & Region (1)	Number of Specimens (2)	Type of procedure			
		EIA (3)	IFA (4)	Western Blot (5)	Other (6)
TOTAL	2,895,368	49	19	46	
AVERAGE	57,907				
NEW ENGLAND	134,491				
Connecticut	63,263	X	X	X	
Massachusetts	29,778	X	X	X	
Maine	7,792	X		X	
New Hampshire	8,623	X	X	X	
Rhode Island	23,854	X	X	X	
Vermont	1,183	X	X	X	
MIDDLE ATLANTIC	91,940				
New Jersey	91,270	X	X	X	
New York*					
Pennsylvania	670			X	
EAST NORTH CENTRAL	409,398				
Illinois	18,003	X		X	
Indiana	14,244	X		X	
Michigan	226,450	X	X	X	Blood spot EIA, blood spot Western Blot
Ohio	64,308	X		X	
Wisconsin	88,393	X		X	
WEST NORTH CENTRAL	201,607				
Iowa	51,784	X	X	X	
Kansas	13,867	X	X	X	
Minnesota	0				
Missouri	124,564	X		X	
Nebraska	4,324	X		X	
North Dakota	4,225	X	X		
South Dakota	2,843	X			
SOUTH ATLANTIC	718,197				
Delaware	9,111	X		X	
District of Columbia	46,757	X		X	
Florida	249,329	X	X	X	
Georgia	72,084	X		X	
Maryland	118,015	X	X	X	Antigen
North Carolina	28,528	X		X	
South Carolina	58,994	X	X	X	Antigen, Beta 2
Virginia	121,167	X		X	
West Virginia	14,212	X		X	Miniblot
EAST SOUTH CENTRAL	217,370				
Alabama	33,822	X		X	
Kentucky	8,112	X		X	
Mississippi	61,176	X		X	P24 antigen
Tennessee	114,260	X		X	
WEST SOUTH CENTRAL	294,552				
Arkansas	57,468	X	X	X	
Louisiana	1,640	X		X	
Oklahoma	65,073	X		X	
Texas	170,371	X		X	Neonate screen EIA, neonate screen Western Blot
MOUNTAIN	281,443				
Arizona	22,564	X		X	
Colorado	150,059	X		X	GENIE, RIBA
Idaho	9,689	X	X		
Montana	17,835	X		X	
Nevada	10,519	X		X	
New Mexico	17,128	X	X	X	
Utah	60,854	X		X	
Wyoming	3,215	X		X	
PACIFIC	545,396				
Alaska	8,669	X	X		
California	333,736	X	X	X	RIPA
Hawaii	25,218	X		X	
Oregon	91,469	X	X	X	
Washington	86,301	X		X	
TERRITORIES	974				
Guam	974	X			
Puerto Rico	0				
Virgin Islands	0				

* New York did not report for fiscal year 1990.

TABLE 28. IMMUNOLOGY-Other Serology Specimens

Lab & Region	Number of Specimens	Disease/Type of procedure
(1)	(2)	(3)
TOTAL	288,980	
AVERAGE	11,958	
NEW ENGLAND	11,629	
Connecticut	0	
Massachusetts	11,629	Lyme disease-EIA, Western blot (IgG & IgM), capture EIA
Maine	0	
New Hampshire	0	
Rhode Island	0	
Vermont	0	
MIDDLE ATLANTIC	0	
New Jersey	0	
New York*	0	
Pennsylvania	0	
EAST NORTH CENTRAL	44,948	
Illinois	3,502	Arboviruses, arboe-human-Hemagglutination Inhibition
Indiana	0	
Michigan	12,279	Legionella-HEM agglutination; Pertussis-EIA, serum agglutination; Toxoplasmosis, Toxoplasmosis (IgM), Lyme disease (serum & tick)-EIA
Ohio	0	
Wisconsin	29,165	Anti-thyroid antibodies, thyroglobulin microsomal-Boyden's passive haemagglutination, AFP-EIA; anti-DNA, ENA-IFA; anti-ENA-ouchestony; cell agglutination-temp./filter relationship; cell structure markers-flow cytometry, AFP-EIA
WEST NORTH CENTRAL	2,036	
Iowa	0	
Kansas	0	
Minnesota	1,335	Rubella-EIA, IgG, IgM
Missouri	0	
Nebraska	505	Hepatitis-EIA
North Dakota	40	Lyme disease-IFA
South Dakota	156	HTLV-1-EIA
SOUTH ATLANTIC	78,881	
Delaware	1,387	Rubella-Rubascan
District of Columbia	9,598	Herpes, Rubella, CMV, Hepatitis B, measles, VZV-EIA
Florida	0	
Georgia	67,400	Rubella-latex agglutination (Immunity screening only)
Maryland	7,475	CMV-EIA; HSV-ELISA; HTLV-1-EIA, IFA, WB
North Carolina	0	
South Carolina	1,021	Lyme-EIA
Virginia	0	
West Virginia	0	
EAST SOUTH CENTRAL	102,123	
Alabama	27,725	Rubella-EIA, Tyne, Legionnaire's, Q fever-FA
Kentucky	0	
Mississippi	74,211	Hepatitis, pregnancy, Lyme, Rubella, measles-EIA
Tennessee	187	Legionella-IFA
WEST SOUTH CENTRAL	15,047	
Arkansas	5	Infectious mononucleosis-hetrophile, monospot
Louisiana	0	
Oklahoma	5,682	Hepatitis-EIA
Texas	9,350	Lyme disease-EIA
MOUNTAIN	17,433	
Arizona	0	
Colorado	0	
Idaho	0	
Montana	6,234	Hepatitis-HBs AG (EIA), anti-HBs (RIA), anti-HAV (EIA), IgM
Nevada	3,782	Rubella- Latex agglutination; Rubella-Indirect FA; Hepatitis B-EIA
New Mexico	0	
Utah	7,417	Rubella-latex agglutination, IFA; Hepatitis-EIA; Western Equine/St. Louis Encephalitis-EIA, hemagglutination inhibition; Rocky Mountain Spotted fever, measles, mumps, Lyme, Varicella-IFA
Wyoming	0	
PACIFIC	16,885	
Alaska	4,888	Rubella-EIA, Rubazyme
California	0	
Hawaii	0	
Oregon	12,019	Rubella-latex agglutination; Hepatitis A & B-EIA
Washington	0	
TERRITORIES	0	
Guam	0	
Puerto Rico	0	
Virgin Islands	0	

* New York did not report for fiscal year 1990.

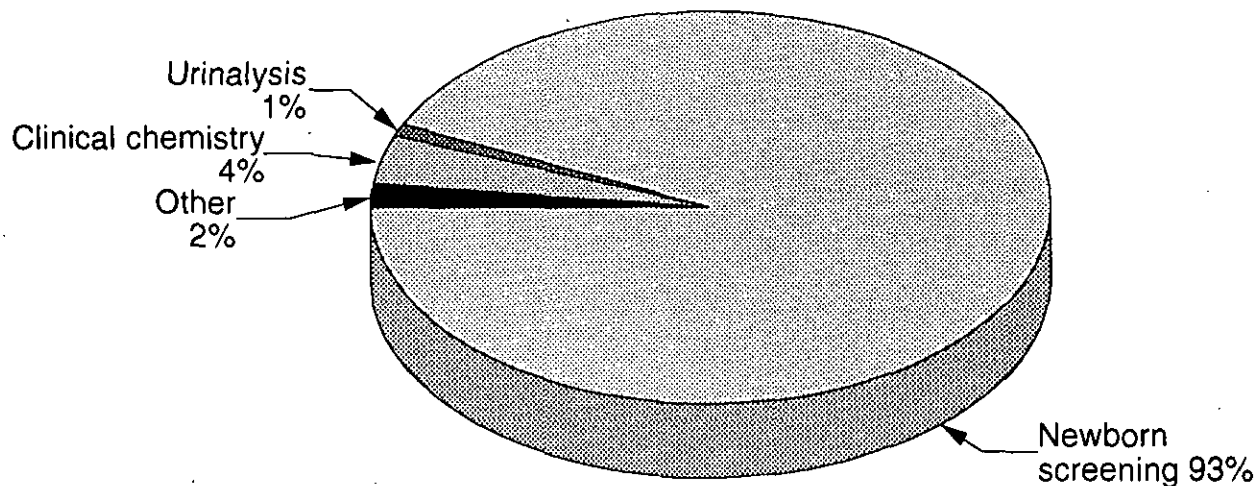
TABLE 29. HEMATOLOGY/IMMUNOHEMATOLOGY SPECIMENS

Lab & Region (1)	Total Hematology/Immunochemistry Specimens (2)	Type of specimen	
		Hematology (3)	Immunochemistry (4)
TOTAL	777,842	331,038	311,853
AVERAGE	31,118	18,391	18,344
NEW ENGLAND	15	15	0
Connecticut	15	15	0
Massachusetts	0	0	0
Maine	0	0	0
New Hampshire	0	0	0
Rhode Island	0	0	0
Vermont	0	0	0
MIDDLE ATLANTIC	30	30	0
New Jersey	0	0	0
New York*			
Pennsylvania	30	30	0
EAST NORTH CENTRAL	39,975	0	39,975
Illinois	0	0	0
Indiana	0	0	0
Michigan	0	0	0
Ohio	0	0	0
Wisconsin	39,975	0	39,975
WEST NORTH CENTRAL	13,017	13,017	0
Iowa	0	0	0
Kansas	0	0	0
Minnesota	0	0	0
Missouri	8,274	8,274	0
Nebraska	0	0	0
North Dakota	0	0	0
South Dakota	4,743	4,743	0
SOUTH ATLANTIC	384,453	232,362	132,091
Delaware	11,085	10,142	943
District of Columbia	81,409	50,844	10,785
Florida	81,005	44,534	18,471
Georgia	18,045	0	18,045
Maryland	148,667	123,897	22,770
North Carolina	22,212	666	21,848
South Carolina	28,321	2,579	25,742
Virginia	17,709	0	17,709
West Virginia	0	0	0
EAST SOUTH CENTRAL	98,692	19,590	77,102
Alabama	41,948	2,835	39,113
Kentucky	7,982	0	7,982
Mississippi	48,762	18,755	30,007
Tennessee	0	0	0
WEST SOUTH CENTRAL	75,415	23,578	51,837
Arkansas	7,794	10	7,784
Louisiana	3,459	0	3,459
Oklahoma	8,175	0	8,175
Texas	57,987	23,568	34,419
MOUNTAIN	558	558	0
Arizona	0	0	0
Colorado	0	0	0
Idaho	0	0	0
Montana	0	0	0
Nevada	0	0	0
New Mexico	0	0	0
Utah	0	0	0
Wyoming	558	558	0
PACIFIC	135,051	NA	NA
Alaska	0	0	0
California	135,051	NA	NA
Hawaii	0	0	0
Oregon	0	0	0
Washington	0	0	0
TERRITORIES	52,736	41,888	10,848
Guam	4,788	4,788	0
Puerto Rico	2,217	2,217	0
Virgin Islands	45,733	34,885	10,848

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

FIGURE 10.
STATE PUBLIC HEALTH LABORATORY CLINICAL
CHEMISTRY SPECIMENS, BY CATEGORY, FISCAL YEAR 1990



TOTAL: 18.5 MILLION SPECIMENS

TABLE 30. CLINICAL CHEMISTRY SPECIMENS

Lab & Region (1)	Total Clinical Chemistry Specimens (2)	Type of specimen			
		Clinical Chemistry (3)	Urinalysis (4)	Newborn Screening (5)	Other Clinical Chemistry (6)
TOTAL	18,480,739	790,388	92,500	17,207,795	390,078
AVERAGE	401,755	35,928	7,115	419,702	24,380
NEW ENGLAND	835,148	698	0	834,084	384
Connecticut	166,836	698	0	165,774	384
Massachusetts	619,412	0	0	619,412	0
Maine	17,501	0	0	17,501	0
New Hampshire	0	0	0	0	0
Rhode Island	31,397	0	0	31,397	0
Vermont	0	0	0	0	0
MIDDLE ATLANTIC	641,756	878	10	640,868	0
New Jersey	129,842	8	0	129,836	0
New York*					
Pennsylvania	411,914	872	10	411,032	0
EAST NORTH CENTRAL	4,048,417	8,458	0	4,038,221	3,740
Illinois	1,449,894	0	0	1,449,894	0
Indiana	0	0	0	0	0
Michigan	1,030,513	0	0	1,030,513	0
Ohio	898,622	0	0	898,622	0
Wisconsin	669,388	8,458	0	667,192	3,740
WEST NORTH CENTRAL	1,341,048	9,410	1,719	1,311,890	18,029
Iowa	366,380	0	0	349,072	17,308
Kansas	148,455	0	0	148,455	0
Minnesota	280,048	0	0	280,048	0
Missouri	504,080	0	0	504,080	0
Nebraska	11,392	0	0	11,392	0
North Dakota	18,917	0	0	18,843	74
South Dakota	11,778	9,410	1,719	0	647
SOUTH ATLANTIC	3,498,819	478,702	86,931	2,898,814	58,372
Delaware	8,080	4,551	3,509	0	0
District of Columbia	63,804	28,131	27,511	10,162	0
Florida	535,487	186,153	879	339,986	28,469
Georgia	261,025	27,445	545	233,035	0
Maryland	1,653,186	230,329	34,297	1,398,257	283
North Carolina	525,872	7,037	0	518,835	0
South Carolina	219,707	13,187	190	191,312	15,018
Virginia	133,334	1,869	0	120,176	11,290
West Virginia	98,184	0	0	98,852	1,312
EAST SOUTH CENTRAL	881,753	138,523	2,190	720,848	192
Alabama	380,901	21,447	2,190	357,072	192
Kentucky	258,971	14,844	0	244,127	0
Mississippi	136,208	102,232	0	33,976	0
Tennessee	85,673	0	0	85,673	0
WEST SOUTH CENTRAL	3,338,740	24,280	0	3,303,190	11,270
Arkansas	138,585	1,958	0	125,359	11,270
Louisiana	190,522	2,018	0	188,504	0
Oklahoma	106,987	0	0	106,987	0
Texas	2,902,646	20,308	0	2,882,340	0
MOUNTAIN	1,595,736	0	8,632	1,586,781	323
Arizona	0	0	0	0	0
Colorado	1,253,295	0	0	1,253,295	0
Idaho	8,384	0	8,157	227	0
Montana	64,996	0	0	64,996	0
Nevada	798	0	475	0	323
New Mexico	122,050	0	0	122,050	0
Utah	146,313	0	0	146,313	0
Wyoming	0	0	0	0	0
PACIFIC	2,287,864	0	0	1,973,289	294,575
Alaska	0	0	0	0	0
California	886,000	0	0	596,000	290,000
Hawaii	0	0	0	0	0
Oregon	1,248,817	0	0	1,248,817	0
Washington	135,047	0	0	130,472	4,575
TERRITORIES	151,880	131,421	13,018	2,010	5,211
Guam	2,989	443	2,546	0	0
Puerto Rico	3,514	3,514	0	0	0
Virgin Islands	145,157	127,464	10,472	2,010	5,211

* New York did not report for fiscal year 1990.

TABLE 31. CLINICAL CHEMISTRY—Clinical Chemistry Specimens and Types of Tests

Lab & Region (1)	Number of Specimens (2)	Type of test												
		Glucose (3)	Cholesterol (4)	BUN (5)	Uric Acid (6)	Trans-aminases (7)	Alkaline Phosphatase (8)	Total Proteins (9)	Serum Iron (10)	Iron Binding Capacity (11)	Triglycerides (12)	Lactic Acid (13)	Bilirubin (14)	T4, T3, T3 Uptake (15)
TOTAL	790,368	18	14	15	16	14	13	10	8	7	13	1	15	9
AVERAGE	35,926													
NEW ENGLAND	698													
Connecticut	698													
Massachusetts	0													
Maine	0													
New Hampshire	0													
Rhode Island	0													
Vermont	0													
MIDDLE ATLANTIC	878													
New Jersey	6													
New York*														
Pennsylvania	872	X	X	X	X						X			
EAST NORTH CENTRAL	8,456													
Illinois	0													
Indiana	0													
Michigan	0													
Ohio	0													
Wisconsin	8,456	X	X	X	X	X	X	X	X	X	X		X	X
WEST NORTH CENTRAL	9,410													
Iowa	0													
Kansas	0													
Minnesota	0													
Missouri	0													
Nebraska	0													
North Dakota	0													
South Dakota	9,410	X	X	X	X	X	X	X	X					X
SOUTH ATLANTIC	476,702													
Delaware	4,551	X		X										
District of Columbia	26,131	X	X		X			X	X	X	X		X	X
Florida	166,153	X	X	X	X	X	X	X	X	X	X		X	X
Georgia	27,445	X	X		X								X	
Maryland	230,329	X	X	X	X	X	X	X	X	X	X	X	X	X
North Carolina	7,037								X	X	X			X
South Carolina	13,187	X	X	X	X	X	X	X			X		X	
Virginia	1,969					X							X	
West Virginia	0													
EAST SOUTH CENTRAL	138,523													
Alabama	21,447	X	X	X	X	X	X	X	X	X	X		X	X
Kentucky	14,844	X	X	X	X	X	X	X			X		X	X
Mississippi	102,232	X	X	X	X	X	X				X		X	
Tennessee	0													
WEST SOUTH CENTRAL	24,280													
Arkansas	1,956	X		X	X	X	X						X	
Louisiana	2,018	X		X	X	X	X						X	
Oklahoma	0													
Texas	20,306	X												
MOUNTAIN	0													
Arizona	0													
Colorado	0													
Idaho	0													
Montana	0													
Nevada	0													
New Mexico	0													
Utah	0													
Wyoming	0													
PACIFIC	0													
Alaska	0													
California	0													
Hawaii	0													
Oregon	0													
Washington	0													
TERRITORIES	131,421													
Guam	443	X	X	X	X	X	X	X			X		X	X
Puerto Rico	3,514	X	X	X	X	X	X	X			X		X	X
Virgin Islands	127,464	X	X	X	X	X	X		X	X	X		X	

* New York did not report for fiscal year 1990.

TABLE 31. CLINICAL CHEMISTRY-Clinical Chemistry Specimens and Types of Tests (continued)

Lab & Region (16)	Number of Specimens (17)	Type of test										Other (27)
		Sodium (18)	Potassium (19)	Phosphorous (20)	Calcium (21)	Creatinine (22)	Acid Phosphatase (23)	Albumin (24)	Chloride (25)	LDH (26)		
TOTAL	790,368	13	13	8	9	16	3	9	12	12		
AVERAGE	35,926											
NEW ENGLAND	698											
Connecticut	698										Tay Sachs, serum, leukocytes	
Massachusetts	0											
Maine	0											
New Hampshire	0											
Rhode Island	0											
Vermont	0											
MIDDLE ATLANTIC	878											
New Jersey	6					X						
New York*	0											
Pennsylvania	872										National cholesterol reference method	
EAST NORTH CENTRAL	8,456											
Illinois	0											
Indiana	0											
Michigan	0											
Ohio	0											
Wisconsin	8,456	X	X	X	X	X		X	X	X	Amylase, HDL, chol., magnesium, urine calcium, creat. prot., uric acid	
WEST NORTH CENTRAL	9,410											
Iowa	0											
Kansas	0											
Minnesota	0											
Missouri	0											
Nebraska	0											
North Dakota	0											
South Dakota	9,410	X	X	X	X	X		X	X	X	Amylase, CPK, GGTP, osmolality, monotest, lithium	
SOUTH ATLANTIC	476,702											
Delaware	4,551	X	X			X			X		Ketones	
District of Columbia	26,131									X		
Florida	166,153	X	X		X	X	X	X	X	X		
Georgia	27,445	X	X			X					SCOT, SGPT	
Maryland	230,329	X	X	X	X	X	X	X	X	X	Pregnancy (serum), A/G ratio, CO2, venipunctures, globulin, CPK, FEP, ferritin, GGTP, glycohemoglobin, HDL, LDL, magnesium, TSH, Hemoglobin alc.	
North Carolina	7,037											
South Carolina	13,187	X	X	X	X	X		X	X	X	Cholinesterase, creatine kinase, Gamma glutamyl transpeptidase	
Virginia	1,869											
West Virginia	0											
EAST SOUTH CENTRAL	138,523											
Alabama	21,447	X	X	X	X	X		X	X	X	Bicarbonate, phenobarbital, phenytoin, theophylline, GGTP	
Kentucky	14,844	X	X	X	X	X		X	X	X	Lithium, GGTP, amylase, CPK, HDL	
Mississippi	102,232	X	X			X			X	X	Anticonvulsants, HDL	
Tennessee	0											
WEST SOUTH CENTRAL	24,280											
Arkansas	1,956					X						
Louisiana	2,018					X						
Oklahoma	0											
Texas	20,306											
MOUNTAIN	0											
Arizona	0											
Colorado	0											
Idaho	0											
Montana	0											
Nevada	0											
New Mexico	0											
Utah	0											
Wyoming	0											
PACIFIC	0											
Alaska	0											
California	0											
Hawaii	0											
Oregon	0											
Washington	0											
TERRITORIES	131,421											
Guam	443	X	X			X			X	X		
Puerto Rico	3,514	X	X	X	X	X	X	X	X	X	Amylase, lithium, phenytoin, phenobarbital, primidone, carbamazepine, ethosuximide, valproic acid, theophylline	
Virgin Islands	127,464	X	X	X	X	X		X	X	X		

* New York did not report for fiscal year 1990.

TABLE 32. CLINICAL CHEMISTRY-Urinalysis Specimens

Lab & Region (1)	Number of Specimens (2)	Type of procedure			
		Routine (3)	Microscopic (4)	Pregnancy Tests (5)	Other (6)
TOTAL	92,600	13	13	7	
AVERAGE	7,116				
NEW ENGLAND	0				
Connecticut	0				
Massachusetts	0				
Maine	0				
New Hampshire	0				
Rhode Island	0				
Vermont	0				
MIDDLE ATLANTIC	10				
New Jersey	0				
New York*					
Pennsylvania	10	X	X		
EAST NORTH CENTRAL	0				
Illinois	0				
Indiana	0				
Michigan	0				
Ohio	0				
Wisconsin	0				
WEST NORTH CENTRAL	1,719				
Iowa	0				
Kansas	0				
Minnesota	0				
Missouri	0				
Nebraska	0				
North Dakota	0				
South Dakota	1,719	X	X	X	
SOUTH ATLANTIC	66,931				
Delaware	3,509	X	X	X	
District of Columbia	27,511	X	X	X	
Florida	879	X	X		
Georgia	545	X	X		
Maryland	34,297	X	X	X	Specific gravity
North Carolina	0				
South Carolina	190	X	X		
Virginia	0				
West Virginia	0				
EAST SOUTH CENTRAL	2,190				
Alabama	2,190	X	X		
Kentucky	0				
Mississippi	0				
Tennessee	0				
WEST SOUTH CENTRAL	0				
Arkansas	0				
Louisiana	0				
Oklahoma	0				
Texas	0				
MOUNTAIN	8,632				
Arizona	0				
Colorado	0				
Idaho	8,157	X	X	X	
Montana	0				
Nevada	475	X	X		
New Mexico	0				
Utah	0				
Wyoming	0				
PACIFIC	0				
Alaska	0				
California	0				
Hawaii	0				
Oregon	0				
Washington	0				
TERRITORIES	13,018				
Guam	2,548	X	X	X	
Puerto Rico	0				
Virgin Islands	10,472	X	X	X	

* New York did not report for fiscal year 1990.

TABLE 33. CLINICAL CHEMISTRY-Newborn Screening

Lab & Region (1)	Number of Specimens (2)	Type of assay						
		PKU (3)	Tyrosinemia (4)	Galactosemia (5)	MSUD (6)	Hypothyroidism (7)	Amino Acid Chromatography (8)	Homocystinuria (9)
TOTAL	17,207,795	37	7	25	10	36	6	8
AVERAGE	419,702							
NEW ENGLAND	834,084							
Connecticut	165,774	X		X		X		
Massachusetts	619,412	X		X	X	X	X	X
Maine	17,501	X		X		X		X
New Hampshire	0							
Rhode Island	31,387	X	X				X	
Vermont	0							
MIDDLE ATLANTIC	540,868							
New Jersey	129,836	X	X	X		X		
New York*								
Pennsylvania	411,032	X				X		
EAST NORTH CENTRAL	4,036,221							
Illinois	1,449,894	X		X		X		
Indiana	0							
Michigan	1,030,513	X		X	X	X		
Ohio	898,622	X		X		X		X
Wisconsin	657,192	X		X	X	X	X	
WEST NORTH CENTRAL	1,311,890							
Iowa	349,072	X		X	X	X		
Kansas	148,455	X		X		X		
Minnesota	280,049	X		X		X		
Missouri	504,080	X		X		X		
Nebraska	11,392							
North Dakota	18,843	X				X		
South Dakota	0							
SOUTH ATLANTIC	2,898,614							
Delaware	0							
District of Columbia	10,162					X		
Florida	339,986	X		X		X		
Georgia	233,035	X	X	X	X	X		X
Maryland	1,388,257	X	X	X	X	X		X
North Carolina	518,835	X		X		X		
South Carolina	191,312	X				X		
Virginia	120,175	X		X	X	X		X
West Virginia	96,852	X		X		X		
EAST SOUTH CENTRAL	720,848							
Alabama	367,072	X				X	X	
Kentucky	244,127	X		X		X		
Mississippi	33,976							
Tennessee	85,673	X				X		
WEST SOUTH CENTRAL	3,303,190							
Arkansas	125,359	X				X		
Louisiana	188,504	X				X		
Oklahoma	106,987	X				X		
Texas	2,882,340	X	X			X		
MOUNTAIN	1,586,781							
Arizona	0							
Colorado	1,253,295	X		X	X	X	X	X
Idaho	227	X						
Montana	64,896	X	X	X		X		
Nevada	0							
New Mexico	122,050	X		X	X	X		
Utah	148,313	X		X		X		
Wyoming	0							
PACIFIC	1,973,289							
Alaska	0							
California	598,000	X		X		X		
Hawaii	0							
Oregon	1,246,817	X	X	X	X	X		X
Washington	130,472	X				X		
TERRITORIES	2,010							
Guam	0							
Puerto Rico	0							
Virgin Islands	2,010							

* New York did not report for fiscal year 1990.

TABLE 33. CLINICAL CHEMISTRY-Newborn Screening (continued)

Lab & Region (10)	Number of Specimens (11)	Type of assay					Other (18)
		Maternal PKU (12)	Amino Acid Disorders (13)	Hemoglobinopathy (14)	Cystic Fibrosis (15)		
TOTAL	17,207,795	6	1	32	3		
AVERAGE	419,702						
NEW ENGLAND	834,084						
Connecticut	185,774			X			
Massachusetts	619,412			X			Congenital Toxoplasmosis, Congenital adrenal hyperplasia
Maine	17,501						Leucine
New Hampshire	0						
Rhode Island	31,397			X			
Vermont	0						
MIDDLE ATLANTIC	540,888						
New Jersey	129,836			X			
New York*	0						
Pennsylvania	411,032	X		X			Plasmas: phenylalanine, tyrosine, serum: T4, TSH, FT4, TBG
EAST NORTH CENTRAL	4,036,221						
Illinois	1,449,894			X	X		Biotinidase deficiency, congenital adrenal hyperplasia
Indiana	0						
Michigan	1,030,513			X			Biotinidase deficiency
Ohio	898,622			X			
Wisconsin	657,192			X	X		
WEST NORTH CENTRAL	1,311,890						
Iowa	349,072			X			Congenital adrenal hyperplasia
Kansas	146,455			X			
Minnesota	280,048			X			
Missouri	504,080	X		X			
Nebraska	11,392						Biotinidase
North Dakota	18,843						
South Dakota	0						
SOUTH ATLANTIC	2,698,614						
Delaware	0						
District of Columbia	10,162			X			
Florida	339,986			X			
Georgia	233,035			X			Congenital adrenal hyperplasia
Maryland	1,388,257	X	X	X			
North Carolina	518,835	X		X			Congenital adrenal hyperplasia
South Carolina	191,312			X			
Virginia	120,175	X		X			Biotinidase, sickle cell
West Virginia	96,852			X			
EAST SOUTH CENTRAL	720,848						
Alabama	357,072	X		X			
Kentucky	244,127			X			
Mississippi	33,976			X			
Tennessee	85,873			X			
WEST SOUTH CENTRAL	3,303,190						
Arkansas	125,359			X			
Louisiana	188,504			X			
Oklahoma	106,987			X			
Texas	2,882,340			X			Congenital adrenal hyperplasia
MOUNTAIN	1,586,781						
Arizona	0						
Colorado	1,253,295			X	X		Biotinidase deficiency
Idaho	227						
Montana	64,896						
Nevada	0						
New Mexico	122,050						Serum phenylalanine
Utah	148,313						
Wyoming	0						
PACIFIC	1,973,289						
Alaska	0						
California	596,000			X			
Hawaii	0						
Oregon	1,246,817						Congenital adrenal hyperplasia, biotinidase
Washington	130,472						Congenital adrenal hyperplasia
TERRITORIES	2,010						
Guam	0						
Puerto Rico	0						
Virgin Islands	2,010			X			

* New York did not report for fiscal year 1990.

TABLE 34. CLINICAL CHEMISTRY-Hemoglobinopathy Specimens

Lab & Region	Number of Specimens	Type of procedure							
		Hemoglobin Cellulose Acetate Electrophoresis	Citrate Agar Electrophoresis	Solubility Testing	Fetal Hemoglobin Assay	Hemoglobin A2 Quantitation	Densitometry	HPLC	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
TOTAL	2,688,826	14	17	8	5	6	5	6	
AVERAGE	86,736								
NEW ENGLAND	49,992								
Connecticut	5,782	X	X		X	X			Isoelectric focusing
Massachusetts	39,859		X						Isoelectric focusing
Maine	0								
New Hampshire	0								
Rhode Island	4,351	X	X	X					
Vermont	0								
MIDDLE ATLANTIC	38,702								
New Jersey	30,303		X						Isoelectric focusing
New York*									
Pennsylvania	8,399	X	X						Isoelectric focusing
EAST NORTH CENTRAL	409,519								
Illinois	241,649						X		Agarose agar electrophoresis
Indiana	0								
Michigan	166,806								Isoelectric focusing
Ohio	573	X	X	X					
Wisconsin	491								Isoelectric focusing
WEST NORTH CENTRAL	222,392								
Iowa	51,586							X	Isoelectric focusing
Kansas	263						X		Isoelectric focusing
Minnesota	69,727								Isoelectric focusing
Missouri	100,816								Isoelectric focusing
Nebraska	0								
North Dakota	0								
South Dakota	0								
SOUTH ATLANTIC	653,257								
Delaware	0								
District of Columbia	5,081	X	X	X	X	X	X		
Florida	314,521		X						Isoelectric focusing
Georgia	69,497	X	X	X		X		X	Hb Bart's quant., isoelectric focusing electrophoresis
Maryland	130,453	X	X	X	X	X	X		Isoelectric focusing
North Carolina	69,410	X	X	X	X	X	X		
South Carolina	62,815	X			X	X		X	
Virginia	NA							X	Isoelectric focusing
West Virginia	1,480								Isoelectric focusing
EAST SOUTH CENTRAL	192,744								
Alabama	62,879	X	X					X	
Kentucky	10,873								Isoelectric focusing
Mississippi	33,976	X	X						Isoelectric focusing
Tennessee	85,016								Isoelectric focusing
WEST SOUTH CENTRAL	660,308								
Arkansas	41,772		X						Electro focusing
Louisiana	36,067	X	X						IEF
Oklahoma	6,001	X	X	X					
Texas	576,468		X						Isoelectric focusing
MOUNTAIN	161,902								
Arizona	0								
Colorado	161,531								Isoelectric focusing
Idaho	0								
Montana	0								
Nevada	0								
New Mexico	371								Isoelectric focusing, Hb barts quantitation
Utah	0								
Wyoming	0								
PACIFIC	298,000								
Alaska	0								
California	298,000							X	
Hawaii	0								
Oregon	0								
Washington	0								
TERRITORIES	2,010								
Guam	0								
Puerto Rico	0								
Virgin Islands	2,010	X		X					

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available

TABLE 35. CLINICAL CHEMISTRY-Other Clinical Chemistry Specimens

Lab & Region (1)	Number of Specimens (2)	Specimen/Type of procedure (3)
TOTAL	390,078	
AVERAGE	24,380	
NEW ENGLAND	364	
Connecticut	364	Serum phenylalanine-McCaman & Robbins; serum tyrosine-Underfrland & Cooper
Massachusetts	0	
Maine	0	
New Hampshire	0	
Rhode Island	0	
Vermont	0	
MIDDLE ATLANTIC	0	
New Jersey	0	
New York*		
Pennsylvania	0	
EAST NORTH CENTRAL	3,740	
Illinois	0	
Indiana	0	
Michigan	0	
Ohio	0	
Wisconsin	3,740	IgG, IgA, IgM-Immunoglobulin, nephelometry; C3, C4, PFB-complement, nephelometry; alpha 1-antitrypsin, nephelometry; haptoglobin, C-reactive protein, rheumatoid factor-nephelometry; beta 2 microglobulin, IgE-EIA
WEST NORTH CENTRAL	18,029	
Iowa	17,308	AFP, Estradiol-RIA; hCG-EIA
Kansas	0	
Minnesota	0	
Missouri	0	
Nebraska	0	
North Dakota	74	Serum phenylalanine-McCaman Robbins
South Dakota	647	Occult blood-biochemical
SOUTH ATLANTIC	56,372	
Delaware	0	
District of Columbia	0	
Florida	28,469	Hemoglobinopathy (children 2-12)-cellulose acetate, citrate agar, solubility, Hb Ab A2 quantitation
Georgia	0	
Maryland	293	Feces-WBC, qualitative fat, occult blood, hamocult slide
North Carolina	0	
South Carolina	15,018	Adult hemoglobinopathy-cellulose acetate, HPLC; AFP, Thyroid panels-RIA
Virginia	11,290	Adult hemoglobinopathies-HPLC, isoelectric focusing
West Virginia	1,312	Adult hemoglobinopathies-solubility testing, isoelectric focusing
EAST SOUTH CENTRAL	192	
Alabama	192	Whole blood (lead)-AA, EP
Kentucky	0	
Mississippi	0	
Tennessee	0	
WEST SOUTH CENTRAL	11,270	
Arkansas	11,270	Sickle cell (non-neonatal)-Electro Focusing
Louisiana	0	
Oklahoma	0	
Texas	0	
MOUNTAIN	323	
Arizona	0	
Colorado	0	
Idaho	0	
Montana	0	
Nevada	323	Newborn screening-Heel stick; Sickle cell solubility-Sicklequik
New Mexico	0	
Utah	0	
Wyoming	0	
PACIFIC	294,575	
Alaska	0	
California	290,000	AFP (maternal serum)-EIA
Hawaii	0	
Oregon	0	
Washington	4,575	Hemoglobinopathy specimens (not newborn)-hemoglobin cellulose acetate electrophoresis, citrate agar electrophoresis, solubility testing
TERRITORIES	5,211	
Guam	0	
Puerto Rico	0	
Virgin Islands	5,211	Special chemistry-RIA; adult hemoglobinopathies-hemoglobin cellulose acetate electrophoresis, solubility testing

* New York did not report for fiscal year 1990.

TABLE 36. PATHOLOGY SPECIMENS

Lab & Region (1)	Total Pathology Specimens (2)	Exfoliative Cytology Specimens (3)	Cytogenetics Specimens (4)	Other Pathology Specimen	
				Number of Specimens (5)	Type of specimen (6)
TOTAL	422,185	419,283	2,860	42	
AVERAGE	60,309	60,877	1,430	21	
NEW ENGLAND	0	0	0	0	
Connecticut	0	0	0	0	
Massachusetts	0	0	0	0	
Maine	0	0	0	0	
New Hampshire	0	0	0	0	
Rhode Island	0	0	0	0	
Vermont	0	0	0	0	
MIDDLE ATLANTIC	0	0	0	0	
New Jersey	0	0	0	0	
New York*					
Pennsylvania	0	0	0	0	
EAST NORTH CENTRAL	102,449	100,220	2,229	0	
Illinois	0	0	0	0	
Indiana	0	0	0	0	
Michigan	0	0	0	0	
Ohio	0	0	0	0	
Wisconsin	102,449	100,220	2,229	0	
WEST NORTH CENTRAL	0	0	0	0	
Iowa	0	0	0	0	
Kansas	0	0	0	0	
Minnesota	0	0	0	0	
Missouri	0	0	0	0	
Nebraska	0	0	0	0	
North Dakota	0	0	0	0	
South Dakota	0	0	0	0	
SOUTH ATLANTIC	297,085	297,043	0	42	
Delaware	0	0	0	0	
District of Columbia	11,763	11,763	0	0	
Florida	0	0	0	0	
Georgia	0	0	0	0	
Maryland	50,077	50,072	0	5	Autopsies
North Carolina	171,404	171,404	0	0	
South Carolina	0	0	0	0	
Virginia	0	0	0	0	
West Virginia	63,841	63,804	0	37	Oral, breast, penis
EAST SOUTH CENTRAL	0	0	0	0	
Alabama	0	0	0	0	
Kentucky	0	0	0	0	
Mississippi	0	0	0	0	
Tennessee	0	0	0	0	
WEST SOUTH CENTRAL	0	0	0	0	
Arkansas	0	0	0	0	
Louisiana	0	0	0	0	
Oklahoma	0	0	0	0	
Texas	0	0	0	0	
MOUNTAIN	22,631	22,000	631	0	
Arizona	0	0	0	0	
Colorado	0	0	0	0	
Idaho	631	0	631	0	
Montana	0	0	0	0	
Nevada	0	0	0	0	
New Mexico	22,000	22,000	0	0	
Utah	0	0	0	0	
Wyoming	0	0	0	0	
PACIFIC	0	0	0	0	
Alaska	0	0	0	0	
California	0	0	0	0	
Hawaii	0	0	0	0	
Oregon	0	0	0	0	
Washington	0	0	0	0	
TERRITORIES	0	0	0	0	
Guam	0	0	0	0	
Puerto Rico	0	0	0	0	
Virgin Islands	0	0	0	0	

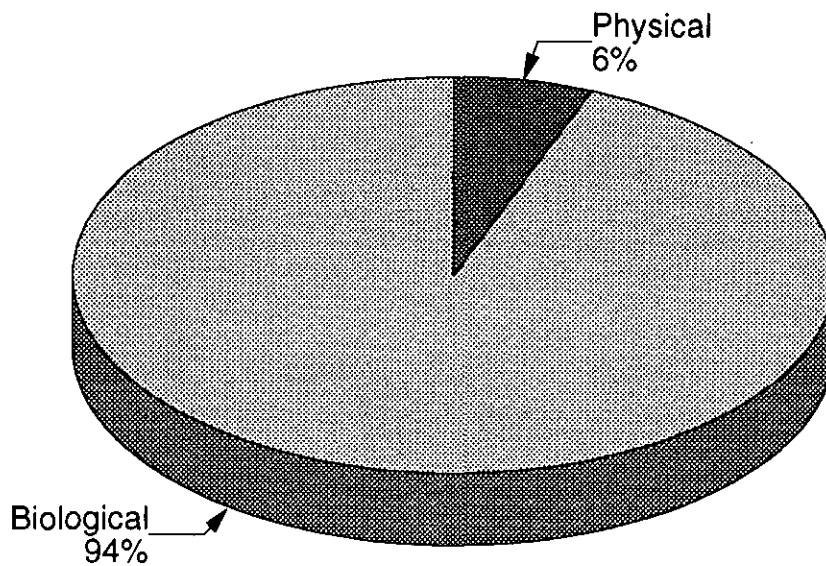
* New York did not report for fiscal year 1990.

TABLE 37. OCCUPATIONAL SAFETY AND HEALTH-Biological Samples

Lab & Region	Number of Samples
(1)	(2)
TOTAL	4,162
AVERAGE	415
NEW ENGLAND	3,310
Connecticut	1,040
Massachusetts	0
Maine	50
New Hampshire	2,220
Rhode Island	0
Vermont	0
MIDDLE ATLANTIC	0
New Jersey	0
New York*	0
Pennsylvania	0
EAST NORTH CENTRAL	250
Illinois	0
Indiana	0
Michigan	0
Ohio	189
Wisconsin	61
WEST NORTH CENTRAL	182
Iowa	173
Kansas	0
Minnesota	0
Missouri	0
Nebraska	0
North Dakota	9
South Dakota	0
SOUTH ATLANTIC	0
Delaware	0
District of Columbia	0
Florida	0
Georgia	0
Maryland	0
North Carolina	0
South Carolina	0
Virginia	0
West Virginia	0
EAST SOUTH CENTRAL	0
Alabama	0
Kentucky	0
Mississippi	0
Tennessee	0
WEST SOUTH CENTRAL	80
Arkansas	0
Louisiana	0
Oklahoma	80
Texas	0
MOUNTAIN	330
Arizona	0
Colorado	0
Idaho	0
Montana	50
Nevada	0
New Mexico	0
Utah	280
Wyoming	0
PACIFIC	0
Alaska	0
California	0
Hawaii	0
Oregon	0
Washington	0
TERRITORIES	0
Guam	0
Puerto Rico	0
Virgin Islands	0

* New York did not report for fiscal year 1990.

FIGURE 11.
STATE PUBLIC HEALTH LABORATORY TOXICOLOGY SPECIMENS,
BY CATEGORY, FISCAL YEAR 1990



TOTAL: 1.2 MILLION SPECIMENS

TABLE 38. TOXICOLOGY-Biological Samples

Lab & Region (1)	Total Biological Toxicology Samples (2)
TOTAL	1,160,962
AVERAGE	32,249
NEW ENGLAND	386,346
Connecticut	51,034
Massachusetts	249,408
Maine	6,711
New Hampshire	13,287
Rhode Island	61,535
Vermont	4,371
MIDDLE ATLANTIC	224,324
New Jersey	218,418
New York*	
Pennsylvania	5,906
EAST NORTH CENTRAL	60,472
Illinois	16,314
Indiana	2,554
Michigan	0
Ohio	17,441
Wisconsin	24,163
WEST NORTH CENTRAL	15,373
Iowa	209
Kansas	0
Minnesota	0
Missouri	25
Nebraska	1,597
North Dakota	5,815
South Dakota	7,727
SOUTH ATLANTIC	238,951
Delaware	8,653
District of Columbia	79,119
Florida	26,220
Georgia	0
Maryland	52,856
North Carolina	25,017
South Carolina	47,086
Virginia	0
West Virginia	0
EAST SOUTH CENTRAL	10,743
Alabama	0
Kentucky	10,743
Mississippi	0
Tennessee	0
WEST SOUTH CENTRAL	85,614
Arkansas	393
Louisiana	68,877
Oklahoma	0
Texas	16,344
MOUNTAIN	132,907
Arizona	22
Colorado	106,615
Idaho	0
Montana	220
Nevada	0
New Mexico	8,424
Utah	4,119
Wyoming	13,507
PACIFIC	5,492
Alaska	2,667
California	2,825
Hawaii	0
Oregon	0
Washington	0
TERRITORIES	740
Guam	0
Puerto Rico	740
Virgin Islands	0

* New York did not report for fiscal year 1990.

TABLE 39. TOXICOLOGY-Biological Samples-Blood-Forensic

Lab & Region (1)	Type of sample								Number of Samples (9)	Other Type of Sample (10)
	Ethyl Alcohol (2)	Other Volatiles (3)	Drugs and Narcotics (4)	Lead (5)	Other Metallic Poisons (6)	Other Poisons (7)	Insecticides (8)			
TOTAL	31,520	688	8,875	307,647	14	17	0	2,595		
AVERAGE	2,101	172	1,479	76,912	7	9	0	288		
NEW ENGLAND	3,941	28	0	282,627	0	0	0	1,990		
Connecticut	1,268							651	Blood typing	
Massachusetts				249,357				7	PCB's	
Maine	1,039									
New Hampshire	1,229	28						235	Carbon monoxide	
Rhode Island				33,270				1,097	Blood typing	
Vermont	405							NA	Carbon monoxide	
MIDDLE ATLANTIC	639	639	622	0	0	0	0	0		
New Jersey										
New York*										
Pennsylvania	639	639	622							
EAST NORTH CENTRAL	8,381	12	1,827	3	8	10	0	107		
Illinois										
Indiana										
Michigan										
Ohio	479	12	441					8	Carbon monoxide	
								8	Hemoglobin	
Wisconsin	7,902		1,386	3	8	10		91	Carbon monoxide	
WEST NORTH CENTRAL	4,567	0	0	0	0	0	0	0		
Iowa										
Kansas										
Minnesota										
Missouri										
Nebraska	1,133									
North Dakota										
South Dakota	3,434									
SOUTH ATLANTIC	0	0	0	25,017	0	0	0	0		
Delaware										
District of Columbia										
Florida										
Georgia										
Maryland										
North Carolina				25,017						
South Carolina										
Virginia										
West Virginia										
EAST SOUTH CENTRAL	2,699	0	1,218	0	8	0	0	0		
Alabama										
Kentucky	2,699		1,218		8					
Mississippi										
Tennessee										
WEST SOUTH CENTRAL	0	0	0	0	0	0	0	0		
Arkansas										
Louisiana										
Oklahoma										
Texas										
MOUNTAIN	9,088	9	6,208	0	0	7	0	498		
Arizona										
Colorado	75									
Idaho										
Montana										
Nevada										
New Mexico	3,010		3,653			7		106	Salicylates	
								44	Acetaminophen	
								70	Carbon monoxide	
Utah	2,814	9	1,555					66	Carbonoxyhemoglobin	
								12	Cyanide	
								167	Cannabinoids	
Wyoming	3,069		NA					33	Carbon monoxide	
PACIFIC	2,225	0	0	0	0	0	0	0		
Alaska										
California	2,225									
Hawaii										
Oregon										
Washington										
TERRITORIES	0	0	0	0	0	0	0	0		
Guam										
Puerto Rico										
Virgin Islands										

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 39. TOXICOLOGY-Biological Samples-Blood-Other (continued)

Lab & Region	Type of sample								Number of Samples	Other Type of Sample
	Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides			
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
TOTAL	1,538	80	16,508	281,383	572	0	0	47,473		
AVERAGE	268	80	2,751	12,233	572	0	0	8,782		
NEW ENGLAND	0	0	0	45,471	0	0	0	10,871		
Connecticut				37,961				698	Tay Sachs	
								8	Tyrosine	
								356	Phenylalanine	
Massachusetts										
Maine				5,328						
New Hampshire				2,182				6,809	Erythrocyte protoporphyrin	
Rhode Island										
Vermont										
MIDDLE ATLANTIC	80	80	0	17,901	0	0	0	31,920		
New Jersey				16,080				15,845	Erythrocyte protoporphyrin	
								14,434	Hematocrit	
New York*										
Pennsylvania	80	80		1,821				7,841	Erythrocyte protoporphyrin	
EAST NORTH CENTRAL	88	0	48	37,168	572	0	0	81		
Illinois				16,263				78	Prothrombin tests	
Indiana				2,554						
Michigan										
Ohio	21			15,368						
Wisconsin	67		48	2,983	572			9	Carbon monoxide	
								2,737	Therapy drugs	
								1,534	Erythrocyte protoporphyrin	
								175	Cholinesterase	
WEST NORTH CENTRAL	0	0	2,030	480	0	0	0	0		
Iowa				178						
Kansas										
Minnesota										
Missouri				25						
Nebraska				279						
North Dakota										
South Dakota			2,030							
SOUTH ATLANTIC	0	0	11,498	88,386	0	0	0	4,801		
Delaware				3,852				4,801	Erythrocyte protoporphyrin	
District of Columbia				19,115						
Florida				28,220						
Georgia										
Maryland			11,194	21,345						
North Carolina										
South Carolina			302	15,854						
Virginia										
West Virginia										
EAST SOUTH CENTRAL	0	0	2,780	0	0	0	0	0		
Alabama										
Kentucky			2,780							
Mississippi										
Tennessee										
WEST SOUTH CENTRAL	115	0	174	93,548	0	0	0	0		
Arkansas	115		174	8,327						
Louisiana				68,877						
Oklahoma										
Texas				16,344						
MOUNTAIN	515	0	NA	409	0	0	0	0		
Arizona				22						
Colorado										
Idaho										
Montana				23						
Nevada										
New Mexico										
Utah										
Wyoming	515		NA	364						
PACIFIC	0	0	0	0	0	0	0	0		
Alaska										
California										
Hawaii										
Oregon										
Washington										
TERRITORIES	740	0	0	0	0	0	0	0		
Guam										
Puerto Rico	740									
Virgin Islands										

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 40. TOXICOLOGY-Biological Samples-Urine-Forensic

Lab & Region (1)	Type of sample								Number of Samples (9)	Other Type of Sample (10)
	Ethyl Alcohol (2)	Other Volatiles (3)	Drugs and Narcotics (4)	Lead (5)	Other Metallic Poisons (6)	Other Poisons (7)	Insecticides (8)			
TOTAL	27,274	970	110,288	44	10	9	0	3,269		
AVERAGE	2,727	485	11,029	44	10	9	0	3,269		
NEW ENGLAND	4,938	0	5,137	44	0	0	0	0		
Connecticut	4,695		5,137							
Massachusetts				44						
Maine										
New Hampshire										
Rhode Island										
Vermont	243									
MIDDLE ATLANTIC	0	0	0	0	0	0	0	0		
New Jersey										
New York*										
Pennsylvania										
EAST NORTH CENTRAL	974	7	2,908	0	0	9	0	3,269		
Illinois										
Indiana										
Michigan										
Ohio	681	7	881							
Wisconsin	293		2,225			9		3,269	Urine-marijuana	
WEST NORTH CENTRAL	1,189	0	6,642	0	0	0	0	0		
Iowa										
Kansas										
Minnesota										
Missouri										
Nebraska	185									
North Dakota	59		5,756							
South Dakota	945		886							
SOUTH ATLANTIC	0	0	0	0	0	0	0	0		
Delaware										
District of Columbia										
Florida										
Georgia										
Maryland										
North Carolina										
South Carolina										
Virginia										
West Virginia										
EAST SOUTH CENTRAL	0	0	4,058	0	0	0	0	0		
Alabama										
Kentucky			4,058							
Mississippi										
Tennessee										
WEST SOUTH CENTRAL	0	0	0	0	0	0	0	0		
Arkansas										
Louisiana										
Oklahoma										
Texas										
MOUNTAIN	23,173	963	91,545	0	10	0	0	0		
Arizona										
Colorado	23,144	963	84,844							
Idaho										
Montana										
Nevada										
New Mexico	27		1,088		10					
Utah	2		148							
Wyoming	NA		5,465							
PACIFIC	0	0	0	0	0	0	0	0		
Alaska										
California										
Hawaii										
Oregon										
Washington										
TERRITORIES	0	0	0	0	0	0	0	0		
Guam										
Puerto Rico										
Virgin Islands										

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 40. TOXICOLOGY-Biological Samples-Urine-Other (continued)

Lab & Region (11)	Type of sample							Number of Samples (19)	Other Type of Sample (20)
	Ethyl Alcohol (12)	Other Volatiles (13)	Drugs and Narcotics (14)	Lead (15)	Other Metallic Poisons (16)	Other Poisons (17)	Insecticides (18)		
TOTAL	12,244	0	260,627	263	664	1	0	21,361	
AVERAGE	3,061	0	23,693	53	111	1	0	5,340	
NEW ENGLAND	0	0	333	49	143	0	0	21,268	
Connecticut				45	143				
Massachusetts									
Maine									
New Hampshire				4					
Rhode Island			333					21,268	Drug (dog racing)
Vermont									
MIDDLE ATLANTIC	0	0	172,425	0	6	0	0	0	
New Jersey			172,253		6				
New York*									
Pennsylvania			172						
EAST NORTH CENTRAL	720	0	1,082	179	45	0	0	72	
Illinois									
Indiana									
Michigan									
Ohio	664		580						
Wisconsin	56		482	179	45			72	Urine- marijuana
WEST NORTH CENTRAL	0	0	421	33	0	0	0	0	
Iowa				33					
Kansas									
Minnesota									
Missouri									
Nebraska									
North Dakota									
South Dakota			421						
SOUTH ATLANTIC	11,487	0	80,321	2	0	0	0	0	
Delaware									
District of Columbia			60,004						
Florida									
Georgia									
Maryland			20,317						
North Carolina									
South Carolina	11,487			2					
Virginia									
West Virginia									
EAST SOUTH CENTRAL	0	0	0	0	0	0	0	0	
Alabama									
Kentucky									
Mississippi									
Tennessee									
WEST SOUTH CENTRAL	57	0	2,798	0	8	1	0	8	
Arkansas	57		2,798		8	1		8	Glucose
Louisiana									
Oklahoma									
Texas									
MOUNTAIN	NA	0	0	0	482	0	0	15	
Arizona									
Colorado									
Idaho									
Montana					197				
Nevada									
New Mexico									
Utah					265			15	Uranium
Wyoming	NA								
PACIFIC	0	0	3,267	0	0	0	0	0	
Alaska			2,687						
California			600						
Hawaii									
Oregon									
Washington									
TERRITORIES	0	0	0	0	0	0	0	0	
Guam									
Puerto Rico									
Virgin Islands									

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 41. TOXICOLOGY-Biological Samples-Other-Forensic

Lab & Region	Type of sample							Other	
	Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides	Number of Samples	Type of Sample
1	2	3	4	5	6	7	8	9	10
TOTAL	9,244	0	232	0	343	2,597	0	2,748	
AVERAGE	924	0	39	0	343	2,597	0	916	
NEW ENGLAND	4,089	0	51	0	343	2,597	0	2,630	
Connecticut	72								
Massachusetts									
Maine	294		50						
New Hampshire			1					1	Cyanide
Rhode Island					343	2,597		2,629	Sexual assault
Vermont	3,723								
MIDDLE ATLANTIC	0	0	0	0	0	0	0	0	
New Jersey									
New York*									
Pennsylvania									
EAST NORTH CENTRAL	56	0	43	0	0	0	0	0	
Illinois									
Indiana									
Michigan									
Ohio	47		38						
Wisconsin	9		5						
WEST NORTH CENTRAL	11	0	0	0	0	0	0	0	
Iowa									
Kansas									
Minnesota									
Missouri									
Nebraska									
North Dakota									
South Dakota	11								
SOUTH ATLANTIC	0	0	0	0	0	0	0	0	
Delaware									
District of Columbia									
Florida									
Georgia									
Maryland									
North Carolina									
South Carolina									
Virginia									
West Virginia									
EAST SOUTH CENTRAL	0	0	0	0	0	0	0	0	
Alabama									
Kentucky									
Mississippi									
Tennessee									
WEST SOUTH CENTRAL	0	0	0	0	0	0	0	0	
Arkansas									
Louisiana									
Oklahoma									
Texas									
MOUNTAIN	5,088	0	138	0	0	0	0	118	
Arizona									
Colorado	589								
Idaho									
Montana									
Nevada									
New Mexico	191		100					118	Acid phosphatase swabs
Utah	376		38						
Wyoming	3,932								
PACIFIC	0	0	0	0	0	0	0	0	
Alaska									
California									
Hawaii									
Oregon									
Washington									
TERRITORIES	0	0	0	0	0	0	0	0	
Guam									
Puerto Rico									
Virgin Islands									

* New York did not report for fiscal year 1990.

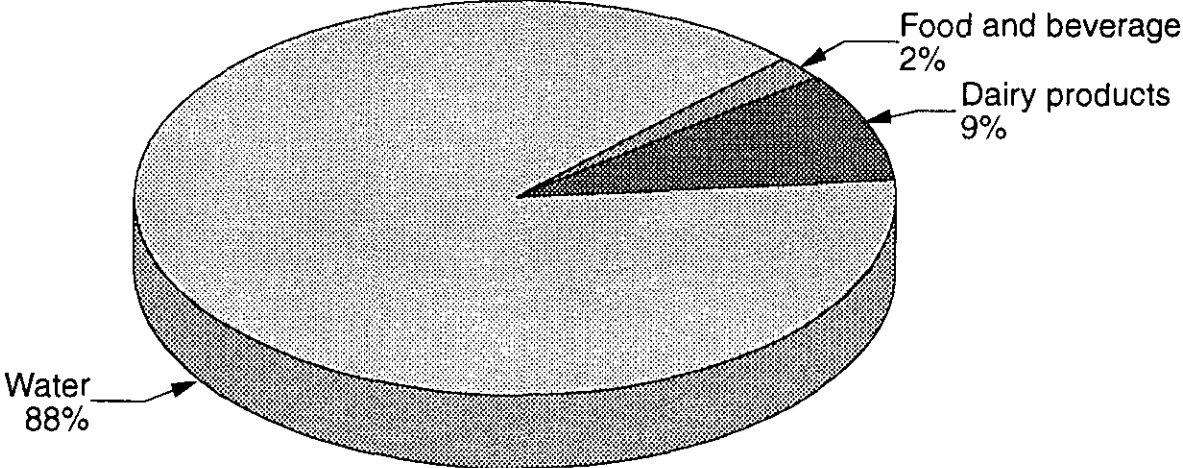
TABLE 41. TOXICOLOGY- Biological Samples-Other-Other (continued)

Lab & Region (11)	Type of sample								Number of Samples (19)	Other Type of Sample (20)
	Ethyl Alcohol (12)	Other Volatiles (13)	Drugs and Narcotics (14)	Lead (15)	Other Metallic Poisons (16)	Other Poisons (17)	Insecticides (18)			
TOTAL	147	0	72	0	0	0	0	0		
AVERAGE	37	0	72	0	0	0	0	0		
NEW ENGLAND	0	0	0	0	0	0	0	0		
Connecticut										
Massachusetts										
Maine										
New Hampshire										
Rhode Island										
Vermont										
MIDDLE ATLANTIC	12	0	0	0	0	0	0	0		
New Jersey										
New York*										
Pennsylvania	12									
EAST NORTH CENTRAL	2	0	0	0	0	0	0	0		
Illinois										
Indiana										
Michigan										
Ohio										
Wisconsin	2									
WEST NORTH CENTRAL	0	0	0	0	0	0	0	0		
Iowa										
Kansas										
Minnesota										
Missouri										
Nebraska										
North Dakota										
South Dakota										
SOUTH ATLANTIC	0	0	0	0	0	0	0	0		
Delaware										
District of Columbia										
Florida										
Georgia										
Maryland										
North Carolina										
South Carolina										
Virginia										
West Virginia										
EAST SOUTH CENTRAL	0	0	0	0	0	0	0	0		
Alabama										
Kentucky										
Mississippi										
Tennessee										
WEST SOUTH CENTRAL	4	0	72	0	0	0	0	0		
Arkansas	4		72							
Louisiana										
Oklahoma										
Texas										
MOUNTAIN	129	0	0	0	0	0	0	0		
Arizona										
Colorado										
Idaho										
Montana										
Nevada										
New Mexico										
Utah										
Wyoming	129									
PACIFIC	0	0	0	0	0	0	0	0		
Alaska										
California										
Hawaii										
Oregon										
Washington										
TERRITORIES	0	0	0	0	0	0	0	0		
Guam										
Puerto Rico										
Virgin Islands										

* New York did not report for fiscal year 1990.

***LABORATORY
ENVIRONMENTAL
WORKLOAD***

FIGURE 12.
STATE PUBLIC HEALTH LABORATORY ENVIRONMENTAL
MICROBIOLOGY SAMPLES, BY CATEGORY, FISCAL YEAR 1990



TOTAL: 2.3 MILLION SAMPLES

TABLE 42. ENVIRONMENTAL MICROBIOLOGY SAMPLES

Lab & Region (1)	Total Environmental Microbiology Samples (2)	Type of sample			
		Water (3)	Dairy Products (4)	Food and Beverage (5)	Other (6)
TOTAL	2,347,745	2,062,177	216,698	58,602	10,268
AVERAGE	44,297	40,435	6,019	1,221	540
NEW ENGLAND	81,321	64,170	6,403	5,162	5,586
Connecticut	18,213	9,026	3,058	753	5,376
Massachusetts	4,639	56	1,071	3,335	177
Maine	22,610	22,605	0	5	0
New Hampshire	1,487	170	1,162	122	33
Rhode Island	11,937	9,915	1,112	910	0
Vermont	22,435	22,398	0	37	0
MIDDLE ATLANTIC	6,262	3,071	3,054	137	0
New Jersey	6,144	3,069	3,054	21	0
New York*					
Pennsylvania	118	2	0	116	0
EAST NORTH CENTRAL	378,546	355,862	19,070	2,489	1,125
Illinois	39,319	29,894	7,916	527	982
Indiana	77,225	71,515	4,012	1,698	0
Michigan	125,767	125,767	0	0	0
Ohio	51,149	43,897	7,142	110	0
Wisconsin	85,086	84,789	0	154	143
WEST NORTH CENTRAL	280,003	266,369	8,184	5,429	21
Iowa	41,782	41,734	0	27	21
Kansas	45,450	45,444	0	6	0
Minnesota	13,538	13,538	0	0	0
Missouri	115,846	108,896	1,573	5,377	0
Nebraska	23,985	23,985	0	0	0
North Dakota	20,854	14,224	6,611	19	0
South Dakota	18,548	18,548	0	0	0
SOUTH ATLANTIC	614,218	552,619	39,467	22,094	38
Delaware	15,672	14,868	624	180	0
District of Columbia	209	0	0	209	0
Florida	288,968	286,102	1,114	1,752	0
Georgia	221	5	124	77	15
Maryland	133,870	112,101	5,869	15,900	0
North Carolina	50,537	50,181	115	218	23
South Carolina	12,328	0	11,792	536	0
Virginia	70,044	53,908	12,932	3,204	0
West Virginia	42,369	35,454	6,897	18	0
EAST SOUTH CENTRAL	182,403	139,522	42,547	333	1
Alabama	87,771	65,057	22,637	77	0
Kentucky	9,788	6,721	2,946	121	0
Mississippi	72,786	55,744	16,964	77	1
Tennessee	12,058	12,000	0	58	0
WEST SOUTH CENTRAL	484,687	423,531	52,649	7,417	1,090
Arkansas	80,846	63,155	16,890	801	0
Louisiana	92,697	59,408	32,214	1,275	0
Oklahoma	79,060	76,070	2,980	10	0
Texas	231,884	224,898	565	5,331	1,090
MOUNTAIN	140,829	124,309	15,114	1,287	119
Arizona	9,763	6,102	3,221	417	23
Colorado	24,736	18,629	5,849	258	0
Idaho	40,125	38,282	1,726	84	33
Montana	18,112	18,102	0	10	0
Nevada	11,480	9,719	1,599	162	0
New Mexico	16,533	13,600	2,719	151	63
Utah	7,496	7,322	0	174	0
Wyoming	12,584	12,553	0	31	0
PACIFIC	146,770	121,491	19,709	4,546	1,024
Alaska	151	149	0	2	0
California	113,507	92,124	17,821	3,038	524
Hawaii	12,872	10,043	1,851	516	462
Oregon	8,651	8,005	0	646	0
Washington	11,589	11,170	37	344	38
TERRITORIES	32,706	11,233	10,501	9,708	1,264
Guam	366	84	14	0	268
Puerto Rico	8,697	3,270	2,608	1,829	990
Virgin Islands	23,643	7,879	7,879	7,879	6

* New York did not report for fiscal year 1990.

TABLE 43. ENVIRONMENTAL MICROBIOLOGY-Water Samples

Lab & Region (1)	Total Water Samples (2)
TOTAL	2,062,177
AVERAGE	40,435
NEW ENGLAND	64,170
Connecticut	9,026
Massachusetts	56
Maine	22,605
New Hampshire	170
Rhode Island	9,915
Vermont	22,398
MIDDLE ATLANTIC	3,071
New Jersey	3,069
New York*	
Pennsylvania	2
EAST NORTH CENTRAL	355,862
Illinois	29,894
Indiana	71,515
Michigan	125,767
Ohio	43,897
Wisconsin	84,789
WEST NORTH CENTRAL	266,369
Iowa	41,734
Kansas	45,444
Minnesota	13,538
Missouri	108,896
Nebraska	23,985
North Dakota	14,224
South Dakota	18,548
SOUTH ATLANTIC	552,619
Delaware	14,868
District of Columbia	0
Florida	286,102
Georgia	5
Maryland	112,101
North Carolina	50,181
South Carolina	0
Virginia	53,908
West Virginia	35,454
EAST SOUTH CENTRAL	139,522
Alabama	65,057
Kentucky	6,721
Mississippi	55,744
Tennessee	12,000
WEST SOUTH CENTRAL	423,531
Arkansas	63,155
Louisiana	59,408
Oklahoma	76,070
Texas	224,898
MOUNTAIN	124,309
Arizona	6,102
Colorado	18,629
Idaho	38,282
Montana	18,102
Nevada	9,719
New Mexico	13,600
Utah	7,322
Wyoming	12,553
PACIFIC	121,491
Alaska	149
California	92,124
Hawaii	10,043
Oregon	8,005
Washington	11,170
TERRITORIES	11,233
Guam	84
Puerto Rico	3,270
Virgin Islands	7,879

* New York did not report for fiscal year 1990.

TABLE 43. ENVIRONMENTAL MICROBIOLOGY-Water Samples-Potable (continued)

Lab & Region	Type of procedure			
	Membrane Filter	Multiple Tube	Presence/Absence	Other
(3)	(4)	(5)	(6)	(7)
TOTAL	1,446,683	344,256	NA	12,432
AVERAGE	33,644	11,475	NA	956
NEW ENGLAND	53,233	1,048	0	189
Connecticut	5,887	48	0	0
Massachusetts	56	0	0	56
Maine	21,239	1,000	0	133
New Hampshire	0	0	0	0
Rhode Island	4,526	0	0	0
Vermont	21,525	0	0	0
MIDDLE ATLANTIC	2,009	0	0	0
New Jersey	2,007	0	0	0
New York*				
Pennsylvania	2	0	0	0
EAST NORTH CENTRAL	203,115	98,524	0	1,907
Illinois	19,071	9,825	0	0
Indiana	0	55,213	0	865
Michigan	101,407	0	0	0
Ohio	40,848	0	0	0
Wisconsin	41,789	33,486	0	1,042
WEST NORTH CENTRAL	185,535	56,049	0	2,602
Iowa	66	33,100	0	0
Kansas	44,008	0	0	0
Minnesota	2	12,642	0	5
Missouri	105,784	0	0	0
Nebraska	23,401	0	0	0
North Dakota	7,188	1,797	0	2,597
South Dakota	5,086	8,510	0	0
SOUTH ATLANTIC	272,148	145,620	NA	6,010
Delaware	8,396	3,761	0	0
District of Columbia	0	0	0	0
Florida	241,503	5,027	NA	2,216
Georgia	0	0	0	0
Maryland	3,194	76,311	0	3,794
North Carolina	7,501	42,510	0	0
South Carolina	0	0	0	0
Virginia	NA	NA	NA	0
West Virginia	11,554	18,011	0	0
EAST SOUTH CENTRAL	137,750	630	0	0
Alabama	64,867	0	0	0
Kentucky	6,610	0	0	0
Mississippi	55,259	0	0	0
Tennessee	11,014	630	0	0
WEST SOUTH CENTRAL	420,040	590	0	0
Arkansas	60,828	0	0	0
Louisiana	58,818	590	0	0
Oklahoma	76,000	0	0	0
Texas	224,394	0	0	0
MOUNTAIN	72,673	36,442	0	1,383
Arizona	4,476	928	0	0
Colorado	16,909	249	0	0
Idaho	23,015	7,914	0	1,064
Montana	11,000	6,652	0	294
Nevada	6,267	2,089	0	0
New Mexico	11,006	1,941	0	25
Utah	NA	5,786	0	NA
Wyoming	0	10,883	0	0
PACIFIC	89,990	5,064	0	341
Alaska	0	78	0	0
California	83,796	1,458	0	40
Hawaii	6,107	466	0	301
Oregon	0	2,857	0	0
Washington	87	205	0	0
TERRITORIES	10,190	289	0	0
Guam	37	0	0	0
Puerto Rico	2,317	289	0	0
Virgin Islands	7,836	0	0	0

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 43. ENVIRONMENTAL MICROBIOLOGY-Water Samples-Non-Potable (continued)

Lab & Region	Type of procedure			
	Membrane Filter	Multiple Tube	Presence/Absence	Other
(8)	(9)	(10)	(11)	(12)
TOTAL	46,298	71,526	NA	4,004
AVERAGE	1,447	2,649	NA	445
NEW ENGLAND	3,812	7,338	0	279
Connecticut	2,791	5,376	0	279
Massachusetts	0	0	0	0
Maine	148	0	0	0
New Hampshire	0	170	0	0
Rhode Island	0	1,792	0	0
Vermont	873	0	0	0
MIDDLE ATLANTIC	0	947	0	0
New Jersey	0	947	0	0
New York*				
Pennsylvania	0	0	0	0
EAST NORTH CENTRAL	17,666	0	0	535
Illinois	0	0	0	0
Indiana	3,144	0	0	0
Michigan	6,203	0	0	0
Ohio	2,540	0	0	0
Wisconsin	5,779	0	0	535
WEST NORTH CENTRAL	5,139	311	0	1,191
Iowa	694	196	0	1,191
Kansas	1,396	0	0	0
Minnesota	799	54	0	0
Missouri	89	0	0	0
Nebraska	584	0	0	0
North Dakota	244	61	0	0
South Dakota	1,333	0	0	0
SOUTH ATLANTIC	5,712	33,697	NA	183
Delaware	1,124	1,578	0	0
District of Columbia	0	0	0	0
Florida	2,669	12,407	NA	188
Georgia	0	0	0	5
Maryland	1,173	19,438	0	0
North Carolina	0	120	0	0
South Carolina	0	0	0	0
Virginia	NA	NA	0	0
West Virginia	746	154	0	0
EAST SOUTH CENTRAL	498	491	0	0
Alabama	184	6	0	0
Kentucky	0	0	0	0
Mississippi	0	485	0	0
Tennessee	314	0	0	0
WEST SOUTH CENTRAL	2,466	9,285	0	26
Arkansas	1,918	0	0	0
Louisiana	0	9,285	0	0
Oklahoma	70	0	0	0
Texas	478	0	0	26
MOUNTAIN	5,934	3,413	0	1,780
Arizona	114	458	0	21
Colorado	0	1,137	0	0
Idaho	3,530	343	0	1,740
Montana	156	0	0	0
Nevada	1,028	54	0	0
New Mexico	33	99	0	19
Utah	1,073	NA	0	NA
Wyoming	0	1,322	0	0
PACIFIC	5,004	15,472	0	0
Alaska	0	59	0	0
California	0	1,160	0	0
Hawaii	2,458	2,683	0	0
Oregon	2,546	2,602	0	0
Washington	0	8,968	0	0
TERRITORIES	67	572	0	0
Guam	0	0	0	0
Puerto Rico	67	572	0	0
Virgin Islands	0	0	0	0

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 43. ENVIRONMENTAL MICROBIOLOGY-Water Samples-Swimming Pools (continued)

Lab & Region	Type of procedure			
	Membrane Filter	Multiple Tube	Presence/Absence	Other
(13)	(14)	(15)	(16)	(17)
TOTAL	48,214	26,879	101	35,738
AVERAGE	2,679	1,680	101	3,249
NEW ENGLAND	254	0	0	1,280
Connecticut	169	0	0	0
Massachusetts	0	0	0	0
Maine	85	0	0	0
New Hampshire	0	0	0	0
Rhode Island	0	0	0	1,280
Vermont	NA	0	0	0
MIDDLE ATLANTIC	0	0	0	0
New Jersey	0	0	0	0
New York*				
Pennsylvania	0	0	0	0
EAST NORTH CENTRAL	19,583	14,896	0	30,242
Illinois	947	0	0	0
Indiana	0	13,047	0	13,047
Michigan	18,127	0	0	16,692
Ohio	509	0	0	0
Wisconsin	0	1,849	0	503
WEST NORTH CENTRAL	5,337	4,432	0	2,347
Iowa	0	1,275	0	0
Kansas	0	0	0	0
Minnesota	0	9	0	10
Missouri	3,023	0	0	0
Nebraska	0	0	0	0
North Dakota	2,314	23	0	2,337
South Dakota	0	3,125	0	0
SOUTH ATLANTIC	22,028	6,413	NA	887
Delaware	9	0	0	0
District of Columbia	0	0	0	0
Florida	22,019	79	NA	0
Georgia	0	0	0	0
Maryland	0	1,789	0	887
North Carolina	0	0	0	0
South Carolina	0	0	0	0
Virginia	0	0	0	0
West Virginia	0	4,551	0	0
EAST SOUTH CENTRAL	143	0	101	0
Alabama	0	0	0	0
Kentucky	101	0	101	0
Mississippi	0	0	0	0
Tennessee	42	0	0	0
WEST SOUTH CENTRAL	409	0	0	0
Arkansas	409	0	0	0
Louisiana	0	0	0	0
Oklahoma	0	0	0	0
Texas	0	0	0	0
MOUNTAIN	407	932	0	967
Arizona	0	0	0	0
Colorado	0	0	0	0
Idaho	350	0	0	326
Montana	0	0	0	0
Nevada	16	0	0	0
New Mexico	39	0	0	57
Utah	2	584	0	584
Wyoming	0	348	0	0
PACIFIC	10	134	0	15
Alaska	0	12	0	0
California	0	94	0	15
Hawaii	10	0	0	0
Oregon	0	0	0	0
Washington	0	28	0	0
TERRITORIES	43	72	0	0
Guam	0	47	0	0
Puerto Rico	0	25	0	0
Virgin Islands	43	0	0	0

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 43. ENVIRONMENTAL MICROBIOLOGY-Water Samples-Sewage and Waste (continued)

Lab & Region (18)	Type of procedure			
	Membrane Filter (19)	Multiple Tube (20)	Presence/ Absence (21)	Other (22)
TOTAL	1,692	9,101	NA	51
AVERAGE	169	506	NA	51
NEW ENGLAND	0	2,448	0	0
Connecticut	0	131	0	0
Massachusetts	0	0	0	0
Maine	0	0	0	0
New Hampshire	0	0	0	0
Rhode Island	0	2,317	0	0
Vermont	0	0	0	0
MIDDLE ATLANTIC	0	115	0	0
New Jersey	0	115	0	0
New York*				
Pennsylvania	0	0	0	0
EAST NORTH CENTRAL	137	25	NA	NA
Illinois	26	25	0	0
Indiana	111	0	0	0
Michigan	0	0	0	0
Ohio	0	0	0	0
Wisconsin	NA	NA	NA	NA
WEST NORTH CENTRAL	1,233	246	0	0
Iowa	454	0	0	0
Kansas	40	0	0	0
Minnesota	17	10	0	0
Missouri	0	0	0	0
Nebraska	0	0	0	0
North Dakota	371	93	0	0
South Dakota	351	143	0	0
SOUTH ATLANTIC	NA	5,410	0	0
Delaware	0	0	0	0
District of Columbia	0	0	0	0
Florida	0	0	0	0
Georgia	0	0	0	0
Maryland	0	5,360	0	0
North Carolina	0	50	0	0
South Carolina	0	0	0	0
Virginia	NA	NA	0	0
West Virginia	0	0	0	0
EAST SOUTH CENTRAL	10	0	0	0
Alabama	0	0	0	0
Kentucky	10	0	0	0
Mississippi	0	0	0	0
Tennessee	0	0	0	0
WEST SOUTH CENTRAL	0	107	0	0
Arkansas	0	0	0	0
Louisiana	0	107	0	0
Oklahoma	0	0	0	0
Texas	0	0	0	0
MOUNTAIN	312	692	0	51
Arizona	0	105	0	0
Colorado	0	334	0	0
Idaho	0	0	0	0
Montana	0	0	0	0
Nevada	133	132	0	0
New Mexico	179	110	0	51
Utah	0	11	0	0
Wyoming	0	0	0	0
PACIFIC	0	58	0	0
Alaska	0	0	0	0
California	0	9	0	0
Hawaii	0	12	0	0
Oregon	0	0	0	0
Washington	0	37	0	0
TERRITORIES	0	0	0	0
Guam	0	0	0	0
Puerto Rico	0	0	0	0
Virgin Islands	0	0	0	0

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 44. ENVIRONMENTAL MICROBIOLOGY-Dairy Products Samples

Lab & Region	Number of Samples	Type of sample						Other
		Milk and Cream	Ice Cream	Cheese	Other Dairy Products	Frozen Desserts		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
TOTAL	216,698	34	28	20	31	22		
AVERAGE	6,019							
NEW ENGLAND	6,403							
Connecticut	3,058	X	X	X	X	X	Plant equipment, empty containers	
Massachusetts	1,071	X	X	X		X		
Maine	0							
New Hampshire	1,162	X	X	X	X	X	Dairy waters	
Rhode Island	1,112	X	X	X	X	X		
Vermont	0							
MIDDLE ATLANTIC	3,054							
New Jersey	3,054	X	X	X	X	X		
New York*								
Pennsylvania	0							
EAST NORTH CENTRAL	19,070							
Illinois	7,916	X	X	X	X	X		
Indiana	4,012	X	X	X	X	X	Empty cartons	
Michigan	0							
Ohio	7,142	X			X			
Wisconsin	0							
WEST NORTH CENTRAL	8,184							
Iowa	0							
Kansas	0							
Minnesota	0							
Missouri	1,573	X	X	X	X	X		
Nebraska	0							
North Dakota	6,611	X	X	X	X	X	Butterfat, DMSCC & DMCC	
South Dakota	0							
SOUTH ATLANTIC	39,467							
Delaware	624	X	X		X	X	Eggnog, sour cream, yogurt, Lactaid	
District of Columbia	0							
Florida	1,114	X	X			X		
Georgia	124	X	X	X	X			
Maryland	5,869	X	X	X	X	X		
North Carolina	115	X						
South Carolina	11,792	X	X	X	X	X	Containers	
Virginia	12,932	X	X		X	X	Cultured products, milk containers	
West Virginia	6,897	X			X		Raw milk	
EAST SOUTH CENTRAL	42,547							
Alabama	22,637	X	X		X	X		
Kentucky	2,946	X	X	X	X	X	Containers	
Mississippi	16,964	X			X			
Tennessee	0							
WEST SOUTH CENTRAL	52,649							
Arkansas	16,890	X	X	X	X	X	Caps and containers, glycol and sweet water, novelties	
Louisiana	32,214	X	X	X	X	X	Raw milks, containers, powdered milk	
Oklahoma	2,980	X	X					
Texas	565	X	X		X	X		
MOUNTAIN	15,114							
Arizona	3,221	X	X	X	X		Powdered milk	
Colorado	5,849	X	X		X		Container rinses	
Idaho	1,726	X						
Montana	0							
Nevada	1,599	X	X	X	X	X		
New Mexico	2,719	X		X	X		Containers	
Utah	0							
Wyoming	0							
PACIFIC	19,709							
Alaska	0							
California	17,821	X	X	X	X	X		
Hawaii	1,851	X			X	X	Containers	
Oregon	0							
Washington	37				X			
TERRITORIES	10,501							
Guam	14		X		X			
Puerto Rico	2,608	X	X	X	X			
Virgin Islands	7,879	X	X		X			

* New York did not report for fiscal year 1990.

TABLE 45. ENVIRONMENTAL MICROBIOLOGY-Food and Beverage Samples

Lab & Region	Number of Samples	Type of sample			
		Food Quality	Food-Associated Disease Outbreaks (Suspected)	Seafood	Environmental
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	58,602	26	45	25	27
AVERAGE	1,221				
NEW ENGLAND	5,162				
Connecticut	753	X	X	X	X
Massachusetts	3,335	X	X	X	X
Maine	5	X	X	X	
New Hampshire	122	X	X	X	X
Rhode Island	910	X	X	X	X
Vermont	37		X		X
MIDDLE ATLANTIC	137				
New Jersey	21	X	X		
New York*					
Pennsylvania	116		X		
EAST NORTH CENTRAL	2,489				
Illinois	527	X	X		X
Indiana	1,698	X	X	X	X
Michigan	0				
Ohio	110		X		
Wisconsin	154				
WEST NORTH CENTRAL	5,429				
Iowa	27		X		
Kansas	6		X		
Minnesota	0				
Missouri	5,377	X	X		X
Nebraska	0				
North Dakota	19		X		
South Dakota	0				
SOUTH ATLANTIC	22,094				
Delaware	180	X	X	X	
District of Columbia	209	X	X	X	
Florida	1,752	X	X	X	X
Georgia	77		X	X	X
Maryland	15,900	X	X	X	X
North Carolina	218		X	X	
South Carolina	536	X	X		X
Virginia	3,204	X	X	X	X
West Virginia	18		X		
EAST SOUTH CENTRAL	333				
Alabama	77	X	X	X	
Kentucky	121	X	X		X
Mississippi	77		X	X	X
Tennessee	58		X		
WEST SOUTH CENTRAL	7,417				
Arkansas	801	X	X	X	X
Louisiana	1,275	X	X	X	X
Oklahoma	10		X		
Texas	5,331			X	
MOUNTAIN	1,287				
Arizona	417	X	X		X
Colorado	258	X	X	X	X
Idaho	84		X	X	X
Montana	10		X		
Nevada	162	X	X	X	
New Mexico	151	X	X		X
Utah	174		X		
Wyoming	31		X		
PACIFIC	4,546				
Alaska	2		X		
California	3,038	X	X	X	X
Hawaii	516	X	X	X	X
Oregon	646		X	X	X
Washington	344		X		X
TERRITORIES	9,708				
Guam	0				
Puerto Rico	1,829	X	X	X	X
Virgin Islands	7,879				X

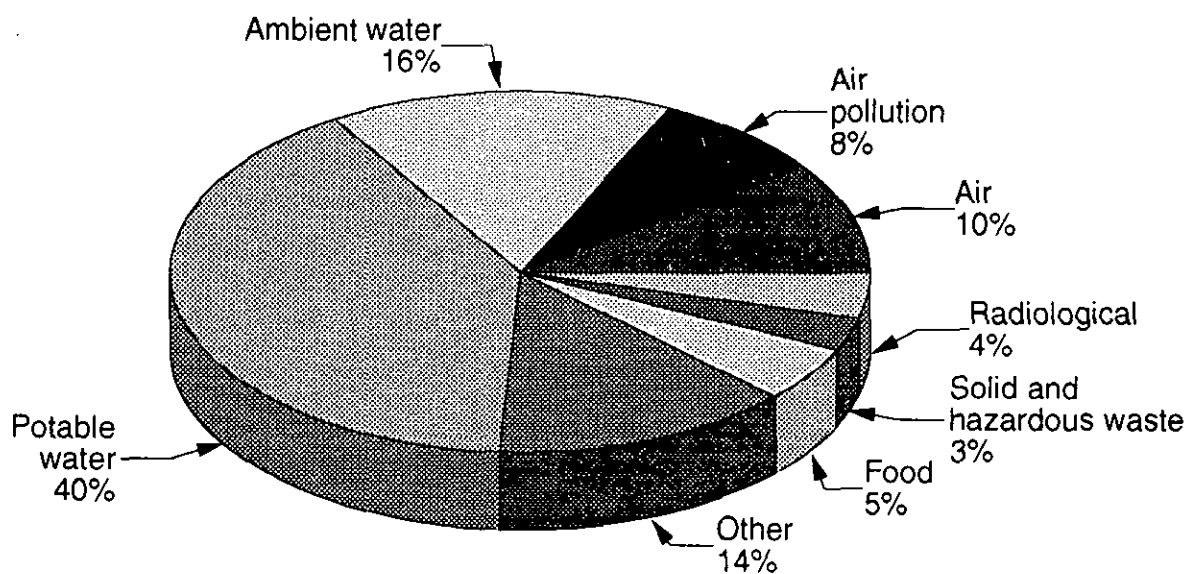
* New York did not report for fiscal year 1990.

TABLE 46. ENVIRONMENTAL MICROBIOLOGY-Other Environmental Microbiology Samples

Lab & Region	Number of Samples	Type of sample
(1)	(2)	(3)
TOTAL	10,268	
AVERAGE	540	
NEW ENGLAND	5,586	
Connecticut	5,376	Shellfish meats, shellfish seawater
Massachusetts	177	Paralytic shellfish poisoning
Maine	0	
New Hampshire	33	Paralytic shellfish poisoning
Rhode Island	0	
Vermont	0	
MIDDLE ATLANTIC	0	
New Jersey	0	
New York*		
Pennsylvania	0	
EAST NORTH CENTRAL	1,125	
Illinois	982	Quality assurance, miscellaneous
Indiana	0	
Michigan	0	
Ohio	0	
Wisconsin	143	Legionellosis, water samples
WEST NORTH CENTRAL	21	
Iowa	21	Soil
Kansas	0	
Minnesota	0	
Missouri	0	
Nebraska	0	
North Dakota	0	
South Dakota	0	
SOUTH ATLANTIC	38	
Delaware	0	
District of Columbia	0	
Florida	0	
Georgia	15	Physical therapy equipment, Zephiran
Maryland	0	
North Carolina	23	Algae, red tide samples
South Carolina	0	
Virginia	0	
West Virginia	0	
EAST SOUTH CENTRAL	1	
Alabama	0	
Kentucky	0	
Mississippi	1	Fifth samples
Tennessee	0	
WEST SOUTH CENTRAL	1,090	
Arkansas	0	
Louisiana	0	
Oklahoma	0	
Texas	1,090	Water suitability
MOUNTAIN	119	
Arizona	23	Virus and parasites in water
Colorado	0	
Idaho	33	Aquatic biology-Benthon, plankton
Montana	0	
Nevada	0	
New Mexico	63	Plant, insect identification, meat serology, veterinary enteric specimens
Utah	0	
Wyoming	0	
PACIFIC	1,024	
Alaska	0	
California	524	Drug surveillance, miscellaneous environmental
Hawaii	462	Staph phage typing
Oregon	0	
Washington	38	Sediment
TERRITORIES	1,264	
Guam	268	Bakery products, syrup concentrate, food and beverage, environmental samples (soil, vacuum contents, shoe, swab),
Puerto Rico	990	Milk containers for sterility check, somatic cell counts
Virgin Islands	6	Ice cream

* New York did not report for fiscal year 1990.

FIGURE 13.
STATE PUBLIC HEALTH LABORATORY ENVIRONMENTAL
CHEMISTRY SAMPLES, BY CATEGORY, FISCAL YEAR 1990



TOTAL: 1.1 MILLION SAMPLES

TABLE 47. ENVIRONMENTAL CHEMISTRY SAMPLES

Lab & Region	Total Environmental Chemistry Samples	Type of sample								
		Potable Water	Ambient Water	Solid and Hazardous Waste	Food	Body Fluids and Tissues	Air	Air Pollution	Radiological	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TOTAL	1,075,709	424,938	176,465	33,176	55,488	2,694	107,813	89,636	42,533	142,966
AVERAGE	24,448	10,118	5,882	1,276	1,913	245	5,391	5,602	1,467	7,943
NEW ENGLAND	115,263	41,446	3,679	3,479	4,537	0	7,023	46,000	4,725	4,374
Connecticut	32,127	13,717	2,455	3,396	425	0	6,823	NA	1,056	4,255
Massachusetts	349	35	0	2	312	0	0	0	0	0
Maine	20,304	16,899	791	0	0	0	200	0	2,414	0
New Hampshire	2	0	0	0	2	0	0	0	0	0
Rhode Island	56,681	5,885	433	81	3,788	0	0	46,000	375	119
Vermont	5,800	4,910	NA	0	10	0	0	0	880	0
MIDDLE ATLANTIC	8,357	1,125	1,824	204	5,181	23	0	0	0	0
New Jersey	8,357	1,125	1,824	204	5,181	23	0	0	0	0
New York*										
Pennsylvania	0	0	0	0	0	0	0	0	0	0
EAST NORTH CENTRAL	205,265	83,164	4,468	1,091	862	0	5,505	1,061	7,015	102,099
Illinois	6,697	6,040	295	110	123	0	0	0	0	129
Indiana	21,263	15,429	4,133	0	739	0	0	0	818	144
Michigan	54,807	54,807	0	0	0	0	0	0	0	0
Ohio	11,027	6,888	40	981	0	0	1	1,061	2,056	0
Wisconsin	111,471	0	0	0	0	0	5,504	0	4,141	101,826
WEST NORTH CENTRAL	149,642	65,708	51,411	8,759	4,407	925	2,215	4,773	7,484	3,960
Iowa	68,339	17,942	39,930	5,947	0	493	0	2,013	2,014	0
Kansas	13,528	3,536	4,538	794	14	36	0	2,466	2,144	0
Minnesota	22,119	15,473	3,164	1,352	0	396	913	291	463	67
Missouri	12,498	7,479	0	433	4,350	0	0	0	236	0
Nebraska	13,884	11,777	99	0	9	0	0	3	1,996	0
North Dakota	10,772	3,484	2,339	45	34	0	395	0	582	3,893
South Dakota	8,502	6,017	1,341	188	0	0	907	0	49	0
SOUTH ATLANTIC	291,793	147,757	79,410	8,698	10,742	0	19,270	10,172	6,815	8,929
Delaware	8,152	7,840	0	0	0	0	0	0	312	0
District of Columbia	239	12	0	0	227	0	0	0	0	0
Florida	35,821	33,927	1,759	65	70	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0
Maryland	213,739	76,932	76,931	8,089	10,381	0	18,716	10,172	3,715	8,803
North Carolina	32,115	27,328	720	544	55	0	554	0	2,788	126
South Carolina	0	0	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0	0	0	0
West Virginia	1,727	1,718	0	0	9	0	0	0	0	0
EAST SOUTH CENTRAL	23,694	15,921	1,104	1,369	489	0	1,076	1,358	1,357	1,020
Alabama	0	0	0	0	0	0	0	0	0	0
Kentucky	9,354	8,331	0	0	489	0	0	0	0	534
Mississippi	7,476	7,476	0	0	0	0	0	0	0	0
Tennessee	6,864	114	1,104	1,369	0	0	1,076	1,358	1,357	486
WEST SOUTH CENTRAL	104,080	29,034	9,440	3,849	27,048	0	10,370	3,285	6,616	14,438
Arkansas	12,187	3,228	60	0	7,826	0	0	0	1,073	0
Louisiana	29,084	3,559	136	0	17,654	0	0	0	438	7,297
Oklahoma	24,385	5,130	1,274	1,369	77	0	7,850	3,285	2,400	3,000
Texas	38,424	17,117	7,970	2,480	1,491	0	2,520	0	2,705	4,141
MOUNTAIN	73,246	16,359	21,683	3,283	436	1,612	3,431	19,724	4,714	2,004
Arizona	3,778	342	1,361	818	61	23	1,140	0	0	33
Colorado	21,366	4,540	2,468	508	354	949	340	8,500	1,886	1,821
Idaho	10,723	1,731	4,645	249	0	60	1,846	1,846	346	0
Montana	9,535	1,667	1,711	873	6	120	49	5,109	0	0
Nevada	5,276	4,228	775	0	0	0	7	0	266	0
New Mexico	12,815	1,549	4,760	574	10	195	0	3,945	1,632	150
Utah	9,753	2,302	5,963	261	5	265	49	324	584	0
Wyoming	0	0	0	0	0	0	0	0	0	0
PACIFIC	93,840	13,895	3,446	2,444	1,786	134	58,923	3,263	3,807	6,142
Alaska	0	0	0	0	0	0	0	0	0	0
California	29,434	6,112	2,838	2,428	1,022	0	6,363	1,971	2,558	6,142
Hawaii	56,841	1,617	608	0	764	0	52,560	1,292	0	0
Oregon	0	0	0	0	0	0	0	0	0	0
Washington	7,565	6,166	0	16	0	134	0	0	1,249	0
TERRITORIES	10,529	10,529	0	0	0	0	0	0	0	0
Guam	0	0	0	0	0	0	0	0	0	0
Puerto Rico	2,650	2,650	0	0	0	0	0	0	0	0
Virgin Islands	7,879	7,879	0	0	0	0	0	0	0	0

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 48. ENVIRONMENTAL CHEMISTRY-Water Samples-Potable

Lab & Region	Number of Samples	Type of substance identified			
		Synthetic Organic Chemicals	Pesticides and Herbicides	Inorganic Chemicals	Radionuclides
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	424,938	37	38	40	24
AVERAGE	10,118				
NEW ENGLAND	41,446				
Connecticut	13,717	X	X	X	X
Massachusetts	35	X	X	X	
Maine	16,899	X	X	X	X
New Hampshire	0				
Rhode Island	5,885	X	X	X	X
Vermont	4,910	X	X	X	X
MIDDLE ATLANTIC	1,125				
New Jersey	1,125	X	X	X	
New York*					
Pennsylvania	0				
EAST NORTH CENTRAL	83,164				
Illinois	6,040	X	X	X	
Indiana	15,429	X	X	X	X
Michigan	54,807	X	X	X	
Ohio	6,888	X	X	X	
Wisconsin	0				
WEST NORTH CENTRAL	65,708				
Iowa	17,942	X	X	X	X
Kansas	3,536	X	X	X	X
Minnesota	15,473	X	X	X	X
Missouri	7,479	X	X	X	
Nebraska	11,777	X	X	X	X
North Dakota	3,484	X	X	X	X
South Dakota	6,017	X	X	X	X
SOUTH ATLANTIC	147,757				
Delaware	7,840	X	X	X	X
District of Columbia	12			X	
Florida	33,927	X	X	X	
Georgia	0				
Maryland	76,932	X	X	X	X
North Carolina	27,328	X	X	X	X
South Carolina	0				
Virginia	0				
West Virginia	1,718		X	X	
EAST SOUTH CENTRAL	15,921				
Alabama	0				
Kentucky	8,331	X	X	X	
Mississippi	7,476			X	
Tennessee	114	X	X	X	
WEST SOUTH CENTRAL	29,034				
Arkansas	3,228	X	X	X	X
Louisiana	3,559	X	X		X
Oklahoma	5,130	X	X	X	X
Texas	17,117	X	X	X	X
MOUNTAIN	16,359				
Arizona	342	X	X	X	
Colorado	4,540	X	X	X	X
Idaho	1,731	X	X	X	X
Montana	1,667	X	X	X	X
Nevada	4,228		X	X	X
New Mexico	1,549	X	X	X	X
Utah	2,302	X	X	X	X
Wyoming	0				
PACIFIC	13,895				
Alaska	0				
California	6,112			X	
Hawaii	1,617	X	X	X	
Oregon	0				
Washington	6,166	X	X	X	
TERRITORIES	10,529				
Guam	0				
Puerto Rico	2,650	X	X	X	
Virgin Islands	7,879	X			

* New York did not report for fiscal year 1990.

TABLE 48. ENVIRONMENTAL CHEMISTRY-Water Samples-Ambient (continued)

Lab & Region	Number of Samples	Type of substance identified			
		Synthetic Organic Chemicals	Pesticides and Herbicides	Inorganic Chemicals	Radionuclides
(7)	(8)	(9)	(10)	(11)	(12)
TOTAL	176,465	22	20	29	15
AVERAGE	5,882				
NEW ENGLAND	3,679				
Connecticut	2,455	X	X	X	
Massachusetts	0				
Maine	791	X		X	X
New Hampshire	0				
Rhode Island	433	X		X	
Vermont	NA	X		X	X
MIDDLE ATLANTIC	1,824				
New Jersey	1,824	X	X	X	
New York*					
Pennsylvania	0				
EAST NORTH CENTRAL	4,468				
Illinois	295		X	X	
Indiana	4,133	X	X	X	X
Michigan	0				
Ohio	40			X	
Wisconsin	0				
WEST NORTH CENTRAL	51,411				
Iowa	39,930	X	X	X	X
Kansas	4,538	X	X	X	X
Minnesota	3,164	X	X	X	
Missouri	0				
Nebraska	99				X
North Dakota	2,339	X	X	X	X
South Dakota	1,341			X	X
SOUTH ATLANTIC	79,410				
Delaware	0				
District of Columbia	0				
Florida	1,759	X	X	X	
Georgia	0				
Maryland	76,931	X	X	X	X
North Carolina	720	X	X	X	X
South Carolina	0				
Virginia	0				
West Virginia	0				
EAST SOUTH CENTRAL	1,104				
Alabama	0				
Kentucky	0				
Mississippi	0				
Tennessee	1,104	X	X	X	
WEST SOUTH CENTRAL	9,440				
Arkansas	60				X
Louisiana	136			X	
Oklahoma	1,274			X	
Texas	7,970	X	X	X	X
MOUNTAIN	21,683				
Arizona	1,361	X	X	X	
Colorado	2,468	X	X	X	X
Idaho	4,645	X	X	X	
Montana	1,711	X	X	X	
Nevada	775			X	
New Mexico	4,760	X	X	X	X
Utah	5,963	X	X	X	X
Wyoming	0				
PACIFIC	3,446				
Alaska	0				
California	2,838	X	X	X	
Hawaii	608			X	
Oregon	0				
Washington	0				
TERRITORIES	0				
Guam	0				
Puerto Rico	0				
Virgin Islands	0				

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 49. ENVIRONMENTAL CHEMISTRY-Solid and Hazardous Waste Samples

Lab & Region	Number of Samples	Type of substance identified			
		Synthetic Organic Chemicals	Pesticides and Herbicides	Inorganic Chemicals	Radionuclides
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	33,176	23	21	24	4
AVERAGE	1,276				
NEW ENGLAND	3,479				
Connecticut	3,396	X	X	X	
Massachusetts	2	X			
Maine	0				
New Hampshire	0				
Rhode Island	81	X		X	
Vermont	0				
MIDDLE ATLANTIC	204				
New Jersey	204	X	X	X	
New York*					
Pennsylvania	0				
EAST NORTH CENTRAL	1,091				
Illinois	110		X	X	
Indiana	0				
Michigan	0				
Ohio	981	X	X	X	
Wisconsin	0				
WEST NORTH CENTRAL	8,759				
Iowa	5,947	X		X	
Kansas	794	X	X	X	
Minnesota	1,352	X	X	X	
Missouri	433	X	X	X	X
Nebraska	0				
North Dakota	45	X	X	X	
South Dakota	188			X	
SOUTH ATLANTIC	8,698				
Delaware	0				
District of Columbia	0				
Florida	65	X	X	X	
Georgia	0				
Maryland	8,089	X	X	X	
North Carolina	544	X	X	X	X
South Carolina	0				
Virginia	0				
West Virginia	0				
EAST SOUTH CENTRAL	1,369				
Alabama	0				
Kentucky	0				
Mississippi	0				
Tennessee	1,369	X	X	X	
WEST SOUTH CENTRAL	3,849				
Arkansas	0				
Louisiana	0				
Oklahoma	1,369	X			
Texas	2,480	X	X	X	
MOUNTAIN	3,283				
Arizona	818	X	X	X	
Colorado	508	X	X	X	X
Idaho	249	X	X	X	
Montana	873	X	X	X	
Nevada	0				
New Mexico	574	X	X	X	X
Utah	261	X	X	X	
Wyoming	0				
PACIFIC	2,444				
Alaska	0				
California	2,428	X	X	X	
Hawaii	0				
Oregon	0				
Washington	16		X	X	
TERRITORIES	0				
Guam	0				
Puerto Rico	0				
Virgin Islands	0				

* New York did not report for fiscal year 1990.

TABLE 50. ENVIRONMENTAL CHEMISTRY-Food Samples

Lab & Region	Number of Samples	Type of substance identified			
		Synthetic Organic Chemicals	Pesticides and Herbicides	Inorganic Chemicals	Radionuclides
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL	55,488	21	19	19	8
AVERAGE	1,913				
NEW ENGLAND	4,537				
Connecticut	425	X	X	X	X
Massachusetts	312	X	X	X	
Maine	0				
New Hampshire	2	X			
Rhode Island	3,788	X	X	X	
Vermont	10	X		X	X
MIDDLE ATLANTIC	5,181				
New Jersey	5,181	X	X	X	
New York*					
Pennsylvania	0				
EAST NORTH CENTRAL	862				
Illinois	123		X	X	
Indiana	739		X		X
Michigan	0				
Ohio	0				
Wisconsin	0				
WEST NORTH CENTRAL	4,407				
Iowa	0				
Kansas	14	X			X
Minnesota	0				
Missouri	4,350			X	
Nebraska	9				X
North Dakota	34		X		
South Dakota	0				
SOUTH ATLANTIC	10,742				
Delaware	0				
District of Columbia	227	X		X	
Florida	70	X	X	X	
Georgia	0				
Maryland	10,381	X	X	X	X
North Carolina	55	X			
South Carolina	0				
Virginia	0				
West Virginia	9			X	
EAST SOUTH CENTRAL	489				
Alabama	0				
Kentucky	489		X	X	
Mississippi	0				
Tennessee	0				
WEST SOUTH CENTRAL	27,048				
Arkansas	7,826	X	X		X
Louisiana	17,654	X	X	X	
Oklahoma	77	X	X		
Texas	1,491	X	X	X	X
MOUNTAIN	436				
Arizona	61	X	X	X	
Colorado	354		X	X	
Idaho	0				
Montana	6	X			
Nevada	0				
New Mexico	10	X		X	
Utah	5	X	X		
Wyoming	0				
PACIFIC	1,786				
Alaska	0				
California	1,022	X	X	X	
Hawaii	764	X	X	X	
Oregon	0				
Washington	0				
TERRITORIES	0				
Guam	0				
Puerto Rico	0				
Virgin Islands	0				

* New York did not report for fiscal year 1990.

TABLE 51. ENVIRONMENTAL CHEMISTRY-Body Fluid and Tissue Samples

Lab & Region	Number of Samples	Type of substance identified	
		Inorganic Chemicals	Organic Chemicals
(1)	(2)	(3)	(4)
TOTAL	2,694	9	7
AVERAGE	245		
NEW ENGLAND	0		
Connecticut	0		
Massachusetts	0		
Maine	0		
New Hampshire	0		
Rhode Island	0		
Vermont	0		
MIDDLE ATLANTIC	23		
New Jersey	23	X	X
New York*			
Pennsylvania	0		
EAST NORTH CENTRAL	0		
Illinois	0		
Indiana	0		
Michigan	0		
Ohio	0		
Wisconsin	0		
WEST NORTH CENTRAL	925		
Iowa	493	X	X
Kansas	36		X
Minnesota	396	X	X
Missouri	0		
Nebraska	0		
North Dakota	0		
South Dakota	0		
SOUTH ATLANTIC	0		
Delaware	0		
District of Columbia	0		
Florida	0		
Georgia	0		
Maryland	0		
North Carolina	0		
South Carolina	0		
Virginia	0		
West Virginia	0		
EAST SOUTH CENTRAL	0		
Alabama	0		
Kentucky	0		
Mississippi	0		
Tennessee	0		
WEST SOUTH CENTRAL	0		
Arkansas	0		
Louisiana	0		
Oklahoma	0		
Texas	0		
MOUNTAIN	1,612		
Arizona	23	X	
Colorado	949	X	X
Idaho	60		X
Montana	120	X	
Nevada	0		
New Mexico	195	X	X
Utah	265	X	
Wyoming	0		
PACIFIC	134		
Alaska	0		
California	0		
Hawaii	0		
Oregon	0		
Washington	134	X	
TERRITORIES	0		
Guam	0		
Puerto Rico	0		
Virgin Islands	0		

* New York did not report for fiscal year 1990.

TABLE 52. ENVIRONMENTAL CHEMISTRY-Air Samples

Lab & Region	Number of Samples	Type of sample		
		Particulates (3)	Inorganics (4)	Toxics (5)
(1)	(2)	(3)	(4)	(5)
TOTAL	107,813	16	15	11
AVERAGE	5,391			
NEW ENGLAND	7,023			
Connecticut	6,823	X	X	X
Massachusetts	0			
Maine	200		X	X
New Hampshire	0			
Rhode Island	0			
Vermont	0			
MIDDLE ATLANTIC	0			
New Jersey	0			
New York*				
Pennsylvania	0			
EAST NORTH CENTRAL	5,505			
Illinois	0			
Indiana	0			
Michigan	0			
Ohio	1	X	X	
Wisconsin	5,504	X		
WEST NORTH CENTRAL	2,215			
Iowa	0			
Kansas	0			
Minnesota	913	X	X	X
Missouri	0			
Nebraska	0			
North Dakota	395	X		
South Dakota	907	X		
SOUTH ATLANTIC	19,270			
Delaware	0			
District of Columbia	0			
Florida	0			
Georgia	0			
Maryland	18,716	X	X	X
North Carolina	554	X	X	X
South Carolina	0			
Virginia	0			
West Virginia	0			
EAST SOUTH CENTRAL	1,076			
Alabama	0			
Kentucky	0			
Mississippi	0			
Tennessee	1,076	X		X
WEST SOUTH CENTRAL	10,370			
Arkansas	0			
Louisiana	0			
Oklahoma	7,850	X	X	
Texas	2,520	X	X	X
MOUNTAIN	3,431			
Arizona	1,140	X	X	
Colorado	340			X
Idaho	1,846	X	X	
Montana	49		X	
Nevada	7	X	X	
New Mexico	0			
Utah	49		X	X
Wyoming	0			
PACIFIC	58,923			
Alaska	0			
California	6,363	X	X	X
Hawaii	52,560	X	X	X
Oregon	0			
Washington	0			
TERRITORIES	0			
Guam	0			
Puerto Rico	0			
Virgin Islands	0			

* New York did not report for fiscal year 1990.

TABLE 53. ENVIRONMENTAL CHEMISTRY-Air Pollution Samples

Lab & Region	Number of Samples	Type of activity								Number of Continuous Sampling Stations
		Number of Stations	Discrete Sampling Stations				Gaseous	Other		
			Particulate							
(1)	(2)	(3)	Solids (4)	Metals (5)	Organics (6)	Other (7)	(8)	(9)	(10)	
TOTAL	89,636	418	14	15	7	6	5	1	114	
AVERAGE	5,602									
NEW ENGLAND	46,000									
Connecticut	NA	46	X	X	X	X			8	
Massachusetts	0									
Maine	0									
New Hampshire	0									
Rhode Island	46,000	12	X	X	X				5	
Vermont	0									
MIDDLE ATLANTIC	0									
New Jersey	0									
New York*										
Pennsylvania	0									
EAST NORTH CENTRAL	1,061									
Illinois	0									
Indiana	0									
Michigan	0									
Ohio	1,061	12	X							
Wisconsin	0									
WEST NORTH CENTRAL	4,773									
Iowa	2,013	33	X	X			X		12	
Kansas	2,466	39	X	X		X				
Minnesota	291	NA							NA	
Missouri	0									
Nebraska	3			X						
North Dakota	0									
South Dakota	0									
SOUTH ATLANTIC	10,172									
Delaware	0									
District of Columbia	0									
Florida	0									
Georgia	0									
Maryland	10,172	15	X	X	X		X	X	62	
North Carolina	0									
South Carolina	0									
Virginia	0									
West Virginia	0									
EAST SOUTH CENTRAL	1,358									
Alabama	0									
Kentucky	0									
Mississippi	0									
Tennessee	1,358	25	X	X			X			
WEST SOUTH CENTRAL	3,285									
Arkansas	0									
Louisiana	0									
Oklahoma	3,285	9	X	X	X				7	
Texas	0									
MOUNTAIN	19,724									
Arizona	0									
Colorado	8,500	86	X	X					14	
Idaho	1,846	36	X	X						
Montana	5,109	30	X	X	X	X				
Nevada	0									
New Mexico	3,945	46	X	X		X	X			
Utah	324	4		X	X	X				
Wyoming	0									
PACIFIC	3,263									
Alaska	0									
California	1,971	10	X	X	X		X			
Hawaii	1,292	15	X	X		X			6	
Oregon	0									
Washington	0									
TERRITORIES	0									
Guam	0									
Puerto Rico	0									
Virgin Islands	0									

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 54. ENVIRONMENTAL CHEMISTRY-Radiological Analysis Samples

Lab & Region	Number of Samples	Type of sample								Other
		Air	Water	Milk	Food	Silt	Soil	Wipes from Instruments		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
TOTAL	42,533	19	26	18	15	10	17	21		
AVERAGE	1,467									
NEW ENGLAND	4,725									
Connecticut	1,056	X	X	X	X		X	X	Fish/shellfish, vegetation, charcoal filter	
Massachusetts	0									
Maine	2,414	X	X	X	X		X	X		
New Hampshire	0									
Rhode Island	375	X	X					X		
Vermont	880	X	X	X	X	X	X	X		
MIDDLE ATLANTIC	0									
New Jersey	0									
New York*										
Pennsylvania	0									
EAST NORTH CENTRAL	7,015									
Illinois	0									
Indiana	818	X	X	X				X		
Michigan	0									
Ohio	2,056	X	X	X	X	X	X	X	Vegetation	
Wisconsin	4,141	X	X	X	X	X	X	X	Special plague project	
WEST NORTH CENTRAL	7,484									
Iowa	2,014	X	X	X	X		X		Smears, TLD's	
Kansas	2,144	X	X	X	X		X	X	Fish, biota, vegetation, shoreline sediment, bottom sediment, algae	
Minnesota	463	X	X	X	X	X	X	X		
Missouri	236		X							
Nebraska	1,996	X	X	X	X	X	X	X	Decommissioned nuclear plant test wells	
North Dakota	582		X	X						
South Dakota	49							X		
SOUTH ATLANTIC	6,815									
Delaware	312		X							
District of Columbia	0									
Florida	0									
Georgia	0									
Maryland	3,715	X	X	X	X			X	Vegetation, filters	
North Carolina	2,788	X	X	X	X	X	X	X		
South Carolina	0									
Virginia	0									
West Virginia	0									
EAST SOUTH CENTRAL	1,357									
Alabama	0									
Kentucky	0									
Mississippi	0									
Tennessee	1,357	X	X	X	X	X	X	X	Fish, vegetation	
WEST SOUTH CENTRAL	6,616									
Arkansas	1,073	X	X	X	X	X	X	X		
Louisiana	438		X	X	X	X	X	X		
Oklahoma	2,400	X	X							
Texas	2,705	X	X	X	X		X	X		
MOUNTAIN	4,714									
Arizona	0									
Colorado	1,886	X	X	X			X	X		
Idaho	346		X							
Montana	0									
Nevada	266		X							
New Mexico	1,632		X			X	X	X	Radio cannister, radioactive waste, air filters	
Utah	584	X	X				X		Urine	
Wyoming	0									
PACIFIC	3,807									
Alaska	0									
California	2,558								Radon, EPA, environmental samples	
Hawaii	0									
Oregon	0									
Washington	1,249								Q.A. sampling	
TERRITORIES	0									
Guam	0									
Puerto Rico	0									
Virgin Islands	0									

* New York did not report for fiscal year 1990.

TABLE 55. ENVIRONMENTAL CHEMISTRY-Other Environmental Chemistry Samples

Lab & Region (1)	Number of Samples (2)	Type of sample (3)
TOTAL	142,966	
AVERAGE	7,943	
NEW ENGLAND	4,374	
Connecticut	4,255	Lead wipes from abatement projects, EPA extractions of soil, dairy quality chemistry
Massachusetts	0	
Maine	0	
New Hampshire	0	
Rhode Island	119	Air samples (radon)
Vermont	0	
MIDDLE ATLANTIC	0	
New Jersey	0	
New York*		
Pennsylvania	0	
EAST NORTH CENTRAL	102,099	
Illinois	129	Quality assurance, miscellaneous
Indiana	144	Milk for aflatoxin M1
Michigan	0	
Ohio	0	
Wisconsin	101,826	Inorganics, organics, mass spectrometries
WEST NORTH CENTRAL	3,960	
Iowa	0	
Kansas	0	
Minnesota	67	Surface water discharge, test for asbestos
Missouri	0	
Nebraska	0	
North Dakota	3,893	Quality control (PE), Regulatory samples (feed, fertilizer, petroleum)
South Dakota	0	
SOUTH ATLANTIC	8,929	
Delaware	0	
District of Columbia	0	
Florida	0	
Georgia	0	
Maryland	8,803	Acid rain, occupational health, acid neutralizing capacity
North Carolina	126	Isocyanates, ozone, benzidines, silica, cotton dust weight
South Carolina	0	
Virginia	0	
West Virginia	0	
EAST SOUTH CENTRAL	1,020	
Alabama	0	
Kentucky	534	Milk for pesticides, air sampling (asbestos), asbestos, other environmental chemistry
Mississippi	0	
Tennessee	486	Dept. of Tourism, environmental epidemiology, groundwater, laboratory samples
WEST SOUTH CENTRAL	14,438	
Arkansas	0	
Louisiana	7,297	Sewage & waste water (BOD), shellfish water, trihalomethanes, VOCs
Oklahoma	3,000	Radon
Texas	4,141	Fluoridation check
MOUNTAIN	2,004	
Arizona	33	Miscellaneous
Colorado	1,821	Oxygenates (fuels), Food (insect parts), dairy products (solids/moisture)
Idaho	0	
Montana	0	
Nevada	0	
New Mexico	150	Proficiency samples, sludges
Utah	0	
Wyoming	0	
PACIFIC	6,142	
Alaska	0	
California	6,142	Drugs, hazardous substances, cosmetics, ceramics, body fluids and tissues
Hawaii	0	
Oregon	0	
Washington	0	
TERRITORIES	0	
Guam	0	
Puerto Rico	0	
Virgin Islands	0	

* New York did not report for fiscal year 1990.

TABLE 56. OCCUPATIONAL SAFETY AND HEALTH-Environmental Samples

Lab & Region (1)	Total Environmental Samples (2)	Type of sample	
		Asbestos (3)	Other (4)
TOTAL	100,299	22,725	77,574
AVERAGE	3,858	947	4,310
NEW ENGLAND	4,691	4,086	605
Connecticut	4,226	3,756	470
Massachusetts	0	0	0
Maine	202	202	0
New Hampshire	159	124	35
Rhode Island	104	4	100
Vermont	0	0	0
MIDDLE ATLANTIC	2,188	1,996	192
New Jersey	2,188	1,996	192
New York*	0	0	0
Pennsylvania	0	0	0
EAST NORTH CENTRAL	65,127	4,889	60,238
Illinois	1,839	1,839	0
Indiana	2,797	564	2,233
Michigan	0	0	0
Ohio	3,458	53	3,405
Wisconsin	57,033	2,433	54,600
WEST NORTH CENTRAL	10,849	6,823	4,026
Iowa	9,355	5,464	3,891
Kansas	408	408	0
Minnesota	538	403	135
Missouri	39	39	0
Nebraska	509	509	0
North Dakota	0	0	0
South Dakota	0	0	0
SOUTH ATLANTIC	11,484	1,886	9,598
Delaware	0	0	0
District of Columbia	0	0	0
Florida	639	258	381
Georgia	0	0	0
Maryland	9,554	1,524	8,030
North Carolina	81	81	0
South Carolina	1,210	23	1,187
Virginia	0	0	0
West Virginia	0	0	0
EAST SOUTH CENTRAL	2,151	128	2,023
Alabama	0	0	0
Kentucky	2,151	128	2,023
Mississippi	0	0	0
Tennessee	0	0	0
WEST SOUTH CENTRAL	2,629	2,463	166
Arkansas	1,721	1,721	0
Louisiana	16	0	16
Oklahoma	465	315	150
Texas	427	427	0
MOUNTAIN	1,180	454	726
Arizona	856	285	571
Colorado	0	0	0
Idaho	0	0	0
Montana	88	0	88
Nevada	0	0	0
New Mexico	0	0	0
Utah	236	169	67
Wyoming	0	0	0
PACIFIC	0	0	0
Alaska	0	0	0
California	0	0	0
Hawaii	0	0	0
Oregon	0	0	0
Washington	0	0	0
TERRITORIES	0	0	0
Guam	0	0	0
Puerto Rico	0	0	0
Virgin Islands	0	0	0

* New York did not report for fiscal year 1990.

TABLE 57. TOXICOLOGY-Physical Samples

Lab & Region (1)	Total Physical Toxicology Samples (2)
TOTAL	74,071
AVERAGE	2,469
NEW ENGLAND	39,265
Connecticut	30,094
Massachusetts	7
Maine	437
New Hampshire	256
Rhode Island	8,447
Vermont	24
MIDDLE ATLANTIC	189
New Jersey	162
New York*	
Pennsylvania	27
EAST NORTH CENTRAL	1,150
Illinois	473
Indiana	203
Michigan	0
Ohio	251
Wisconsin	223
WEST NORTH CENTRAL	8,937
Iowa	0
Kansas	0
Minnesota	0
Missouri	20
Nebraska	5
North Dakota	7,602
South Dakota	1,310
SOUTH ATLANTIC	18,429
Delaware	0
District of Columbia	193
Florida	0
Georgia	0
Maryland	12,955
North Carolina	397
South Carolina	4,884
Virginia	0
West Virginia	0
EAST SOUTH CENTRAL	100
Alabama	0
Kentucky	100
Mississippi	0
Tennessee	0
WEST SOUTH CENTRAL	1,211
Arkansas	673
Louisiana	477
Oklahoma	61
Texas	0
MOUNTAIN	151
Arizona	0
Colorado	114
Idaho	0
Montana	0
Nevada	0
New Mexico	18
Utah	19
Wyoming	0
PACIFIC	1,238
Alaska	0
California	1,162
Hawaii	76
Oregon	0
Washington	0
TERRITORIES	3,401
Guam	0
Puerto Rico	0
Virgin Islands	3,401

* New York did not report for fiscal year 1990.

TABLE 57. TOXICOLOGY-Physical Samples-Forensic (continued)

Lab & Region	Type of sample							
	Liquids for Alcohol	Pesticides	PCB's	Plant and Plant Materials	Drugs and Narcotics	Articles for Blood Stains	Paint - Comparison	Paint - Lead
(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
TOTAL	906	413	0	10,411	27,601	1,952	85	5
AVERAGE	113	413	0	1,735	2,760	976	43	5
NEW ENGLAND	203	0	0	8,535	21,571	1,285	0	0
Connecticut	196			6,439	15,440	1,285		
Massachusetts								
Maine				178	259			
New Hampshire								
Rhode Island				1,918	5,872			
Vermont	7							
MIDDLE ATLANTIC	0	0	0	0	0	0	0	0
New Jersey								
New York*								
Pennsylvania								
EAST NORTH CENTRAL	690	0	0	6	8	0	0	0
Illinois	473							
Indiana								
Michigan								
Ohio	217			6	8			
Wisconsin								
WEST NORTH CENTRAL	4	0	0	1,870	2,503	667	49	5
Iowa								
Kansas								
Minnesota								
Missouri								5
Nebraska								
North Dakota	1			1,094	1,976	667	49	
South Dakota	3			776	527			
SOUTH ATLANTIC	0	0	0	0	0	0	0	0
Delaware								
District of Columbia								
Florida								
Georgia								
Maryland								
North Carolina								
South Carolina								
Virginia								
West Virginia								
EAST SOUTH CENTRAL	0	0	0	0	0	0	0	0
Alabama								
Kentucky								
Mississippi								
Tennessee								
WEST SOUTH CENTRAL	0	413	0	0	24	0	36	0
Arkansas								
Louisiana		413			24		36	
Oklahoma								
Texas								
MOUNTAIN	9	0	0	0	18	0	0	0
Arizona								
Colorado								
Idaho								
Montana								
Nevada								
New Mexico	8							
Utah	1				18			
Wyoming								
PACIFIC	0	0	0	0	76	0	0	0
Alaska								
California								
Hawaii					76			
Oregon								
Washington								
TERRITORIES	0	0	0	0	3,401	0	0	0
Guam								
Puerto Rico								
Virgin Islands					3,401			

* New York did not report for fiscal year 1990.

TABLE 57. TOXICOLOGY-Physical Samples-Forensic (continued)

Lab & Region (12)	Type of sample			
	Fibers and Hairs (13)	Gunpowder Residues (14)	Other	
			Number of Samples (15)	Type of Sample (16)
TOTAL	1,270	369	5,451	
AVERAGE	635	369	779	
NEW ENGLAND	757	0	2,485	
Connecticut	757		1,301	Clothing for seminal stains
			447	Fire accelerants
			60	Other volatiles
Massachusetts				
Maine				
New Hampshire				
Rhode Island			657	Sexual assault
Vermont				
MIDDLE ATLANTIC	0	0	0	
New Jersey				
New York*				
Pennsylvania				
EAST NORTH CENTRAL	0	0	39	
Illinois			19	Food tampering
Indiana				
Michigan				
Ohio			4	Pipes
			3	Containers
			1	Syringes
			12	Miscellaneous
Wisconsin				
WEST NORTH CENTRAL	513	369	2,933	
Iowa				
Kansas				
Minnesota				
Missouri				
Nebraska				
North Dakota	513	369	489	Firearms
			1,781	Latent fingerprints
			148	Tool marks
			515	Arson, trace explosives, toxic screens, tear matches, forensic photography
South Dakota				
SOUTH ATLANTIC	0	0	0	
Delaware				
District of Columbia				
Florida				
Georgia				
Maryland				
North Carolina				
South Carolina				
Virginia				
West Virginia				
EAST SOUTH CENTRAL	0	0	0	
Alabama				
Kentucky				
Mississippi				
Tennessee				
WEST SOUTH CENTRAL	0	0	4	
Arkansas				
Louisiana			4	Cosmetics
Oklahoma				
Texas				
MOUNTAIN	0	0	10	
Arizona				
Colorado				
Idaho				
Montana				
Nevada				
New Mexico			10	Baits (strychnine)
Utah				
Wyoming				
PACIFIC	0	0	0	
Alaska				
California				
Hawaii				
Oregon				
Washington				
TERRITORIES	0	0	0	
Guam				
Puerto Rico				
Virgin Islands				

* New York did not report for fiscal year 1990.

TABLE 57. TOXICOLOGY-Physical Samples-Other (continued)

Lab & Region (17)	Type of sample							
	Liquids for Alcohol (18)	Pesticides (19)	PCB's (20)	Plant and Plant Materials (21)	Drugs and Narcotics (22)	Articles for Blood Stains (23)	Paint - Companson (24)	Paint - Lead (25)
TOTAL	6	58	33	9	740	0	0	17,863
AVERAGE	3	34	33	5	82	0	0	1,116
NEW ENGLAND	0	0	0	0	2	0	0	4,399
Connecticut								4,169
Massachusetts								
Maine								
New Hampshire					2			213
Rhode Island								
Vermont								17
MIDDLE ATLANTIC	0	0	0	0	74	0	0	93
New Jersey					69			93
New York*								
Pennsylvania					5			
EAST NORTH CENTRAL	0	0	0	3	158	0	0	228
Illinois								
Indiana					142			60
Michigan								
Ohio				3	16			166
Wisconsin								
WEST NORTH CENTRAL	0	0	0	0	0	0	0	24
Iowa								
Kansas								
Minnesota								20
Missouri								
Nebraska								
North Dakota								4
South Dakota								
SOUTH ATLANTIC	5	68	0	0	134	0	0	11,925
Delaware								193
District of Columbia								
Florida								
Georgia								10,031
Maryland								
North Carolina		67						330
South Carolina	5	1			134			1,371
Virginia								
West Virginia								
EAST SOUTH CENTRAL	0	0	0	0	69	0	0	1
Alabama								
Kentucky					69			1
Mississippi								
Tennessee								
WEST SOUTH CENTRAL	0	0	33	0	279	0	0	28
Arkansas					279			
Louisiana								
Oklahoma			33					28
Texas								
MOUNTAIN	1	0	0	6	24	0	0	5
Arizona								
Colorado								
Idaho								
Montana								
Nevada								
New Mexico								
Utah	1			6	24			5
Wyoming								
PACIFIC	0	0	0	0	0	0	0	1,162
Alaska								1,162
California								
Hawaii								
Oregon								
Washington								
TERRITORIES	0	0	0	0	0	0	0	0
Guam								
Puerto Rico								
Virgin Islands								

* New York did not report for fiscal year 1990.

TABLE 57. TOXICOLOGY-Physical Samples-Other (continued)

Lab & Region	Type of sample			
	Fibers and Hairs (27)	Gunpowder Residues (28)	Number of Samples (29)	Other
				Type of Sample (30)
TOTAL	0	0	6,478	
AVERAGE	0	0	720	
NEW ENGLAND	0	0	41	
Connecticut				
Massachusetts				
Maine				
New Hampshire			12	Soil (lead)
			14	Earthenware (lead, cadmium)
			11	Wipes (lead)
			4	Solder (lead)
Rhode Island				
Vermont				
MIDDLE ATLANTIC	0	0	22	
New Jersey				
New York*				
Pennsylvania			22	Water (lead)
EAST NORTH CENTRAL	0	0	2	
Illinois				
Indiana			1	Soil (lead)
Michigan				
Ohio				
Wisconsin			1	Pottery (lead)
			2	Soil (lead)
			28	Solder (lead)
			7	Hair (arsenic)
WEST NORTH CENTRAL	0	0	0	
Iowa				
Kansas				
Minnesota				
Missouri				
Nebraska				
North Dakota				
South Dakota				
SOUTH ATLANTIC	0	0	6,297	
Delaware				
District of Columbia				
Florida				
Georgia				
Maryland			13	Ceramics (lead)
			13	Ceramics (cadmium)
			1	Toys (lead)
			2,753	Dust (lead)
			144	Dust (lead-EPA project)
North Carolina				
South Carolina			16	Metals non-lead
			41	Malathion
			44	Miscellaneous
			3,272	Asbestos (non-OSHA)
Virginia				
West Virginia				
EAST SOUTH CENTRAL	0	0	1	
Alabama				
Kentucky			1	Pottery (lead)
Mississippi				
Tennessee				
WEST SOUTH CENTRAL	0	0	1	
Arkansas			1	Milk
Louisiana				
Oklahoma				
Texas				
MOUNTAIN	0	0	114	
Arizona				
Colorado			114	Safety testing of toys
Idaho				
Montana				
Nevada				
New Mexico				
Utah				
Wyoming				
PACIFIC	0	0	0	
Alaska				
California				
Hawaii				
Oregon				
Washington				
TERRITORIES	0	0	0	
Guam				
Puerto Rico				
Virgin Islands				

* New York did not report for fiscal year 1990

***OTHER
LABORATORY
WORKLOADS***

TABLE 58. LABORATORY IMPROVEMENT PROGRAM-Number of Laboratories and LIP Personnel

Lab & Region (1)	Number of Professional/ Technical and Non-Technical Positions in LIP (2)	Number of laboratories				
		Clinical (3)	Public Health (4)	Physicians' Office (5)	Dairy/Food (6)	Water (7)
TOTAL	367.05	8,975	771	29,175	270	1,235
AVERAGE	7.98	332	19	1,823	13	48
NEW ENGLAND	16.10	396	118	2,087	51	174
Connecticut	11.00	180	115	1,237	15	111
Massachusetts	2.00	NA	NA	NA	26	NA
Maine	1.40	114	1	250	NA	26
New Hampshire	0.20	NA	1	NA	1	NA
Rhode Island	1.00	76	0	600	1	22
Vermont	0.50	26	1	NA	8	15
MIDDLE ATLANTIC	38.20	1,173	4	4,997	NA	NA
New Jersey	17.00	579	1	23	NA	NA
New York*						
Pennsylvania	21.20	594	3	4,974	NA	NA
EAST NORTH CENTRAL	35.00	1,137	79	881	31	76
Illinois	4.00	1,137	12	881	31	76
Indiana	5.00	NA	9	NA	NA	NA
Michigan	7.00	NA	50	NA	NA	NA
Ohio	8.00	NA	8	NA	NA	NA
Wisconsin	11.00	NA	NA	NA	NA	NA
WEST NORTH CENTRAL	14.90	450	132	24	14	97
Iowa	2.00	164	8	NA	NA	46
Kansas	8.00	NA	100	NA	NA	NA
Minnesota	2.00	NA	NA	NA	NA	NA
Missouri	1.00	NA	7	NA	NA	NA
Nebraska	0.00	114	4	NA	NA	13
North Dakota	0.50	172	12	24	14	29
South Dakota	1.40	NA	1	NA	NA	9
SOUTH ATLANTIC	56.45	1,311	139	1,955	50	295
Delaware	0.35	25	3	NA	1	6
District of Columbia	0.00	NA	NA	NA	NA	NA
Florida	19.00	877	14	NA	NA	NA
Georgia	0.00	NA	NA	NA	NA	NA
Maryland	16.70	214	8	1,800	25	200
North Carolina	14.00	NA	101	NA	NA	NA
South Carolina	2.40	NA	NA	NA	6	NA
Virginia	0.00	NA	11	NA	18	89
West Virginia	4.00	195	2	155	NA	NA
EAST SOUTH CENTRAL	17.00	377	157	2,000	26	172
Alabama	4.00	NA	5	NA	5	22
Kentucky	3.00	NA	144	2,000	NA	NA
Mississippi	0.00	NA	3	NA	NA	NA
Tennessee	10.00	377	5	NA	21	150
WEST SOUTH CENTRAL	6.50	NA	29	NA	7	67
Arkansas	3.00	NA	4	NA	NA	NA
Louisiana	2.00	NA	NA	NA	7	22
Oklahoma	0.50	NA	NA	NA	NA	NA
Texas	1.00	NA	25	NA	NA	45
MOUNTAIN	27.20	1,233	54	5,031	78	208
Arizona	13.00	558	21	1,250	2	75
Colorado	2.00	160	10	3,000	61	45
Idaho	4.00	56	6	281	13	31
Montana	0.70	NA	NA	NA	NA	NA
Nevada	0.50	NA	NA	NA	1	22
New Mexico	1.00	129	3	NA	1	35
Utah	5.00	50	13	500	NA	NA
Wyoming	1.00	280	1	NA	NA	NA
PACIFIC	143.70	2,312	56	12,200	1	128
Alaska	0.20	42	3	200	1	30
California	136.50	2,030	49	12,000	NA	NA
Hawaii	2.00	NA	1	NA	NA	NA
Oregon	4.00	240	3	NA	NA	38
Washington	1.00	NA	NA	NA	NA	60
TERRITORIES	12.00	586	3	NA	12	18
Guam	0.00	5	1	NA	NA	NA
Puerto Rico	12.00	580	1	0	12	17
Virgin Islands	0.00	1	1	NA	NA	1

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 59. LABORATORY IMPROVEMENT PROGRAM-Clinical Laboratories

Lab & Region	Number of Labs in State	Number of Labs Licensed/Registered/Approved/Certified by State	Number by LIP				Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Licensed/Grants/Permits/Approved	Registered	Certified	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	8,975	9,801	5,870	35	1,554		
AVERAGE	332	272	326	35	104		
NEW ENGLAND	396	433	306	35	122		
Connecticut	180	240	240	35	93	Dog(12), Blood banks(30), blood drawing facilities(120), DNA(5)	
Massachusetts	NA	NA	0	0	0		Div. of Health Care Quality
Maine	114	114	66	0	26		44 by Hospital Licensure & Certification
New Hampshire	NA	3	0	0	3		
Rhode Island	76	76	0	0	0		Facilities Regulation, Dept. of Health
Vermont	26	0	0	0	0		
MIDDLE ATLANTIC	1,173	1,173	1,173	0	303		
New Jersey	579	579	579	0	120		
New York*							
Pennsylvania	594	594	594	0	183	CLIA (98)	
EAST NORTH CENTRAL	1,137	1,085	869	0	361		
Illinois	1,137	238	238	0	0		Laboratory Licensing Section
Indiana	NA	216	0	0	216		Acute Care Services Div., Indiana State Board of Health
Michigan	NA	374	374	0	145		Dept. of Public Health
Ohio	NA	257	257	0	0		
Wisconsin	NA	NA	0	0	0		Section of Lab Certification, Bur. of Prev., Div. of Health
WEST NORTH CENTRAL	450	676	362	0	137		
Iowa	164	164	0	0	0		Iowa Dept. of Inspections & Appeals
Kansas	NA	212	212	0	137		Dept. of Health & Environment
Minnesota	NA	0	0	0	0		Dept. of Health
Missouri	NA	150	150	0	0		Public Health Laboratory & Bureau of Hospital Lic.
Nebraska	114	114	0	0	0		Health Facilities Standards Bureau
North Dakota	172	17	0	0	0		Health Facilities
South Dakota	NA	19	0	0	0		Div. of Public Health Certification, Dept. of Health
SOUTH ATLANTIC	1,311	1,262	332	0	84		
Delaware	25	15	15	0	0		
District of Columbia	NA	NA	0	0	0		Dept. of Consumer & Regulatory Affairs
Florida	877	877	0	0	0		HRS Office of Licensure & Certification
Georgia	NA	NA	0	0	0		Office of Reg. Services, GA Dept. of Human Resources
Maryland	214	286	286	0	0		
North Carolina	NA	NA	0	0	0		Div. of Facility Services, Dept. of Human Resources
South Carolina	NA	NA	0	0	0		Bureau of Certification
Virginia	NA	0	0	0	0		
West Virginia	195	84	31	0	84		
EAST SOUTH CENTRAL	377	604	0	0	132		
Alabama	NA	132	0	0	132		
Kentucky	NA	95	0	0	0		Div. of Licensure & Regulations
Mississippi	NA	NA	0	0	0		Health Facilities Licensure & Certification
Tennessee	377	377	0	0	0		Laboratory Licensure Board
WEST SOUTH CENTRAL	NA	623	44	0	202		
Arkansas	NA	421	44	0	0		
Louisiana	NA	NA	0	0	0		Div. of Lic. & Certification, Dept. of Health & Hospitals
Oklahoma	NA	202	0	0	202		
Texas	NA	NA	0	0	0		Bureau of Lic. & Cert., Texas Dept. of Health
MOUNTAIN	1,233	854	390	0	146		
Arizona	558	277	194	0	0		
Colorado	160	90	0	0	0		Health Facilities Div.
Idaho	56	56	56	0	56		
Montana	NA	NA	0	0	0		Licensure & Certification Bureau, Dept. of Health
Nevada	NA	NA	0	0	0		Bureau of Regulatory Health Services
New Mexico	129	101	0	0	40	61 labs approved for RPR & Rubella	Fed Prog Cert. Sect. DOH (40 labs)
Utah	50	50	0	0	50		
Wyoming	280	280	140	0	0		Dept. of Health
PACIFIC	2,312	2,511	2,394	0	67		
Alaska	42	42	0	0	0	23-voluntary Syphilis P.T. program	State Medicaid Office
California	2,030	2,154	2,154	0	0		Laboratory Field Services, CSDHS
Hawaii	NA	75	0	0	0		Hospitals & Medical Facilities Branch, Dept. of Health
Oregon	240	240	240	0	67		
Washington	NA	NA	0	0	0		Laboratory Quality Assurance, Office of Licensing & Cert.
TERRITORIES	586	580	0	0	0		
Guam	5	NA	0	0	0		HCFA
Puerto Rico	580	580	0	0	0		Office for Certification of Clinical Labs, Dept. of Health
Virgin Islands	1	0	0	0	0		

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 59. LABORATORY IMPROVEMENT PROGRAM-Clinical Laboratories-Activity of LIP Staff (continued)

Lab & Region	Proficiency Testing										
	Bacteriology	Mycology	Parasitology	Virology	Immunology		Hematology	Clinical Chemistry	Pathology	Environmental Microbiology	Environmental Chemistry
					Syphilis Serology	Non-Syphills Serology					
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
TOTAL	20	18	17	10	26	17	18	17	2	2	1
NEW ENGLAND											
Connecticut	X	X	X	X	X	X	X	X			
Massachusetts											
Maine	X	X	X		X	X	X	X			
New Hampshire											
Rhode Island											
Vermont											
MIDDLE ATLANTIC											
New Jersey	X	X	X		X	X	X	X			
New York*											
Pennsylvania	X	X	X	X	X	X	X	X			
EAST NORTH CENTRAL											
Illinois	X	X	X	X	X	X	X	X			
Indiana											
Michigan	X	X	X	X	X	X	X	X			
Ohio	X	X	X	X	X	X	X	X			
Wisconsin	X	X	X		X	X	X	X			
WEST NORTH CENTRAL											
Iowa	X	X	X		X	X	X	X			
Kansas	X	X	X	X	X	X	X	X	X		
Minnesota											
Missouri					X						
Nebraska											
North Dakota											
South Dakota											
SOUTH ATLANTIC											
Delaware					X						
District of Columbia											
Florida											
Georgia											
Maryland	X	X	X	X	X	X	X	X	X		
North Carolina	X				X						
South Carolina											
Virginia					X						
West Virginia	X		X		X		X	X		X	X
EAST SOUTH CENTRAL											
Alabama											
Kentucky	X				X		X	X			
Mississippi											
Tennessee											
WEST SOUTH CENTRAL											
Arkansas	X	X	X		X						
Louisiana											
Oklahoma					X						
Texas											
MOUNTAIN											
Arizona										X	
Colorado											
Idaho	X				X	X	X				
Montana											
Nevada											
New Mexico					X	X					
Utah	X	X	X	X	X	X	X	X			
Wyoming											
PACIFIC											
Alaska					X						
California	X	X	X		X	X	X	X			
Hawaii											
Oregon	X	X	X	X	X	X	X	X			
Washington											
TERRITORIES											
Guam											
Puerto Rico	X	X	X	X	X	X	X	X			
Virgin Islands											

* New York did not report for fiscal year 1990.

TABLE 59. LABORATORY IMPROVEMENT PROGRAM-Clinical.Laboratories-Activity of LIP Staff (continued)

Lab & Region (21)	Proficiency Testing (continued)		Field Visits - LIP Program		
	Dairy/ Food (22)	Other (23)	Licensure/ Permit/ Approval (24)	Certification (25)	Other (26)
TOTAL	1		17	14	
NEW ENGLAND					
Connecticut		Immunohematology	X	X	Blood collection facilities, dog labs
Massachusetts					
Maine			X	X	
New Hampshire				X	
Rhode Island					
Vermont					
MIDDLE ATLANTIC					
New Jersey		Immunohematology	X	X	
New York*					
Pennsylvania		Toxicology	X	X	Investigation in response to complaints
EAST NORTH CENTRAL					
Illinois		Blood alcohol, PKU	X		
Indiana					
Michigan			X	X	
Ohio					
Wisconsin					
WEST NORTH CENTRAL					
Iowa		Blood gas, coagulation	X	X	
Kansas			X	X	
Minnesota					
Missouri	X		X		
Nebraska					
North Dakota					
South Dakota					
SOUTH ATLANTIC					
Delaware			X		
District of Columbia					
Florida					
Georgia					
Maryland			X		
North Carolina					
South Carolina					
Virginia					
West Virginia			X	X	
EAST SOUTH CENTRAL					
Alabama				X	
Kentucky					
Mississippi					
Tennessee					
WEST SOUTH CENTRAL					
Arkansas					
Louisiana					
Oklahoma				X	
Texas					
MOUNTAIN					
Arizona			X		Complaint investigation/consultation
Colorado					
Idaho				X	
Montana					
Nevada					
New Mexico					
Utah			X	X	
Wyoming			X		
PACIFIC					
Alaska					
California		Forensic alcohol, methadone, cholinesterase	X		
Hawaii					
Oregon			X	X	
Washington					
TERRITORIES					
Guam					
Puerto Rico		Urinalysis, immunohematology, mycobacteriology			
Virgin Islands					

* New York did not report for fiscal year 1990.

TABLE 59. LABORATORY IMPROVEMENT PROGRAM-Clinical Laboratories-Activity of LIP Staff (continued)

Lab & Region (27)	Field Visits - Other Programs		
	Licensure/ Permit/ Approval (28)	Certification (29)	Other (30)
TOTAL	6	4	
NEW ENGLAND			
Connecticut	X	X	
Massachusetts	X	X	CLIA licensure
Maine			
New Hampshire			
Rhode Island	X	X	
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania			
EAST NORTH CENTRAL			
Illinois			
Indiana			
Michigan			
Ohio			
Wisconsin			
WEST NORTH CENTRAL			
Iowa			
Kansas			
Minnesota			
Missouri			
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida			
Georgia			
Maryland			
North Carolina			
South Carolina			
Virginia			
West Virginia			
EAST SOUTH CENTRAL			
Alabama			
Kentucky	X	X	
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas			
Louisiana			
Oklahoma	X		
Texas			
MOUNTAIN			
Arizona			
Colorado			
Idaho			
Montana			
Nevada			
New Mexico			
Utah			
Wyoming	X		
PACIFIC			
Alaska			
California			
Hawaii			
Oregon			
Washington			
TERRITORIES			
Guam			
Puerto Rico			
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 59. LABORATORY IMPROVEMENT PROGRAM-Clinical Laboratories-Activity of LIP Staff (continued)

Lab & Region (31)	Training (32)	Consultation (33)	Other (34)
TOTAL	26	28	
NEW ENGLAND			
Connecticut	X	X	On-site inspections
Massachusetts			
Maine	X	X	
New Hampshire			
Rhode Island	X	X	
Vermont			
MIDDLE ATLANTIC			
New Jersey		X	
New York*			
Pennsylvania	X	X	Guest lectures
EAST NORTH CENTRAL			
Illinois		X	Monitor CAP & ABB survey results
Indiana			
Michigan			Enforcement
Ohio		X	
Wisconsin	X	X	
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas	X	X	
Minnesota			
Missouri	X	X	
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware	X	X	
District of Columbia			
Florida			
Georgia			
Maryland	X	X	
North Carolina	X	X	
South Carolina	X		
Virginia			
West Virginia	X	X	
EAST SOUTH CENTRAL			
Alabama			
Kentucky			
Mississippi			
Tennessee	X	X	
WEST SOUTH CENTRAL			
Arkansas	X	X	
Louisiana	X		
Oklahoma		X	
Texas	X		
MOUNTAIN			
Arizona	X	X	Statute and rule development
Colorado	X	X	
Idaho	X	X	Newsletter
Montana		X	
Nevada			
New Mexico			
Utah	X	X	
Wyoming	X	X	
PACIFIC			
Alaska	X	X	
California	X	X	
Hawaii			
Oregon	X	X	
Washington			
TERRITORIES			
Guam			
Puerto Rico	X	X	
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Public Health Laboratories

Lab & Region	Number of Labs in State	Number of Labs Licensed/Registered/Approved/Certified by State	Number in LIP				Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Licensed/Granted Permits/Approved	Registered	Certified	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	771	320	250	0	51		
AVERAGE	19	11	15	0	5		
NEW ENGLAND	118	115	115	0	0		
Connecticut	115	115	115	0	0		
Massachusetts	NA	NA	0	0	0		Division of Health Care Quality
Maine	1	0	0	0	0		
New Hampshire	1	0	0	0	0		
Rhode Island	0	0	0	0	0		
Vermont	1	0	0	0	0		
MIDDLE ATLANTIC	4	3	3	0	2		
New Jersey	1	1	1	0	1		
New York*							
Pennsylvania	3	2	2	0	1		
EAST NORTH CENTRAL	79	26	21	0	5		
Illinois	12	6	6	0	0		Laboratory Licensing Section
Indiana	9	5	0	0	5		Laboratory Support Division
Michigan	50	7	7	0	0		Dept. of Public Health
Ohio	8	8	8	0	0		
Wisconsin	NA	NA	0	0	0		Section of Lab Certification, Bureau of Prevention, Div. of Health
WEST NORTH CENTRAL	132	14	10	0	1		
Iowa	8	8	0	0	0		Iowa Dept. of Inspections & Appeals
Kansas	100	3	3	0	1		Regional Office, Kansas Dept. of Health & Environment
Minnesota	NA	0	0	0	0		Dept. of Health
Missouri	7	0	7	0	0		Public Health Laboratory & Bureau of Hospital Licensing
Nebraska	4	0	0	0	0		Health Facilities Standards Bureau
North Dakota	12	3	0	0	0		3-certification of water
South Dakota	1	0	0	0	0		
SOUTH ATLANTIC	139	36	19	0	1		
Delaware	3	2	0	0	0		Health Facilities & Licensing
District of Columbia	NA	NA	0	0	0		Dept. of Consumer & Regulatory Affairs
Florida	14	14	0	0	0		HRS Office of Licensure & Certification
Georgia	NA	NA	0	0	0		Office of Regulatory Services, Georgia Dept. of Human Resources
Maryland	8	8	8	0	0		
North Carolina	101	0	0	0	0		101-Voluntary prof. test.
South Carolina	NA	NA	0	0	0		
Virginia	11	11	11	0	0		
West Virginia	2	1	0	0	1		
EAST SOUTH CENTRAL	157	13	0	0	8		
Alabama	5	5	0	0	5		
Kentucky	144	0	0	0	0		108 on-site consultations
Mississippi	3	3	0	0	3		
Tennessee	5	5	0	0	0		Laboratory Licensure Board
WEST SOUTH CENTRAL	29	31	2	0	28		
Arkansas	4	3	2	0	0		
Louisiana	NA	NA	0	0	0		Div. of Lic. & Certification, Dept. of Health & Hospitals
Oklahoma	NA	3	0	0	3		
Texas	25	25	0	0	25		
MOUNTAIN	54	28	28	0	6		
Arizona	21	18	18	0	0		
Colorado	10	0	0	0	0		Health Facilities Division
Idaho	6	6	6	0	6		
Montana	NA	0	0	0	0		
Nevada	NA	NA	0	0	0		Bureau of Regulatory Health Services
New Mexico	3	3	3	0	0		
Utah	13	0	0	0	0		
Wyoming	1	1	1	0	0		Dept. of Health
PACIFIC	56	53	52	0	0		
Alaska	3	0	0	0	0		
California	49	49	49	0	0		Laboratory Field Services, CSDHS
Hawaii	1	1	0	0	0		Hospitals & Medical Facilities Branch, Dept. of Health
Oregon	3	3	3	0	0		
Washington	NA	NA	0	0	0		Laboratory Quality Assurance, Office of Licensing & Certification
TERRITORIES	3	1	0	0	0		
Guam	1	NA	0	0	0		HCFA
Puerto Rico	1	1	0	0	0		FDA/EPA
Virgin Islands	1	0	0	0	0		

* New York did not report for fiscal year 1990.
NOTE: NA = Data not available.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Public Health Laboratories-Activity of LIP Staff (continued)

Lab & Region	Proficiency Testing										
	Bacteriology	Mycology	Parasitology	Virology	Immunology		Hematology	Clinical Chemistry	Pathology	Environmental Microbiology	Environmental Chemistry
					Syphilis Serology	Non-Syphilis Serology					
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
TOTAL	18	11	12	6	23	12	13	14	1	17	12
NEW ENGLAND											
Connecticut	X	X	X		X	X	X	X		X	X
Massachusetts											
Maine	X	X	X	X	X	X		X			X
New Hampshire											
Rhode Island											
Vermont											
MIDDLE ATLANTIC											
New Jersey											
New York*											
Pennsylvania	X	X	X	X	X	X	X	X			
EAST NORTH CENTRAL											
Illinois	X		X		X					X	
Indiana										X	
Michigan	X	X	X	X	X	X		X			
Ohio	X	X	X		X	X	X	X			X
Wisconsin	X	X	X		X	X	X	X			X
WEST NORTH CENTRAL											
Iowa	X	X	X		X		X	X		X	X
Kansas					X	X					
Minnesota											
Missouri					X						
Nebraska											
North Dakota										X	
South Dakota											
SOUTH ATLANTIC											
Delaware											
District of Columbia											
Florida										X	X
Georgia											
Maryland	X	X	X	X	X	X	X	X	X	X	X
North Carolina	X				X		X	X		X	
South Carolina					X		X	X			
Virginia					X						
West Virginia					X						
EAST SOUTH CENTRAL											
Alabama											
Kentucky	X				X		X	X			
Mississippi										X	
Tennessee	X									X	
WEST SOUTH CENTRAL											
Arkansas	X				X						
Louisiana										X	X
Oklahoma					X						
Texas											
MOUNTAIN											
Arizona										X	
Colorado											X
Idaho	X				X		X				
Montana										X	
Nevada											
New Mexico					X	X					
Utah										X	X
Wyoming											
PACIFIC											
Alaska											
California	X	X	X		X	X	X	X			
Hawaii										X	X
Oregon	X	X	X	X	X	X	X	X		X	
Washington	X									X	X
TERRITORIES											
Guam											
Puerto Rico	X	X	X	X	X	X	X	X			
Virgin Islands											

* New York did not report for fiscal year 1990.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Public Health Laboratories-Activity of LIP Staff (continued)

Lab & Region (21)	Proficiency Testing (continued)		Field Visits - LIP Programs		
	Dairy/ Food (22)	Other (23)	Licensure/ Permit/ Approval (24)	Certification (25)	(26)
TOTAL	14		10	8	
NEW ENGLAND					
Connecticut	X		X		
Massachusetts					
Maine					
New Hampshire					
Rhode Island					
Vermont					
MIDDLE ATLANTIC					
New Jersey				X	
New York*					
Pennsylvania		Toxicology	X	X	Investigation in response to complaints
EAST NORTH CENTRAL					
Illinois	X	Blood alcohol	X	X	
Indiana	X				Certify for drinking water
Michigan			X	X	
Ohio	X				
Wisconsin	X				
WEST NORTH CENTRAL					
Iowa		Coagulation			
Kansas					
Minnesota					
Missouri	X		X		
Nebraska					
North Dakota	X			X	
South Dakota					
SOUTH ATLANTIC					
Delaware					
District of Columbia					
Florida					
Georgia					
Maryland	X		X		
North Carolina	X				
South Carolina					
Virginia	X		X		
West Virginia					
EAST SOUTH CENTRAL					
Alabama	X			X	
Kentucky					Consultations to improve lab performance
Mississippi					
Tennessee	X				
WEST SOUTH CENTRAL					
Arkansas				X	
Louisiana	X				
Oklahoma					
Texas				X	
MOUNTAIN					
Arizona			X		Complaint investigation/consultation
Colorado	X				
Idaho					
Montana					
Nevada					
New Mexico					
Utah					
Wyoming					
PACIFIC					
Alaska					
California			X		
Hawaii					
Oregon			X		
Washington					
TERRITORIES					
Guam					
Puerto Rico		Urinalysis, immunohematology, mycobacteriology			
Virgin Islands					

* New York did not report for fiscal year 1990.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Public Health Laboratories-Activity of LIP Staff (continued)

Lab & Region (27)	Field Visits - Other Programs		
	Licensure/ Permit/ Approval (28)	Certification (29)	Other (30)
TOTAL	2	3	
NEW ENGLAND			
Connecticut			
Massachusetts			
Maine			
New Hampshire			
Rhode Island			
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania			
EAST NORTH CENTRAL			
Illinois			
Indiana			
Michigan			
Ohio		X	
Wisconsin			
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas			
Minnesota			
Missouri			
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida			
Georgia			
Maryland			
North Carolina			
South Carolina			
Virginia			
West Virginia			
EAST SOUTH CENTRAL			
Alabama			
Kentucky			
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas			
Louisiana			
Oklahoma	X		
Texas			
MOUNTAIN			
Arizona			
Colorado			
Idaho		X	
Montana			
Nevada			
New Mexico			
Utah			
Wyoming			
PACIFIC			
Alaska			
California			
Hawaii			
Oregon			
Washington			
TERRITORIES			
Guam			
Puerto Rico			
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Public Health Laboratories-Activity of LIP Staff (continued)

Lab & Region (31)	Training (32)	Consultation (33)	Other (34)
TOTAL	27	27	
NEW ENGLAND			
Connecticut	X	X	On-site inspections
Massachusetts			
Maine	X	X	
New Hampshire			
Rhode Island			
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania	X	X	Guest lectures
EAST NORTH CENTRAL			
Illinois		X	Monitor CAP & ABB survey results
Indiana			
Michigan			Enforcement
Ohio			
Wisconsin	X	X	
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas	X	X	
Minnesota			
Missouri	X	X	
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware	X	X	
District of Columbia			
Florida			
Georgia			
Maryland	X	X	
North Carolina	X	X	
South Carolina	X	X	
Virginia	X	X	
West Virginia	X	X	
EAST SOUTH CENTRAL			
Alabama			
Kentucky	X	X	
Mississippi			
Tennessee	X	X	
WEST SOUTH CENTRAL			
Arkansas	X	X	
Louisiana	X		
Oklahoma		X	
Texas	X		
MOUNTAIN			
Arizona	X	X	Statute and rule development
Colorado	X	X	
Idaho	X	X	Newsletter
Montana		X	
Nevada			
New Mexico			
Utah	X	X	
Wyoming			
PACIFIC			
Alaska	X		
California	X	X	
Hawaii			
Oregon	X	X	
Washington	X	X	
TERRITORIES			
Guam			
Puerto Rico	X	X	
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 60. LABORATORY IMPROVEMENT PROGRAM-Regulation of State Public Health Laboratory (continued)

Lab & Region	Type of licensure/certification/accreditation								
	CLIA (2)	Medicare (3)	FDA (4)	CAP (5)	SDWA (6)	OSHA (7)	NVLAP (8)	AIHA (9)	Other (10)
(1) TOTAL	28	34	29	2	32	8	9	8	
NEW ENGLAND									
Connecticut		X	X		X	X	X	X	
Massachusetts	X	X	X						USDA
Maine	X	X			X				
New Hampshire		X	X			X	X		
Rhode Island			X						
Vermont		X			X				
MIDDLE ATLANTIC									
New Jersey		X	X						Dept. of Environmental Protection, EPA
New York*									
Pennsylvania									
EAST NORTH CENTRAL									
Illinois	X	X	X		X	X	X		State licensure
Indiana			X		X	X			USDA-FSIS
Michigan	X	X							
Ohio	X	X	X		X	X	X	X	
Wisconsin	X	X	X		X	X			Great Lakes Assn., Reg. Genetics Svc., NRC
WEST NORTH CENTRAL									
Iowa	X	X			X	X		X	
Kansas	X				X			X	
Minnesota		X			X				
Missouri					X				
Nebraska		X			X		X		
North Dakota	X	X	X		X				
South Dakota					X				
SOUTH ATLANTIC									
Delaware		X	X		X				
District of Columbia									
Florida	X	X			X				
Georgia									GA clinical laboratory licensure GA clinical laboratory director licensure GA clinical laboratory personnel certification
Maryland	X	X			X				
North Carolina					X			X	
South Carolina	X	X	X			X	X	X	
Virginia			X		X				
West Virginia			X		X				
EAST SOUTH CENTRAL									
Alabama			X						EPA
Kentucky	X	X	X					X	State licensure
Mississippi		X	X						EPA-drinking water
Tennessee	X	X	X	X	X				EPA, TDHE Lab License
WEST SOUTH CENTRAL									
Arkansas		X	X		X		X		USDA
Louisiana	X	X	X		X				
Oklahoma	X	X							
Texas	X	X	X		X		X		
MOUNTAIN									
Arizona	X				X		X	X	
Colorado	X		X		X				
Idaho	X	X	X						
Montana	X	X	X		X				EPA
Nevada	X	X	X		X				
New Mexico	X	X	X		X				
Utah	X	X			X				
Wyoming	X	X							State license
PACIFIC									
Alaska									
California	X								
Hawaii	X		X		X				
Oregon	X	X	X	X					EPA-drinking water
Washington					X				
TERRITORIES									
Guam		X							
Puerto Rico			X						EPA, HCFA, state
Virgin Islands		X							

* New York did not report for fiscal year 1990.

TABLE 61. LABORATORY IMPROVEMENT PROGRAM-Physician's Office Laboratories

Lab & Region	Number of Labs in State	Number of Labs Licensed/Registered/Approved/Certified by State	Number by LIP			Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories	
			Licensed/Granted Permits/Approved	Registered	Certified		Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	29,175	9,430	8,605	750	125		
AVERAGE	1,823	786	861	375	42		
NEW ENGLAND	2,087	250	0	250	0		
Connecticut	1,237	0	0	0	0		
Massachusetts	NA	NA	0	0	0		Division of Health Care Quality
Maine	250	250	0	250	0		
New Hampshire	NA	0	0	0	0		
Rhode Island	600	0	0	0	0		
Vermont	NA	0	0	0	0		
MIDDLE ATLANTIC	4,997	4,997	4,997	0	90		
New Jersey	23	23	23	0	0		
New York*							
Pennsylvania	4,974	4,974	4,974	0	90		
EAST NORTH CENTRAL	881	48	48	0	0		
Illinois	881	0	0	0	0		Laboratory Licensing Section
Indiana	NA	0	0	0	0		
Michigan	NA	48	48	0	0		Dept. of Public Health
Ohio	NA	NA	0	0	0		
Wisconsin	NA	NA	0	0	0		Section of Lab Certification, Bureau of Prevention, Div. of Health
WEST NORTH CENTRAL	24	NA	0	0	0		
Iowa	NA	NA	0	0	0		
Kansas	NA	0	0	0	0		
Minnesota	NA	0	0	0	0		Dept. of Health
Missouri	NA	0	0	0	0		
Nebraska	NA	0	0	0	0		Health Facilities Standards Bureau
North Dakota	24	0	0	0	0		
South Dakota	NA	NA	0	0	0		Div. of Public Health Certification, Dept. of Health (CLIA only)
SOUTH ATLANTIC	1,955	1,203	628	500	25		
Delaware	NA	0	0	0	0		
District of Columbia	NA	NA	0	0	0		Dept. of Consumer & Regulatory Affairs
Florida	NA	75	0	0	0		HRS Office of Licensure & Certification
Georgia	NA	0	0	0	0		Office of Regulatory Services, Georgia Dept. of Human Resources
Maryland	1,800	1,000	500	500	0		
North Carolina	NA	NA	0	0	0		Div. of Facility Services, Dept. of Human Resources
South Carolina	NA	NA	0	0	0		
Virginia	NA	0	0	0	0		
West Virginia	155	128	128	0	25		
EAST SOUTH CENTRAL	2,000	NA	0	0	0		
Alabama	NA	NA	0	0	0		Division of Licensure & Certification
Kentucky	2,000	0	0	0	0		
Mississippi	NA	0	0	0	0		
Tennessee	NA	0	0	0	0		
WEST SOUTH CENTRAL	NA	6	6	0	0		
Arkansas	NA	6	6	0	0		
Louisiana	NA	NA	0	0	0		Div. of Lic. & Certification, Dept. of Health & Hospitals
Oklahoma	NA	NA	0	0	0		
Texas	NA	0	0	0	0		
MOUNTAIN	5,031	309	309	0	0		
Arizona	1,250	0	0	0	0		
Colorado	3,000	0	0	0	0		Health Facilities Division
Idaho	281	281	281	0	0		
Montana	NA	0	0	0	0		
Nevada	NA	NA	0	0	0		Bureau of Regulatory Health Services
New Mexico	NA	28	28	0	0		
Utah	500	0	0	0	0		
Wyoming	NA	NA	0	0	0		Dept. of Health
PACIFIC	12,200	2,617	2,617	0	10		
Alaska	200	0	0	0	0		4-voluntary Syphilis P.T. program
California	12,000	2,500	2,500	0	0		Laboratory Field Services, CSDHS
Hawaii	NA	0	0	0	0		
Oregon	NA	117	117	0	10		
Washington	NA	NA	0	0	0		Laboratory Quality Assurance, Office of Licensing & Certification
TERRITORIES	NA	NA	0	0	0		
Guam	NA	NA	0	0	0		
Puerto Rico	0	0	0	0	0		
Virgin Islands	NA	0	0	0	0		

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 61. LABORATORY IMPROVEMENT PROGRAM-Physicians' Office Laboratories-Activity of LIP Staff (continued)

Lab & Region	Proficiency Testing										
	Bacteriology (10)	Mycology (11)	Parasitology (12)	Virology (13)	Immunology		Hematology (16)	Clinical Chemistry (17)	Pathology (18)	Environmental Microbiology (19)	Environmental Chemistry (20)
					Syphilis Serology (14)	Non-Syphilis Serology (15)					
TOTAL	15	7	10	3	17	12	14	14	0	0	0
NEW ENGLAND											
Connecticut											
Massachusetts											
Maine	X					X	X	X			
New Hampshire											
Rhode Island											
Vermont											
MIDDLE ATLANTIC											
New Jersey	X	X	X		X	X	X	X			
New York*											
Pennsylvania	X	X	X	X	X	X	X	X			
EAST NORTH CENTRAL											
Illinois					X		X	X			
Indiana											
Michigan	X					X	X	X			
Ohio											
Wisconsin	X	X	X		X	X	X	X			
WEST NORTH CENTRAL											
Iowa	X	X	X		X	X	X	X			
Kansas	X		X			X	X	X			
Minnesota											
Missouri					X						
Nebraska											
North Dakota											
South Dakota											
SOUTH ATLANTIC											
Delaware											
District of Columbia											
Florida											
Georgia											
Maryland	X	X	X	X	X	X	X	X			
North Carolina	X				X						
South Carolina											
Virginia					X						
West Virginia	X		X		X		X	X			
EAST SOUTH CENTRAL											
Alabama											
Kentucky	X				X		X	X			
Mississippi											
Tennessee											
WEST SOUTH CENTRAL											
Arkansas	X		X		X						
Louisiana											
Oklahoma					X						
Texas											
MOUNTAIN											
Arizona											
Colorado											
Idaho	X					X	X	X			
Montana											
Nevada											
New Mexico					X	X					
Utah											
Wyoming											
PACIFIC											
Alaska					X						
California	X	X	X		X	X	X	X			
Hawaii											
Oregon	X	X	X	X	X	X	X	X			
Washington											
TERRITORIES											
Guam											
Puerto Rico											
Virgin Islands											

* New York did not report for fiscal year 1990.

TABLE 61. LABORATORY IMPROVEMENT PROGRAM-Physicians' Office Laboratories-Activity of LIP Staff (continued)

Lab & Region (21)	Proficiency Testing (continued)		Field Visits - LIP Programs		
	Dairy/ Food (22)	Other (23)	Licensure/ Permit/ Approval (24)	Certification (25)	Other (26)
TOTAL	0		7	3	
NEW ENGLAND					
Connecticut					
Massachusetts					
Maine					Investigate complaints (Medicaid)
New Hampshire					
Rhode Island					
Vermont					
MIDDLE ATLANTIC					
New Jersey		Immunohematology	X		
New York*					
Pennsylvania		Toxicology	X	X	Investigation in response to complaints
EAST NORTH CENTRAL					
Illinois		Blood alcohol			
Indiana					
Michigan			X		
Ohio					
Wisconsin					
WEST NORTH CENTRAL					
Iowa		Coagulation			
Kansas					Consultative inspections
Minnesota					
Missouri					
Nebraska					
North Dakota					
South Dakota					
SOUTH ATLANTIC					
Delaware					
District of Columbia					
Florida					
Georgia					
Maryland			X		
North Carolina					
South Carolina					
Virginia					
West Virginia			X	X	
EAST SOUTH CENTRAL					
Alabama					
Kentucky					
Mississippi					
Tennessee					
WEST SOUTH CENTRAL					
Arkansas					
Louisiana					
Oklahoma					
Texas					
MOUNTAIN					
Arizona					
Colorado					
Idaho					
Montana					
Nevada					
New Mexico					
Utah					
Wyoming			X		
PACIFIC					
Alaska					
California					
Hawaii					
Oregon			X	X	
Washington					
TERRITORIES					
Guam					
Puerto Rico					
Virgin Islands					

* New York did not report for fiscal year 1990.

TABLE 61. LABORATORY IMPROVEMENT PROGRAM-Physicians' Office Laboratories-Activity of LIP Staff (continued)

Lab & Region	Field Visits - Other Programs		
	Licensure/ Permit/ Approval	Certification	Other
(27)	(28)	(29)	(30)
TOTAL	3	2	
NEW ENGLAND			
Connecticut			
Massachusetts	X		
Maine			
New Hampshire			
Rhode Island			
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania			
EAST NORTH CENTRAL			
Illinois			
Indiana			
Michigan			
Ohio			
Wisconsin			
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas			
Minnesota			
Missouri			
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida			
Georgia			
Maryland			
North Carolina			
South Carolina			
Virginia			
West Virginia			
EAST SOUTH CENTRAL			
Alabama			
Kentucky			
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas			
Louisiana			
Oklahoma			
Texas			
MOUNTAIN			
Arizona			
Colorado			
Idaho		X	
Montana			
Nevada			
New Mexico			
Utah			
Wyoming	X		
PACIFIC			
Alaska			
California			
Hawaii			
Oregon			
Washington			
TERRITORIES			
Guam			
Puerto Rico			
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 61. LABORATORY IMPROVEMENT PROGRAM-Physicians' Office Laboratories-Activity of LIP Staff (continued)

Lab & Region (31)	Training (32)	Consultation (33)	Other (34)
TOTAL	16	21	
NEW ENGLAND			
Connecticut			
Massachusetts			
Maine	X	X	
New Hampshire			
Rhode Island			
Vermont			
MIDDLE ATLANTIC			
New Jersey		X	
New York*			
Pennsylvania	X	X	Guest lectures
EAST NORTH CENTRAL			
Illinois		X	Monitor CAP & ABB survey results
Indiana			
Michigan			Enforcement
Ohio		X	
Wisconsin	X	X	
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas		X	
Minnesota			
Missouri	X	X	
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida			
Georgia			
Maryland	X	X	
North Carolina	X	X	
South Carolina	X		
Virginia			
West Virginia	X	X	
EAST SOUTH CENTRAL			
Alabama			
Kentucky			
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas	X	X	
Louisiana			
Oklahoma		X	
Texas			
MOUNTAIN			
Arizona			Statute and rule development
Colorado	X	X	
Idaho	X	X	Newsletter
Montana		X	
Nevada			
New Mexico			
Utah	X	X	
Wyoming	X	X	
PACIFIC			
Alaska	X		
California		X	
Hawaii			
Oregon	X	X	
Washington			
TERRITORIES			
Guam			
Puerto Rico			
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 62. LABORATORY IMPROVEMENT PROGRAM-Dairy and Food Laboratories

Lab & Region	Number of Labs in State	Number of Labs Licensed/Registered/ Approved/Certified by State	Number in LIP				Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Licensed/ Granted Permits/ Approved	Registered	Certified	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	270	347	54	0	240		
AVERAGE	13	13	18	0	11		
NEW ENGLAND	51	50	41	0	27		
Connecticut	15	15	15	0	0		
Massachusetts	26	26	26	0	26		
Maine	NA	NA	0	0	0		Dept. of Agriculture
New Hampshire	1	1	0	0	1		
Rhode Island	1	1	0	0	0		Facilities Regulation, Dept. of Health
Vermont	8	7	0	0	0		Dept. of Agriculture
MIDDLE ATLANTIC	NA	12	0	0	12		
New Jersey	NA	12	0	0	12		Bacteriology Dept., Dept. of Health (dairy only); Food & Drink, Consumer Health Div. (information on food labs not available)
New York*							
Pennsylvania	NA	NA	0	0	0		Dept. of Agriculture
EAST NORTH CENTRAL	31	91	0	0	59		
Illinois	31	31	0	0	31		Dept. of Public Health
Indiana	NA	19	0	0	19		Laboratory Support Division
Michigan	NA	32	0	0	0		Dept. of Agriculture
Ohio	NA	9	0	0	9		
Wisconsin	NA	NA	0	0	0		Section of Lab Certification, Bur. of Prev., Div. of Health
WEST NORTH CENTRAL	14	23	0	0	12		
Iowa	NA	NA	0	0	0		Dept. of Agriculture
Kansas	NA	NA	0	0	0		Board of Agriculture
Minnesota	NA	NA	0	0	0		Dept. of Agriculture
Missouri	NA	9	0	0	9		
Nebraska	NA	NA	NA	NA	NA		Dept. of Agriculture
North Dakota	14	14	0	0	3		ND Dept. of Health & Consolidated Lab & State Agriculture Dept.
South Dakota	NA	NA	0	0	0		Dept. of Agriculture
SOUTH ATLANTIC	50	44	0	0	67		
Delaware	1	0	0	0	0		
District of Columbia	NA	NA	0	0	0		Dept. of Consumer & Regulatory Affairs
Florida	NA	NA	0	0	0		Florida Dept. of Agriculture & Consumer Services
Georgia	NA	NA	0	0	0		Georgia Dept. of Agriculture
Maryland	25	17	0	0	17		
North Carolina	NA	NA	0	0	23		
South Carolina	6	6	0	0	6		
Virginia	18	18	0	0	18		State Health Lab and Dept. of Agriculture & Consumer Services
West Virginia	NA	3	0	0	3		
EAST SOUTH CENTRAL	26	38	0	0	25		
Alabama	5	4	0	0	4		
Kentucky	NA	13	0	0	13		Div. of Laboratory Services
Mississippi	NA	NA	0	0	0		Environmental Health
Tennessee	21	21	0	0	8		State Health Lab, 2 manufacturing grade -Dept. of Agriculture
WEST SOUTH CENTRAL	7	20	0	0	20		
Arkansas	NA	0	0	0	0		
Louisiana	7	7	0	0	7		
Oklahoma	NA	0	0	0	0		
Texas	NA	13	0	0	13		
MOUNTAIN	78	66	13	0	15		
Arizona	2	1	0	0	0		Dept. of Agriculture
Colorado	61	51	0	0	1		
Idaho	13	13	13	0	13		Microbiology section, State Health Lab
Montana	NA	NA	0	0	0		Dept. of Livestock
Nevada	1	1	0	0	1		
New Mexico	1	0	0	0	0		
Utah	NA	NA	0	0	0		Dept. of Agriculture
Wyoming	NA	NA	0	0	0		Dept. of Agriculture
PACIFIC	NA	3	0	0	3		
Alaska	1	0	0	0	0		
California	NA	NA	0	0	0		Dept. of Food and Agriculture
Hawaii	NA	3	0	0	3		
Oregon	NA	NA	0	0	0		Dept. of Agriculture
Washington	NA	NA	0	0	0		Dept. of Agriculture
TERRITORIES	12	NA	0	0	0		
Guam	NA	NA	0	0	0		
Puerto Rico	12	0	0	0	0		
Virgin Islands	NA	NA	0	0	0		Human Environmental and Welfare

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 62. LABORATORY IMPROVEMENT PROGRAM-Dairy and Food Laboratories-Activity of LIP Staff (continued)

Lab & Region	Proficiency Testing	Field Visits - LIP Programs		
		Licensure/ Permit/ Approval	Certification	Other
(8)	(9)	(10)	(11)	(12)
TOTAL	15	3	18	
NEW ENGLAND				
Connecticut		X		
Massachusetts	X	X	X	
Maine				
New Hampshire		X	X	
Rhode Island				
Vermont				
MIDDLE ATLANTIC				
New Jersey	X			
New York*				
Pennsylvania				
EAST NORTH CENTRAL				
Illinois	X		X	
Indiana	X		X	
Michigan				
Ohio	X		X	
Wisconsin	X			
WEST NORTH CENTRAL				
Iowa				
Kansas				
Minnesota				
Missouri			X	
Nebraska				
North Dakota	X		X	
South Dakota				
SOUTH ATLANTIC				
Delaware				
District of Columbia				
Florida				
Georgia				
Maryland			X	Interim visits to inspect changes in facilities and methodology/technical review of new personnel
North Carolina			X	
South Carolina	X			
Virginia			X	
West Virginia	X			
EAST SOUTH CENTRAL				
Alabama	X		X	
Kentucky	X		X	Pre-certification
Mississippi				
Tennessee	X		X	
WEST SOUTH CENTRAL				
Arkansas				
Louisiana	X		X	
Oklahoma				
Texas			X	
MOUNTAIN				
Arizona				
Colorado	X		X	
Idaho				
Montana				
Nevada			X	
New Mexico				
Utah				
Wyoming				
PACIFIC				
Alaska				
California				
Hawaii	X		X	
Oregon				
Washington				
TERRITORIES				
Guam				
Puerto Rico				
Virgin Islands				

* New York did not report for fiscal year 1990.

TABLE 62. LABORATORY IMPROVEMENT PROGRAM-Dairy and Food Laboratories-Activity of LIP Staff (continued)

Lab & Region (13)	Field Visits - Other Programs			Training (17)	Consultation (18)	Other (19)
	Licensure/ Permit/ Approval (14)	Certification (15)	Other (16)			
TOTAL	7	8		18	19	
NEW ENGLAND						
Connecticut				X	X	On-site inspections
Massachusetts					X	
Maine						
New Hampshire						
Rhode Island	X			X	X	
Vermont						
MIDDLE ATLANTIC						
New Jersey	X	X		X	X	Analyst and lab certification
New York*						
Pennsylvania						
EAST NORTH CENTRAL						
Illinois				X		
Indiana				X	X	
Michigan	X	X				
Ohio					X	
Wisconsin				X	X	
WEST NORTH CENTRAL						
Iowa	X	X				
Kansas						
Minnesota						
Missouri				X	X	
Nebraska						
North Dakota				X	X	
South Dakota						
SOUTH ATLANTIC						
Delaware						
District of Columbia						
Florida						
Georgia						
Maryland				X		
North Carolina				X	X	
South Carolina		X		X	X	
Virginia					X	
West Virginia		X		X	X	
EAST SOUTH CENTRAL						
Alabama				X	X	
Kentucky				X		
Mississippi						
Tennessee						
WEST SOUTH CENTRAL						
Arkansas						
Louisiana				X		
Oklahoma						
Texas						
MOUNTAIN						
Arizona						
Colorado					X	
Idaho	X	X		X	X	
Montana						
Nevada						
New Mexico						
Utah						
Wyoming						
PACIFIC						
Alaska						
California	X	X	Water treatment		X	
Hawaii				X	X	
Oregon	X	X				
Washington						
TERRITORIES						
Guam						
Puerto Rico				X	X	
Virgin Islands						

* New York did not report for fiscal year 1990.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories

Lab & Region	Number of Labs in State	Number of Labs Licensed/Registered/Approved/Certified by State	Number of Water Labs in State				Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Licensed/Granted Permits/Approved	Registered	Certified	Other	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
TOTAL	1,235	3,297	511	0	2,524		
AVERAGE	48	82	64	0	87		
NEW ENGLAND	174	281	222	0	37		
Connecticut	111	222	222	0	0		
Massachusetts	NA	NA	0	0	0		Massachusetts EPA, Lawrence Experimental Station
Maine	26	25	0	0	25		
New Hampshire	NA	NA	0	0	0		Dept. of Environmental Services
Rhode Island	22	22	0	0	0		Facilities Regulation, Dept. of Health
Vermont	15	12	0	0	12		Dept. of Health
MIDDLE ATLANTIC	NA	NA	0	0	0		
New Jersey	NA	NA	0	0	0		Dept. of Environmental Protection
New York*							
Pennsylvania	NA	NA	0	0	0		Dept. of Environmental Resources
EAST NORTH CENTRAL	76	880	0	0	694		
Illinois	76	76	0	0	76		Dept. of Public Health
Indiana	NA	54	0	0	54		Laboratory Support Division
Michigan	NA	186	0	0	0		Bureau of Environmental & Occupational Health
Ohio	NA	564	0	0	564		
Wisconsin	NA	NA	0	0	0		Section of Lab Certification, Bur. of Prev., Div. of Health
WEST NORTH CENTRAL	97	462	0	0	398		
Iowa	46	73	0	0	0		Iowa Dept. of Natural Resources/Environmental Protection Div.
Kansas	NA	158	0	0	151		Dept. of Health and Environment
Minnesota	NA	145	0	0	145		Dept. of Health
Missouri	NA	38	0	0	38		
Nebraska	13	13	0	0	13		
North Dakota	29	29	0	0	45		
South Dakota	9	6	0	0	6		
SOUTH ATLANTIC	295	745	156	0	740		
Delaware	6	5	5	0	0		
District of Columbia	NA	NA	0	0	0		Dept. of Consumer & Regulatory Affairs
Florida	NA	420	0	0	420		
Georgia	NA	NA	0	0	0		Georgia Dept. of Natural Resources
Maryland	200	100	0	0	100		
North Carolina	NA	NA	151	0	0		
South Carolina	NA	NA	0	0	0		Bureau of Environmental Quality Control Labs
Virginia	89	163	0	0	163		
West Virginia	NA	57	0	0	57		
EAST SOUTH CENTRAL	172	216	0	0	96		
Alabama	22	20	0	0	20		
Kentucky	NA	35	0	0	0		Dept. of Environmental Protection
Mississippi	NA	11	0	0	11		
Tennessee	150	150	0	0	65		
WEST SOUTH CENTRAL	67	73	5	0	68		
Arkansas	NA	5	5	0	0		
Louisiana	22	23	0	0	23		
Oklahoma	NA	0	0	0	0		
Texas	45	45	0	0	45		
MOUNTAIN	208	486	114	0	368		
Arizona	75	75	75	0	0		
Colorado	45	205	0	0	205		
Idaho	31	31	31	0	31		Microbiology/Chemistry sections, State Health Lab
Montana	NA	14	8	0	6		
Nevada	22	20	0	0	20		
New Mexico	35	35	0	0	0		Environmental Improvement Div. Health & Environment Dept.
Utah	NA	106	0	0	106		
Wyoming	NA	NA	0	0	0		Environmental Protection Agency
PACIFIC	128	139	0	0	109		
Alaska	30	30	0	0	0		Dept. of Environmental Conservation
California	NA	NA	0	0	0		Dept. of Food and Agriculture
Hawaii	NA	7	0	0	7		
Oregon	38	44	0	0	44		
Washington	60	58	0	0	58		
TERRITORIES	18	15	14	0	14		
Guam	NA	NA	0	0	0		
Puerto Rico	17	14	14	0	14		
Virgin Islands	1	1	0	0	0		Human Environmental and Welfare

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories (continued)

Lab & Region	Number of Water Testing Laboratories in Laboratory Improvement Program							
	Licensed/Granted Permits/Approved				Registered			
	Total	Microbiology	Chemistry	Microbiology and Chemistry	Total	Microbiology	Chemistry	Microbiology and Chemistry
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
TOTAL	511	201	139	171	0	0	0	0
AVERAGE	64	25	28	34	0	0	0	0
NEW ENGLAND	222	9	111	102	0	0	0	0
Connecticut	222	9	111	102	0			
Massachusetts	0				0			
Maine	0				0			
New Hampshire	0				0			
Rhode Island	0				0			
Vermont	0				0			
MIDDLE ATLANTIC	0	0	0	0	0	0	0	0
New Jersey	0				0			
New York*	0				0			
Pennsylvania	0				0			
EAST NORTH CENTRAL	0	0	0	0	0	0	0	0
Illinois	0				0			
Indiana	0				0			
Michigan	0				0			
Ohio	0				0			
Wisconsin	0				0			
WEST NORTH CENTRAL	0	0	0	0	0	0	0	0
Iowa	0				0			
Kansas	0				0			
Minnesota	0				0			
Missouri	0				0			
Nebraska	0				0			
North Dakota	0				0			
South Dakota	0				0			
SOUTH ATLANTIC	156	124	4	28	0	0	0	0
Delaware	5	2	0	3	0			
District of Columbia	0				0			
Florida	0				0			
Georgia	0				0			
Maryland	0				0			
North Carolina	151	122	4	25	0			
South Carolina	0				0			
Virginia	0				0			
West Virginia	0				0			
EAST SOUTH CENTRAL	0	0	0	0	0	0	0	0
Alabama	0				0			
Kentucky	0				0			
Mississippi	0				0			
Tennessee	0	0	0	0	0			
WEST SOUTH CENTRAL	5	5	0	0	0	0	0	0
Arkansas	5	5	0	0	0			
Louisiana	0				0			
Oklahoma	0				0			
Texas	0				0			
MOUNTAIN	114	52	22	40	0	0	0	0
Arizona	75	22	13	40	0			
Colorado	0				0			
Idaho	31	22	9	0	0			
Montana	8	8	0	0	0			
Nevada	0				0			
New Mexico	0				0			
Utah	0				0			
Wyoming	0				0			
PACIFIC	0	0	0	0	0	0	0	0
Alaska	0				0			
California	0				0			
Hawaii	0				0			
Oregon	0				0			
Washington	0				0			
TERRITORIES	14	11	2	1	0	0	0	0
Guam	0				0			
Puerto Rico	14	11	2	1	0			
Virgin Islands	0				0			

* New York did not report for fiscal year 1990.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories (continued)

Lab & Region (18)	Number of Water Testing Laboratories in Laboratory Improvement Program							
	Certified				Other			
	Total (19)	Micro-biology (20)	Chemistry (21)	Microbiology and Chemistry (22)	Total (23)	Micro-biology (24)	Chemistry (25)	Microbiology and Chemistry (26)
TOTAL	2,524	807	1,230	487	7	0	7	0
AVERAGE	87	29	59	27	7	0	7	0
NEW ENGLAND	37	9	2	26	0	0	0	0
Connecticut	0				0			
Massachusetts	0				0			
Maine	25	2	2	21	0			
New Hampshire	0				0			
Rhode Island	0				0			
Vermont	12	7	0	5	0			
MIDDLE ATLANTIC	0	0	0	0	0	0	0	0
New Jersey	0				0			
New York*	0				0			
Pennsylvania	0				0			
EAST NORTH CENTRAL	694	244	450	0	0	0	0	0
Illinois	76	76	0	0	0			
Indiana	54	54	0	0	0			
Michigan	0				0			
Ohio	564	114	450	0	0			
Wisconsin	0				0			
WEST NORTH CENTRAL	398	79	174	145	7	0	7	0
Iowa	0				0			
Kansas	151	5	117	29	7	0	7	0
Minnesota	145	19	28	98	0			
Missouri	38	38	0	0	0			
Nebraska	13	4	0	9	0			
North Dakota	45	12	25	8	0			
South Dakota	6	1	4	1	0			
SOUTH ATLANTIC	740	213	363	164	0	0	0	0
Delaware	0				0			
District of Columbia	0				0			
Florida	420	99	241	80	0			
Georgia	0				0			
Maryland	100	31	25	44	0			
North Carolina	0				0			
South Carolina	0				0			
Virginia	163	62	61	40	0			
West Virginia	57	21	36	0	0			
EAST SOUTH CENTRAL	96	51	41	4	0	0	0	0
Alabama	20	20			0			
Kentucky	0				0			
Mississippi	11	11	0	0	0			
Tennessee	65	20	41	4	0			
WEST SOUTH CENTRAL	68	59	9	0	0	0	0	0
Arkansas	0				0			
Louisiana	23	14	9	0	0			
Oklahoma	0				0			
Texas	45	45	0	0	0			
MOUNTAIN	368	94	163	111	0	0	0	0
Arizona	0				0			
Colorado	205	57	62	86	0			
Idaho	31	22	9	0	0			
Montana	6	0	5	0	0			
Nevada	20	7	5	8	0			
New Mexico	0				0			
Utah	106	8	81	17	0			
Wyoming	0				0			
PACIFIC	109	47	26	36	0	0	0	0
Alaska	0				0			
California	0				0			
Hawaii	7	2	2	3	0			
Oregon	44	17	4	23	0			
Washington	58	28	20	10	0			
TERRITORIES	14	11	2	1	0	0	0	0
Guam	0				0			
Puerto Rico	14	11	2	1	0			
Virgin Islands	0				0			

* New York did not report for fiscal year 1990.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories-Activity of LIP Staff (continued)

Lab & Region	Proficiency Testing		Field Visits - LIP Program		
	Water Microbiology	Water Chemistry	Licensure/ Permit/ Approval	Certification	Other
(27)	(28)	(29)	(30)	(31)	(32)
TOTAL	18	16	8	26	
NEW ENGLAND					
Connecticut	X	X	X		
Massachusetts					
Maine	X	X		X	
New Hampshire					
Rhode Island					
Vermont				X	
MIDDLE ATLANTIC					
New Jersey					
New York*					
Pennsylvania					
EAST NORTH CENTRAL					
Illinois				X	
Indiana				X	
Michigan					
Ohio		X	X	X	
Wisconsin		X			
WEST NORTH CENTRAL					
Iowa	X	X	X	X	
Kansas		X		X	
Minnesota				X	
Missouri				X	
Nebraska	X	X		X	
North Dakota	X			X	
South Dakota	X	X		X	
SOUTH ATLANTIC					
Delaware			X		
District of Columbia					
Florida	X	X		X	
Georgia					
Maryland				X	Interim visits to inspect changes in facilities and Methodology/technical review of new personnel
North Carolina	X		X		
South Carolina					
Virginia					
West Virginia	X	X			
EAST SOUTH CENTRAL					
Alabama	X			X	
Kentucky					
Mississippi					
Tennessee	X			X	
WEST SOUTH CENTRAL					
Arkansas					
Louisiana	X	X		X	
Oklahoma					
Texas				X	
MOUNTAIN					
Arizona	X	X	X		Complaint investigation/consultation
Colorado		X		X	
Idaho					
Montana	X		X	X	
Nevada				X	
New Mexico					
Utah	X	X		X	
Wyoming					
PACIFIC					
Alaska					
California					
Hawaii	X	X		X	
Oregon	X			X	
Washington	X	X		X	
TERRITORIES					
Guam					
Puerto Rico			X	X	
Virgin Islands					

* New York did not report for fiscal year 1990.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories-Activity of LIP Staff (continued)

Lab & Region	Field Visits - Other Programs		
	Licensure/ Permit/ Approval	Certification	Other
(33)	(34)	(35)	(36)
TOTAL	4	6	
NEW ENGLAND			
Connecticut			
Massachusetts			
Maine			
New Hampshire			
Rhode Island	X		
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania			
EAST NORTH CENTRAL			
Illinois			
Indiana			
Michigan	X	X	
Ohio			
Wisconsin			
WEST NORTH CENTRAL			
Iowa			
Kansas			
Minnesota			
Missouri			
Nebraska			
North Dakota			
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida			
Georgia			
Maryland			
North Carolina			
South Carolina			
Virginia			
West Virginia		X	
EAST SOUTH CENTRAL			
Alabama			
Kentucky		X	
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas			
Louisiana			
Oklahoma			
Texas			
MOUNTAIN			
Arizona			
Colorado			
Idaho	X	X	
Montana			
Nevada			
New Mexico			
Utah			
Wyoming			
PACIFIC			
Alaska			
California	X	X	Water treatment
Hawaii		X	
Oregon			
Washington			
TERRITORIES			
Guam			
Puerto Rico			
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 63. LABORATORY IMPROVEMENT PROGRAM-Water Laboratories-Activity of LIP Staff (continued)

Lab & Region	Training (37)	Consultation (38)	Other (39)
TOTAL	23	25	(40)
NEW ENGLAND			
Connecticut	X	X	On-site inspections
Massachusetts			
Maine	X	X	
New Hampshire			
Rhode Island	X	X	
Vermont			
MIDDLE ATLANTIC			
New Jersey			
New York*			
Pennsylvania			
EAST NORTH CENTRAL			
Illinois	X		
Indiana	X	X	
Michigan			
Ohio	X	X	
Wisconsin	X	X	
WEST NORTH CENTRAL			
Iowa	X	X	
Kansas		X	
Minnesota	X	X	Inspection
Missouri	X	X	
Nebraska		X	
North Dakota	X	X	
South Dakota			
SOUTH ATLANTIC			
Delaware			
District of Columbia			
Florida	X	X	
Georgia			
Maryland	X	X	
North Carolina	X	X	
South Carolina			
Virginia			
West Virginia	X	X	
EAST SOUTH CENTRAL			
Alabama	X	X	
Kentucky			
Mississippi			
Tennessee			
WEST SOUTH CENTRAL			
Arkansas		X	
Louisiana	X		
Oklahoma			
Texas			
MOUNTAIN			
Arizona	X	X	Statute and rule development
Colorado	X	X	
Idaho	X	X	
Montana		X	
Nevada			
New Mexico			
Utah	X	X	
Wyoming			
PACIFIC			
Alaska			
California			
Hawaii			
Oregon	X	X	
Washington			
TERRITORIES			
Guam			
Puerto Rico	X	X	
Virgin Islands			

* New York did not report for fiscal year 1990.

TABLE 64. LABORATORY IMPROVEMENT PROGRAM-Other LIP Activities for All Types of Laboratories

Lab & Region (1)	Program Activity (2)
Arizona	Blood alcohol program-prepare, distribute, and follow-up blood alcohol proficiency specimens; license lab personnel to analyze blood for alcohol content; issue permits to officers to operate blood alcohol testing devices
California	Licenses/grants permits/approves newborn screening labs, prenatal screening labs, cholinesterase labs, forensic alcohol labs, methadone labs and environmental labs
Connecticut	NPDES; asbestos in air and water (33 labs in state, 36 out-of-state labs); air testing labs, radon labs (69 in and out of state); recombinant DNA labs
Kansas	Admin. of state wide breath alcohol program: 210 agencies utilizing instruments in 122 sites-certify 150 instruments & approximately 2400 operators; conduct quarterly proficiency test program for certifying operators; provide court testimony in DUI cases; provide limited training to officers of judicial system
Louisiana	State Health Unit provides QA/QC training and proficiency testing
Maine	Consultations with Medicaid; certify out-of-state water labs by reciprocity; continuing education/training for clinical environmental lab personnel.
Maryland	Cytology proficiency testing program
Minnesota	Drug and alcohol laboratory licensure and inspection
Montana	National laboratory training network-attend yearly meeting, conduct monthly conference calls, coordinate training activities; Autoclave efficacy program-supply spore strips to labs by request, strip returned to state public health lab for testing after autoclaving
New Jersey	The Clinical Lab Improvement Service is responsible for the licensing, inspection, and proficiency testing of 134 blood banks.
North Carolina	Quarterly newsletter, audio-visual training material, distribution of bacterial stock cultures
North Dakota	NLTA-Midwestern ALTA, Laboratory Education for North Dakota (LEND); ND HIV/AIDS update, pH certification school for NPDES permittees, in-house seminars
Oklahoma	HIV Licensure
Tennessee	Microbiological training program: 1-Lab training for certification of waived tests for county health dept. personnel. 2-Program prepares B.S. graduate microbiological students for state licensure. 3-Program serves as 4th academic year of education for B.S. degree. in clinical microbiology, the purpose of which is to and prepare students for state licensure.
Utah	Pulmonary testing lab- a voluntary program which includes on site visits, proficiency testing monitoring and consultation; blood alcohol testing includes on-site visits, proficiency testing monitoring, and consultation
Virginia	Inspect and recommend approval/disapproval of four commercial blood banks.
Wisconsin	The Wisconsin State Lab of Hygiene (WSLH) provides LIPs (prof. testing) to other states. Out-of-state customers include lab physicians' offices and water chemistry labs. The WSLH is HCFA approved as provider of proficiency testing. Water chemistry labs are inspected/licensed by the Office of Technical Services, WI Dept. of Natural Resources

NOTE: Laboratories that did not report information for this table are not listed.

TABLE 65. BIOLOGICS, REAGENTS, AND MEDIA PRODUCTION-Production of Biologics, Reagents, and Media for Distribution

Lab & Region	No. FTE'S	Biologics		Reagents	Media	Materials Produced for Distribution
		Human Use	Lab Use			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
TOTAL	167.55	1	6	16	18	
Alabama	3.60			X	X	Jones Kendrick media, Rodac plates, Modified Thayer Martin plates, collection bottles: glycerine saline, intestinal parasites, TB, public & private water, and milk, Cary Blair transport media
Alaska	0.70			X	X	Standard bacteriology media, reagents for indol, MRVP, nitrate testing, gram stain reagents
Arizona	6.00			X	X	Blood agar & heart infusion plates, agars: phenylethylalcohol, Mueller Hinton, chocolate, MacConkey's, Hektoen enteric, urea, M-fc, K-ts, M-endo, Haemophilus ducreyi, anaerobic Brucella, nutrient, campylobacter blood; chopped meat medium, broths: gram negative, tryptic soy, thioglycollate; reagents: nitrate, Kovack's; solutio
						KOH, Hanks; indole motility, triple sugar iron, ferric chloride, polyvinyl alcohol, buffered glycerol, saline, Cary Blair transport, Regan-Lowe transport, buffer rinse water, API saline blanks, formalin, Simmons citrate, bile esculin
						10% sodium deoxycholate, 50% nitric acid, 50% sulfuric acid
Arkansas	3.00			X	X	Martin-Lewis, gram stain reagents
California	0.25		X	X		Anti influenza A H1N1 monoclonal Ab, anti influenza A H1N, monoclonal Ab
Colorado	2.00					All media for ova parasite, enteric, pertussis, and gonorrhoea collection kits; nutrient agar, malt extract agar plates
Connecticut	0.50		X			VDRL antigen and saline, serum controls for Syphilis and Lyme disease
Florida	4.00				X	Lowenstein, Jensen Media used in TB testing
Hawaii	0.50				X	Transport media, specialized media, EMJH
Illinois	5.00			X	X	
Indiana	4.00			X	X	
Iowa	2.00			X	X	Buffers, specimen preservation & transport media, all bacteriological culture media used except Jembec plates
Kansas	2.00			X	X	
Kentucky	0.50				X	Lowenstein-Jensen media distributed to Louisville & Jefferson County Health Depts.
Massachusetts	7.00		X	X	X	172,508 tubes-culture media, 16,665 bulk containers-buffers and/or reagents, 67,274 microbiological agar plates
Michigan	100.00	X		X	X	DPT vaccine, individual vaccines for Diphtheria, Pertussis, Tetanus, tissue culture rabies vaccine, factor VIII, immune serum globulin, albumin, Salmonella & Legionella conjugated antisera, various media
Montana	NA					Stock cultures for media quality control
Nebraska	0.50			X		
New Mexico	3.00		X	X	X	Gram stain reagents, Mediums: Modified Martin Lewis, Cary Blair, Viral transport, Aimes transport; casamino acids, charcoal agar, Pai slants, PVA, neutral formalin, saline solutions, water & milk bottles
North Carolina						
North Dakota	1.00		X	X	X	Modified Thayer Martin, Jembec, Aimes transport media, Sabouraud's agar, Jones-Kendrick agar, PM-indicator agar, phosphate buffered saline, 5 percent buffered formalin, Rodac plates
Ohio	2.50			X	X	Viral transport media, Plates: Martin-Lewis agar, chocolate agar; Cary-Blair & throat swab medium, Alsever's & ACD, Regan-Lowe media tubes/plates
Pennsylvania	1.00					Enteric bacteriology kits, parasitology kits, throat washing kits, lyophilized bacteria for QC
South Dakota	2.00				X	Thayer Martin, Regan-Lowe
Tennessee	15.00		X			Isouitalex, VCAT, plates: Butzler, Gonopak, Martin-Lewis, sheep blood agar (for Haemophilus ducreyi); PAI agar & trypticase soy agar slants; Pertussis kits (agar); Group A Strpt. conjugate, Cary-Blair, formalinized kits, brain heart infusion and tryptose phosphate broths, mouse brain tissue, water collection bottles with preservative
Washington	1.50			X	X	

NOTE: Laboratories that did not report information for this table are not listed.

NA = Data not available.

TABLE 66. RESEARCH AND DEVELOPMENT-Basic Research

Lab & Region	Titles of Research Projects	Funding Support				
		Number of Positions	Federal		State Funds	Other Funds
			Grants	Contracts		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
TOTAL		13.4	418,500	233,000	200	47,660
Alabama	Prevalence of drug abuse in women of child-bearing age	NA			NA	
Colorado	SYVA protocol study	0.25				8,000
Louisiana	Bacteria in distribution systems	NA				NA
	Salmonella, Enterococci in surface water	NA				NA
Maryland	Neuroblastoma detection in infants	1.00				41,000
Michigan	Polymerase Chain reaction	1.00	NA		NA	
	Chromosomal and plasmid analysis	1.00			NA	
North Dakota	Syva Chlamydia EIA comparative study	NA			200	660
South Carolina	HIV Seroprevalence	4.00		233,000		
	Impact of influenza virus infection on immune modulator production	0.05			NA	
Washington	Lyme disease vector surveillance	0.20			NA	
	Tick transmission & vector competency study	0.20			NA	
	Etiology of indeterminate HIV Western Blot results	0.20			NA	
Wisconsin	Pulmonary benefits of Cystic Fibrosis national screening	2.00	100,000			
	HIV childbearing women survey	2.50	240,000			
	Treponema immunity	0.00	3,500			
	THC testing in impaired drivers	1.00	75,000			
Wyoming						

NOTE: Laboratories that did not report information for this table are not listed.
 NA = Data not available.

TABLE 67. RESEARCH AND DEVELOPMENT-Applied Research

Lab & Region (1)	Titles of Research Projects (2)	Funding Support				
		Number of Positions (3)	Federal		State Funds (6)	Other Funds (7)
			Grants (4)	Contracts (5)		
TOTAL		46.5	910,052	740,793	474,557	173,173
Alaska	Rabies wildlife bait vaccine	NA				NA
Arizona	Ethylene glycol in wastewater	0.20			NA	
	Polynuclear Aromatic Hydrocarbons in Air	0.20			NA	
	Total Petroleum Hydrocarbons in soil	0.20			NA	
	Groundwater protection list	2.00				NA
California	Nonconventional methods for hazardous waste analysis with LC/MS, ICP/MS, & SFC/CG	6.00	174,000		200,000	
Colorado	Maternal HIV seroprevalence	3.50	285,000			
	Family practice patient HIV seroprevalence	0.15	35,000			
	DIMP analysis in biological specimens	0.50			NA	
Connecticut	Parvovirus infection in cases of suspected Lyme disease	0.00	0	0	0	0
	Application of robotics to EPA method 505	0.00	0	0	0	0
	Development of biomonitoring technique for evaluating impact of pesticides on water	0.00	0	0	0	0
	Quality of laboratory tests performed in physician's offices	1.00		95,000		
Louisiana	Chlamydia probes	NA				NA
Maryland	Relationship between lead in soil and blood lead levels in children	5.00	181,372			
	HIV seroprevalence in state correctional institutions	1.00	25,600			
	Comparison of IEF and HPLC for Hgb screening	0.50				18,345
Massachusetts	Liver transplant associated CMV preparation	2.50	125,160			
	Viral immunity studies	1.20				113,677
	Influenzae studies	1.00		39,135		
	Occupational Lyme disease study	0.10		4,961		
	HIV seroprevalence and C & T	9.00		531,003		
Michigan	Evaluation of Fluorometric TSH	0.50			NA	
	Filter paper blood spots for HIV	0.50			NA	
	DNA probe evaluation	1.50			NA	
	Bactec evaluation	0.50			NA	
New Hampshire	Drugs of abuse in the blood samples of New Hampshire motorists	3.35			120,957	41,151
North Carolina	Maternal HIV seroprevalence study	1.00		70,694		
	Influenza study	1.50	57,052			
	Congenital Adrenal Hyperplasia grant	0.00	26,868			
South Carolina	Development of Reagin EIA procedures	0.50				NA
Washington	Densitometric analysis of HIV-1 Western Blot strips	0.20			NA	NA
	Application of PCR technology	0.20			NA	
	HIV syringe seroprevalence, Tacoma needle exchange program	0.20			NA	NA
	Seroepidemiologic survey of Q. fever	0.20			NA	
Wisconsin	Pesticide Metabolites	1.00			25,000	
	PCB's in blood	1.00			50,000	
	Bioassays of landfill effluents	0.00			20,000	
	Lyme serum, killing	0.00			12,000	
	Blood filtration	0.10			11,800	
	CSF filter, IFA	0.10			20,800	
	TB sensitivity	0.10			14,000	

NOTE: Laboratories that did not report information for this table are not listed.
 NA = Data not available.

TABLE 68. RESEARCH AND DEVELOPMENT-Technical Research

Lab & Region	Titles of Research Projects	Number of Positions	Funding Support			
			Federal		State Funds	Other Funds
(1)	(2)	(3)	(4)	(5)	(6)	(7)
TOTAL		14.7	0	168,838	395,400	13,058
Alaska	Comparative study of Gene probe vs. standard testing for gonorrhea and chlamydia	0.50			20,000	
California	Method development and validation for hazardous waste analysis	3.00			250,000	
	NCI-California collaborative studies	4.00		162,838		
Colorado	Enhancement of UST extractions	0.30			NA	
	SYVA software evaluation (Chlamydia)	NA				2,000
	Chlamydia EIA confirmatory assay	NA				500
Connecticut	CMV antibody in transfused neonates	0.00	0	0	0	0
	Evaluation of Toxoplasma kits: Abbott IgG, Abbott IgM, Sigma IgG	0.00	0	0	0	0
	Evaluation of Abbott Rubella kit	0.00	0	0	0	0
	Comparison of photovac & headspace techniques in detecting petroleum contaminants in ground water	0.00	0	0	0	0
Maryland	Methods improvement in Chlamydia detection	1.00				7,558
Michigan	Screening of drinking water samples for EPA contaminants using Ion Trap Detectors	NA			NA	
Ohio	Herpes evaluation, Ortho diagnostics	0.50				NA
	Herpes evaluation, diagnostic hybrids	0.50				NA
South Carolina	Multiple product evaluations	NA				NA
Washington	Development of TC-99 radiochemistry procedure	0.30		6,000		
	Radon in water samples	0.20			5,000	
Wisconsin	DIFCO EIA study	0.00				2,000
	MMR study	0.00				1,000
	Lyme, IgG, IgM, ELISA	0.20			23,200	
	Lyme Western Blot	0.20			21,000	
	G. C. probe evaluation	0.10			20,000	
	Clostridium difficile evaluation	0.10			11,000	
	Giardia, ELISA	0.10			5,400	
	CDC Lyme evaluation	0.20			10,000	
	Lyme tick evaluation	0.00			4,800	
	Borrelia culture	0.00			10,000	
	Methodology development Milwaukee	0.50			15,000	
	Blood lead proficiency testing	1.50			NA	
	Erythrocyte protoporphyrin	1.50			NA	

NOTE: Laboratories that did not report information for this table are not listed.
 NA = Data not available.

***LABORATORY
PERSONNEL AND
STAFFING PATTERNS***

TABLE 69. NUMBER OF BUDGETED POSITIONS

Lab & Region (1)	Total Budgeted Positions (2)	Management			Clerical			Professional & Technical		
		Number (3)	Percent of total (4)	Number of Vacancies (5)	Number (6)	Percent of total (7)	Number of Vacancies (8)	Number (9)	Percent of total (10)	Number of Vacancies (11)
TOTAL	6,217.81	482.44	7.76%	15.00	816.60	13.13%	64.50	4,042.87	65.02%	345.70
AVERAGE	117.31	9.10		1.25	15.70		2.22	76.28		7.86
NEW ENGLAND	599.30	41.10	6.86%	0.00	72.00	12.01%	6.00	402.10	67.09%	24.00
Connecticut	219.00	16.00	7.31%	0.00	27.00	12.33%	0.00	153.00	69.86%	0.00
Massachusetts	149.50	11.50	7.69%	0.00	18.50	12.37%	0.00	89.50	59.87%	1.00
Maine	54.50	2.00	3.67%	0.00	9.00	16.51%	0.00	37.50	68.81%	1.00
New Hampshire	34.30	3.60	10.50%	0.00	4.50	13.12%	0.00	24.10	70.26%	1.00
Rhode Island	100.00	5.00	5.00%	0.00	7.00	7.00%	4.00	73.00	73.00%	16.00
Vermont	42.00	3.00	7.14%	0.00	6.00	14.29%	2.00	25.00	59.52%	5.00
MIDDLE ATLANTIC	304.00	34.00	11.18%	1.00	35.00	11.51%	5.00	198.00	65.13%	37.00
New Jersey	231.00	15.00	6.49%	0.00	26.00	11.26%	4.00	161.00	69.70%	33.00
New York*										
Pennsylvania	73.00	19.00	26.03%	1.00	9.00	12.33%	1.00	37.00	50.68%	4.00
EAST NORTH CENTRAL	991.75	97.00	9.78%	3.00	118.40	11.94%	9.00	611.95	61.70%	47.00
Illinois	126.00	11.00	8.73%	0.00	19.00	15.08%	0.00	78.00	61.90%	1.00
Indiana	123.00	18.00	14.63%	1.00	11.40	9.27%	1.00	75.20	61.14%	7.00
Michigan	328.00	12.00	3.66%	1.00	36.00	10.98%	5.00	208.00	63.41%	19.00
Ohio	128.00	7.00	5.47%	0.00	24.00	18.75%	3.00	77.00	60.16%	5.00
Wisconsin	286.75	49.00	17.09%	1.00	28.00	9.76%	0.00	173.75	60.59%	15.00
WEST NORTH CENTRAL	528.95	51.59	9.75%	2.00	74.20	14.03%	4.00	331.59	62.69%	14.00
Iowa	156.30	10.59	6.78%	1.00	17.80	11.39%	1.00	105.59	67.56%	1.00
Kansas	73.00	9.00	12.33%	1.00	10.00	13.70%	1.00	48.00	65.75%	2.00
Minnesota	95.00	5.00	5.26%	0.00	11.00	11.58%	0.00	59.00	62.11%	7.00
Missouri	103.00	10.00	9.71%	0.00	19.00	18.45%	1.00	61.00	59.22%	1.00
Nebraska	27.00	6.00	22.22%	0.00	5.00	18.52%	0.00	14.00	51.85%	0.00
North Dakota	45.25	7.00	15.47%	0.00	7.00	15.47%	1.00	28.00	61.88%	3.00
South Dakota	29.40	4.00	13.61%	0.00	4.40	14.97%	0.00	16.00	54.42%	0.00
SOUTH ATLANTIC	1,366.00	76.25	5.58%	3.00	220.00	16.11%	12.00	915.75	67.04%	40.70
Delaware	51.50	5.25	10.19%	0.00	7.00	13.59%	1.00	31.25	60.68%	1.00
District of Columbia	57.00	8.00	14.04%	NA	4.00	7.02%	NA	40.00	70.18%	NA
Florida	334.00	21.00	6.29%	1.00	65.00	19.46%	1.00	225.00	67.37%	12.00
Georgia	137.00	9.00	6.57%	0.00	33.00	24.09%	2.00	69.00	50.36%	2.00
Maryland	340.00	4.00	1.18%	0.00	45.00	13.24%	4.00	259.00	76.18%	12.00
North Carolina	185.00	9.00	4.86%	0.00	28.00	15.14%	3.00	121.00	65.41%	9.70
South Carolina	105.00	9.00	8.57%	0.00	15.00	14.29%	0.00	65.00	61.90%	2.00
Virginia	102.50	6.00	5.85%	NA	15.00	14.63%	NA	69.50	67.80%	NA
West Virginia	54.00	5.00	9.26%	2.00	8.00	14.81%	1.00	36.00	66.67%	2.00
EAST SOUTH CENTRAL	479.90	35.50	7.40%	0.00	61.00	12.71%	9.00	325.40	67.81%	24.00
Alabama	165.00	5.00	3.03%	0.00	26.00	15.76%	6.00	109.00	66.06%	4.00
Kentucky	69.90	5.50	7.87%	0.00	9.00	12.88%	2.00	46.40	66.38%	3.00
Mississippi	57.00	2.00	3.51%	0.00	9.00	15.79%	0.00	40.00	70.18%	1.00
Tennessee	188.00	23.00	12.23%	0.00	17.00	9.04%	1.00	130.00	69.15%	16.00
WEST SOUTH CENTRAL	530.00	36.00	6.79%	2.00	62.00	11.70%	6.00	336.00	63.40%	47.00
Arkansas	105.00	3.00	2.86%	0.00	15.00	14.29%	1.00	76.00	72.38%	7.00
Louisiana	157.00	16.00	10.19%	2.00	23.00	14.65%	4.00	104.00	66.24%	29.00
Oklahoma	45.00	3.00	6.67%	0.00	6.00	13.33%	0.00	31.00	68.89%	1.00
Texas	223.00	14.00	6.28%	0.00	18.00	8.07%	1.00	125.00	56.05%	10.00
MOUNTAIN	467.21	47.00	10.06%	2.00	56.50	12.09%	4.50	312.08	66.80%	30.00
Arizona	80.00	7.00	8.75%	0.00	10.00	12.50%	0.00	53.00	66.25%	2.00
Colorado	91.00	12.00	15.00%	0.00	14.00	15.38%	1.00	57.00	62.64%	3.00
Idaho	53.21	8.00	15.03%	1.00	6.50	12.22%	1.50	32.08	60.29%	2.00
Montana	25.00	2.00	8.00%	0.00	3.00	12.00%	2.00	20.00	80.00%	9.00
Nevada	29.00	3.00	10.34%	1.00	4.00	13.79%	0.00	14.00	48.28%	0.00
New Mexico	106.00	7.00	6.60%	0.00	7.00	6.60%	0.00	80.00	75.47%	9.00
Utah	65.00	5.00	7.69%	0.00	10.00	15.38%	0.00	45.00	69.23%	5.00
Wyoming	18.00	3.00	16.67%	0.00	2.00	11.11%	0.00	11.00	61.11%	0.00
PACIFIC	826.50	44.00	5.32%	2.00	97.50	11.80%	3.00	552.00	66.79%	71.00
Alaska	39.00	3.00	7.69%	0.00	10.00	25.64%	0.00	17.00	43.59%	0.00
California	507.00	14.00	2.76%	0.00	59.50	11.74%	2.00	352.50	69.53%	62.00
Hawaii	90.00	9.00	10.00%	0.00	5.00	5.56%	0.00	67.00	74.44%	0.00
Oregon	62.50	9.00	14.40%	2.00	9.00	14.40%	0.00	39.50	63.20%	2.00
Washington	128.00	9.00	7.03%	0.00	14.00	10.94%	1.00	76.00	59.38%	7.00
TERRITORIES	124.00	20.00	16.13%	0.00	20.00	16.13%	6.00	58.00	46.77%	11.00
Guam	11.00	2.00	18.18%	0.00	0.00	0.00%	0.00	9.00	81.82%	2.00
Puerto Rico	98.00	17.00	17.35%	0.00	19.00	19.39%	6.00	38.00	38.78%	6.00
Virgin Islands	15.00	1.00	6.67%	0.00	1.00	6.67%	0.00	11.00	73.33%	3.00

* New York did not report for fiscal year 1990.
NOTE NA = Data not available.

TABLE 69. NUMBER OF BUDGETED POSITIONS (continued)

Lab & Region (12)	Total Budgeted Positions (13)	Support Services			Maintenance			Total Filled Positions	
		Number (14)	Percent of total (15)	Number of Vacancies (16)	Number (17)	Percent of total (18)	Number of Vacancies (19)	Number (20)	Percent of total (21)
TOTAL	6,217.61	789.95	12.71%	41.50	85.75	1.38%	1.00	5,749.91	92.48%
AVERAGE	117.31	15.49		2.31	3.18		1.00	108.49	
NEW ENGLAND	599.30	62.10	10.36%	5.50	22.00	3.67%	0.00	563.80	94.08%
Connecticut	219.00	19.00	8.68%	0.00	4.00	1.83%	0.00	219.00	100.00%
Massachusetts	149.50	14.00	9.36%	0.00	16.00	10.70%	0.00	148.50	99.33%
Maine	54.50	6.00	11.01%	0.00	0.00	0.00%	0.00	53.50	98.17%
New Hampshire	34.30	2.10	6.12%	0.50	0.00	0.00%	0.00	32.80	95.63%
Rhode Island	100.00	13.00	13.00%	4.00	2.00	2.00%	0.00	76.00	76.00%
Vermont	42.00	8.00	19.05%	1.00	0.00	0.00%	0.00	34.00	80.95%
MIDDLE ATLANTIC	304.00	36.00	11.84%	4.00	1.00	0.33%	0.00	257.00	84.54%
New Jersey	231.00	29.00	12.55%	2.00	0.00	0.00%	0.00	192.00	83.12%
New York*									
Pennsylvania	73.00	7.00	9.59%	2.00	1.00	1.37%	0.00	65.00	89.04%
EAST NORTH CENTRAL	991.75	149.40	15.06%	2.00	15.00	1.51%	0.00	930.75	93.85%
Illinois	126.00	17.00	13.49%	0.00	1.00	0.79%	0.00	125.00	99.21%
Indiana	123.00	16.40	13.33%	1.00	2.00	1.63%	0.00	113.00	91.87%
Michigan	328.00	69.00	21.04%	1.00	3.00	0.91%	0.00	302.00	92.07%
Ohio	128.00	13.00	10.16%	0.00	7.00	5.47%	0.00	120.00	93.75%
Wisconsin	286.75	34.00	11.86%	0.00	2.00	0.70%	0.00	270.75	94.42%
WEST NORTH CENTRAL	528.95	67.35	12.73%	0.00	4.22	0.80%	0.00	508.95	96.22%
Iowa	156.30	20.35	13.02%	0.00	1.97	1.26%	0.00	153.30	98.08%
Kansas	73.00	6.00	8.22%	0.00	0.00	0.00%	0.00	69.00	94.52%
Minnesota	95.00	20.00	21.05%	0.00	0.00	0.00%	0.00	88.00	92.63%
Missouri	103.00	12.00	11.65%	0.00	1.00	0.97%	0.00	101.00	98.06%
Nebraska	27.00	2.00	7.41%	0.00	0.00	0.00%	0.00	27.00	100.00%
North Dakota	45.25	3.00	6.63%	0.00	0.25	0.55%	0.00	41.25	91.16%
South Dakota	29.40	4.00	13.61%	0.00	1.00	3.40%	0.00	29.40	100.00%
SOUTH ATLANTIC	1,366.00	136.00	9.96%	6.00	18.00	1.32%	0.00	1,304.30	95.48%
Delaware	51.50	7.00	13.59%	0.00	1.00	1.94%	0.00	49.50	96.12%
District of Columbia	57.00	5.00	8.77%	NA	0.00	0.00%	0.00	57.00	100.00%
Florida	334.00	22.00	6.59%	0.00	1.00	0.30%	0.00	320.00	95.81%
Georgia	137.00	25.00	18.25%	0.00	1.00	0.73%	0.00	133.00	97.08%
Maryland	340.00	28.00	8.24%	1.00	4.00	1.18%	0.00	323.00	95.00%
North Carolina	185.00	24.00	12.97%	1.00	3.00	1.62%	0.00	171.30	92.59%
South Carolina	105.00	10.00	9.52%	2.00	6.00	5.71%	0.00	101.00	96.19%
Virginia	102.50	12.00	11.71%	NA	0.00	0.00%	0.00	102.50	100.00%
West Virginia	54.00	3.00	5.56%	2.00	2.00	3.70%	0.00	47.00	87.04%
EAST SOUTH CENTRAL	479.90	53.00	11.04%	2.00	5.00	1.04%	0.00	444.90	92.71%
Alabama	165.00	20.00	12.12%	1.00	5.00	3.03%	0.00	154.00	93.33%
Kentucky	69.90	9.00	12.88%	0.00	0.00	0.00%	0.00	64.90	92.85%
Mississippi	57.00	6.00	10.53%	0.00	0.00	0.00%	0.00	56.00	98.25%
Tennessee	188.00	18.00	9.57%	1.00	0.00	0.00%	0.00	170.00	90.43%
WEST SOUTH CENTRAL	530.00	95.00	17.92%	6.00	1.00	0.19%	0.00	469.00	88.49%
Arkansas	105.00	11.00	10.48%	0.00	0.00	0.00%	0.00	97.00	92.38%
Louisiana	157.00	14.00	8.92%	0.00	0.00	0.00%	0.00	122.00	77.71%
Oklahoma	45.00	5.00	11.11%	0.00	0.00	0.00%	0.00	44.00	97.78%
Texas	223.00	65.00	29.15%	6.00	1.00	0.45%	0.00	206.00	92.38%
MOUNTAIN	467.21	45.10	9.65%	1.00	6.53	1.40%	0.00	429.71	91.97%
Arizona	80.00	8.00	10.00%	1.00	2.00	2.50%	0.00	77.00	96.25%
Colorado	91.00	8.00	8.79%	0.00	0.00	0.00%	0.00	87.00	95.60%
Idaho	53.21	4.10	7.71%	0.00	2.53	4.75%	0.00	48.71	91.54%
Montana	25.00	0.00	0.00%	0.00	0.00	0.00%	0.00	14.00	56.00%
Nevada	29.00	8.00	27.59%	0.00	0.00	0.00%	0.00	28.00	96.55%
New Mexico	106.00	10.00	9.43%	0.00	2.00	1.89%	0.00	97.00	91.51%
Utah	65.00	5.00	7.69%	0.00	0.00	0.00%	0.00	60.00	92.31%
Wyoming	18.00	2.00	11.11%	0.00	0.00	0.00%	0.00	18.00	100.00%
PACIFIC	826.50	128.00	15.49%	12.00	5.00	0.60%	NA	738.50	89.35%
Alaska	39.00	9.00	23.08%	0.00	0.00	0.00%	NA	39.00	100.00%
California	507.00	81.00	15.98%	6.00	0.00	0.00%	0.00	437.00	86.19%
Hawaii	90.00	9.00	10.00%	0.00	0.00	0.00%	0.00	90.00	100.00%
Oregon	62.50	5.00	8.00%	0.00	0.00	0.00%	0.00	58.50	93.60%
Washington	128.00	24.00	18.75%	6.00	5.00	3.91%	0.00	114.00	89.06%
TERRITORIES	124.00	18.00	14.52%	3.00	8.00	6.45%	1.00	103.00	83.06%
Guam	11.00	0.00	0.00%	0.00	0.00	0.00%	0.00	9.00	81.82%
Puerto Rico	98.00	16.00	16.33%	3.00	8.00	8.16%	1.00	82.00	83.67%
Virgin Islands	15.00	2.00	13.33%	0.00	0.00	0.00%	0.00	12.00	80.00%

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 70. TURNOVER

Lab & Region (1)	Total Positions Staffed (2)	Total Number Resignations and Separations (3)	Percent Turnover Filled Positions (4)	Management (5)	Clerical (6)	Prof. and Tech. Positions			Supportive Services (10)	Maintenance (11)
						Number of Budgeted Positions (7)	Resignations & Separations (8)	Percent Turnover (9)		
TOTAL	6,217.61	830.72	13.36%	26.00	140.50	4,042.87	550.67	13.62%	109.02	3.53
AVERAGE	117.31	16.61		1.44	3.35	76.28	11.47		2.73	0.88
NEW ENGLAND	599.30	83.00	13.85%	3.00	17.00	402.10	49.50	12.31%	11.50	2.00
Connecticut	219.00	23.00	10.50%	0.00	7.00	153.00	13.00	8.50%	3.00	0.00
Massachusetts	149.50	28.50	19.06%	3.00	2.00	89.50	18.50	20.67%	3.00	2.00
Maine	54.50	4.00	7.34%	0.00	0.00	37.50	3.00	8.00%	1.00	0.00
New Hampshire	34.30	11.50	33.53%	0.00	3.00	24.10	6.00	24.90%	2.50	0.00
Rhode Island	100.00	7.00	7.00%	0.00	2.00	73.00	4.00	5.48%	1.00	0.00
Vermont	42.00	9.00	21.43%	0.00	3.00	25.00	5.00	20.00%	1.00	0.00
MIDDLE ATLANTIC	304.00	39.00	12.83%	0.00	4.00	198.00	33.00	16.67%	2.00	0.00
New Jersey	231.00	39.00	16.88%	0.00	4.00	161.00	33.00	20.50%	2.00	0.00
New York*										
Pennsylvania	73.00	0.00	0.00%	0.00	0.00	37.00	0.00	0.00%	0.00	0.00
EAST NORTH CENTRAL	991.75	103.00	10.39%	5.00	15.00	611.95	74.00	12.09%	9.00	0.00
Illinois	126.00	1.00	0.79%	0.00	0.00	78.00	1.00	1.28%	0.00	0.00
Indiana	123.00	28.00	22.76%	1.00	6.00	75.20	17.00	22.61%	4.00	0.00
Michigan	328.00	26.00	7.93%	1.00	5.00	208.00	19.00	9.13%	1.00	0.00
Ohio	128.00	6.00	4.69%	1.00	2.00	77.00	3.00	3.90%	0.00	0.00
Wisconsin	286.75	42.00	14.65%	2.00	2.00	173.75	34.00	19.57%	4.00	0.00
WEST NORTH CENTRAL	528.95	65.00	12.29%	3.00	15.00	331.59	40.00	12.06%	6.00	1.00
Iowa	156.30	19.00	12.16%	1.00	1.00	105.59	15.00	14.21%	1.00	1.00
Kansas	73.00	14.00	19.18%	0.00	4.00	48.00	8.00	16.67%	2.00	0.00
Minnesota	95.00	8.00	8.42%	1.00	0.00	59.00	6.00	10.17%	1.00	0.00
Missouri	103.00	8.00	7.77%	0.00	3.00	61.00	4.00	6.56%	1.00	0.00
Nebraska	27.00	2.00	7.41%	0.00	2.00	14.00	0.00	0.00%	0.00	0.00
North Dakota	45.25	8.00	17.68%	0.00	3.00	28.00	5.00	17.86%	0.00	0.00
South Dakota	29.40	6.00	20.41%	1.00	2.00	16.00	2.00	12.50%	1.00	0.00
SOUTH ATLANTIC	1,366.00	162.00	11.88%	3.00	33.00	915.75	110.00	12.01%	15.00	1.00
Delaware	51.50	12.00	23.30%	0.00	2.00	31.25	6.00	19.20%	4.00	0.00
District of Columbia	57.00	7.00	12.28%	0.00	2.00	40.00	4.00	10.00%	1.00	0.00
Florida	334.00	63.00	18.86%	1.00	12.00	225.00	49.00	21.78%	1.00	0.00
Georgia	137.00	6.00	4.38%	0.00	2.00	69.00	2.00	2.90%	2.00	0.00
Maryland	340.00	31.00	9.12%	0.00	6.00	259.00	21.00	8.11%	4.00	0.00
North Carolina	185.00	23.00	12.43%	0.00	6.00	121.00	16.00	13.22%	1.00	0.00
South Carolina	105.00	10.00	9.52%	1.00	1.00	65.00	7.00	10.77%	1.00	0.00
Virginia	102.50	NA	NA	NA	NA	69.50	NA	NA	NA	NA
West Virginia	54.00	10.00	18.52%	1.00	2.00	36.00	5.00	13.89%	1.00	1.00
EAST SOUTH CENTRAL	479.90	82.00	17.09%	1.00	14.00	325.40	58.00	17.82%	9.00	0.00
Alabama	165.00	18.00	10.91%	0.00	5.00	109.00	10.00	9.17%	3.00	0.00
Kentucky	69.90	11.00	15.74%	0.00	4.00	46.40	6.00	12.93%	1.00	0.00
Mississippi	57.00	6.00	10.53%	0.00	2.00	40.00	4.00	10.00%	0.00	0.00
Tennessee	188.00	47.00	25.00%	1.00	3.00	130.00	38.00	29.23%	5.00	0.00
WEST SOUTH CENTRAL	530.00	121.00	22.83%	1.00	13.00	336.00	77.00	22.92%	30.00	0.00
Arkansas	105.00	21.00	20.00%	0.00	4.00	76.00	15.00	19.74%	2.00	0.00
Louisiana	157.00	11.00	7.01%	0.00	1.00	104.00	9.00	8.55%	1.00	0.00
Oklahoma	45.00	7.00	15.56%	1.00	1.00	31.00	5.00	16.13%	0.00	0.00
Texas	223.00	82.00	36.77%	0.00	7.00	125.00	48.00	38.40%	27.00	0.00
MOUNTAIN	467.21	106.72	22.84%	6.00	18.50	312.08	71.17	22.81%	10.52	0.53
Arizona	80.00	36.50	45.63%	2.00	8.00	53.00	21.50	40.57%	5.00	0.00
Colorado	91.00	18.00	19.78%	3.00	4.00	57.00	9.00	15.79%	2.00	0.00
Idaho	53.21	9.22	17.33%	1.00	2.50	32.08	4.67	14.56%	0.52	0.53
Montana	25.00	11.00	44.00%	0.00	2.00	20.00	9.00	45.00%	0.00	0.00
Nevada	29.00	2.00	6.90%	0.00	1.00	14.00	0.00	0.00%	1.00	0.00
New Mexico	106.00	28.00	26.42%	0.00	0.00	80.00	26.00	32.50%	2.00	0.00
Utah	65.00	NA	NA	NA	NA	45.00	NA	NA	NA	NA
Wyoming	18.00	2.00	11.11%	0.00	1.00	11.00	1.00	9.09%	0.00	0.00
PACIFIC	826.50	61.00	7.38%	4.00	11.00	552.00	31.00	5.62%	15.00	0.00
Alaska	39.00	3.00	7.69%	0.00	1.00	17.00	1.00	5.88%	1.00	0.00
California	507.00	20.00	3.94%	0.00	2.00	352.50	12.00	3.40%	6.00	0.00
Hawaii	90.00	13.00	14.44%	0.00	0.00	67.00	8.00	11.94%	5.00	0.00
Oregon	62.50	10.00	16.00%	2.00	3.00	39.50	4.00	10.13%	1.00	0.00
Washington	128.00	15.00	11.72%	2.00	5.00	76.00	6.00	7.89%	2.00	0.00
TERRITORIES	124.00	8.00	6.45%	0.00	0.00	58.00	7.00	12.07%	1.00	0.00
Guam	11.00	2.00	18.18%	0.00	0.00	9.00	2.00	22.22%	0.00	0.00
Puerto Rico	98.00	3.00	3.06%	0.00	0.00	38.00	2.00	5.26%	1.00	0.00
Virgin Islands	15.00	3.00	20.00%	0.00	0.00	11.00	3.00	27.27%	0.00	0.00

* New York did not report for fiscal year 1990.

NOTE: NA = Data not available.

TABLE 71. STAFFING PATTERN OF PROFESSIONAL AND TECHNICAL PERSONNEL

Lab & Region (1)	Public Health Pathogenic Microbiology		Virology		Immunology		Public Health Chemistry		Environmental Microbiology	
	Number (2)	Changes (3)	Number (4)	Changes (5)	Number (6)	Changes (7)	Number (8)	Changes (9)	Number (10)	Changes (11)
TOTAL	642.42	-3.65	327.57	-7.09	374.77	20.94	383.04	23.44	257.20	9.30
NEW ENGLAND	56.00	-9.40	26.60	-4.90	39.20	-4.80	8.50	-1.50	23.90	-1.00
Connecticut	15.00	-5.00	10.00	0.00	10.00	-5.00	(13)**		8.00	0.00
Massachusetts	18.00	-2.50	7.00	-2.50	16.00	-2.00	4.50	-1.50	4.00	-3.00
Maine	8.00	-1.00	6.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
New Hampshire	4.00	-0.70	1.60	-3.40	6.20	3.20	0.00	0.00	2.40	-0.50
Rhode Island	7.00	0.00	(2)**		5.00	-1.00	4.00	0.00	8.00	2.00
Vermont	4.00	-0.20	2.00	0.00	2.00	0.00	0.00	0.00	1.50	0.50
MIDDLE ATLANTIC	27.00	-1.00	35.00	-1.00	10.00	2.00	20.00	3.00	3.00	0.00
New Jersey	21.00	-1.00	29.00	-1.00	6.00	0.00	19.00	3.00	3.00	0.00
New York*										
Pennsylvania	6.00	0.00	6.00	0.00	4.00	2.00	1.00	0.00	(2)**	
EAST NORTH CENTRAL	85.00	-7.50	47.40	-5.60	64.00	6.60	58.50	-5.00	41.30	5.70
Illinois	23.00	-2.00	4.00	-1.00	9.00	0.00	18.00	3.00	10.00	0.00
Indiana	11.00	-1.00	5.40	-1.60	10.00	4.40	0.00	-10.00	11.80	-0.80
Michigan	25.00	NA	16.00	NA	15.00	5.00	14.00	1.00	5.00	NA
Ohio	12.00	-2.00	7.00	0.00	5.00	0.00	14.00	6.00	7.00	2.00
Wisconsin	14.00	-2.50	15.00	-3.00	25.00	-2.80	12.50	-5.00	7.50	4.50
WEST NORTH CENTRAL	43.29	-0.66	17.42	-2.94	35.52	3.99	29.49	3.19	30.70	-3.20
Iowa	7.19	0.44	6.82	0.11	7.02	1.59	6.19	0.19	4.00	0.50
Kansas	9.00	0.00	4.00	-1.00	4.00	2.00	4.00	0.00	3.00	0.00
Minnesota	11.00	0.00	(6)**		8.00	0.00	5.50	1.00	8.00	0.00
Missouri	9.00	-1.00	4.00	-1.00	12.00	1.00	12.00	2.00	8.00	-3.00
Nebraska	1.70	0.00	0.40	0.00	1.20	-0.30	0.80	0.00	1.70	-0.30
North Dakota	3.40	-0.10	1.20	-1.05	1.30	-0.30	1.00	0.00	3.00	-0.40
South Dakota	2.00	0.00	1.00	0.00	2.00	0.00	(21)**		3.00	0.00
SOUTH ATLANTIC	132.55	-2.25	75.65	2.75	84.65	3.75	97.55	4.75	50.30	-1.50
Delaware	8.75	0.00	6.40	0.00	2.20	0.00	2.20	0.00	3.80	0.00
District of Columbia	4.50	-0.50	0.50	0.00	7.50	0.00	12.00	-2.00	0.50	-0.50
Florida	NA		NA		NA		NA		NA	
Georgia	22.50	1.25	7.25	-1.75	17.25	-0.75	14.75	4.75	(2)**	
Maryland	43.00	1.00	33.00	0.00	19.00	2.00	29.00	1.00	14.00	0.00
North Carolina	11.00	0.00	12.50	4.00	10.50	0.00	12.00	0.00	8.00	0.00
South Carolina	13.30	0.00	3.00	0.00	14.20	0.00	9.60	0.00	4.00	0.00
Virginia	24.50	0.00	11.50	0.00	9.50	0.00	13.00	0.00	11.00	0.00
West Virginia	5.00	-4.00	1.50	0.50	4.50	2.50	5.00	1.00	9.00	-1.00
EAST SOUTH CENTRAL	88.00	16.00	15.00	1.00	35.40	3.40	30.00	1.00	19.00	0.00
Alabama	49.00	16.00	6.00	0.00	15.00	0.00	10.00	0.00	12.00	0.00
Kentucky	4.00	0.00	5.00	1.00	9.40	0.40	10.00	1.00	3.00	0.00
Mississippi	NA		NA		NA		NA		NA	
Tennessee	35.00	0.00	4.00	0.00	11.00	3.00	10.00	0.00	4.00	0.00
WEST SOUTH CENTRAL	70.00	4.00	20.00	-1.00	52.00	3.00	52.00	11.00	34.00	3.00
Arkansas	12.00	0.00	1.00	0.00	10.00	1.00	12.00	4.00	8.00	-4.00
Louisiana	28.00	6.00	4.00	1.00	16.00	1.00	7.00	0.00	21.00	6.00
Oklahoma	9.00	0.00	3.00	0.00	7.00	0.00	5.00	2.00	NA	
Texas	21.00	-2.00	12.00	-2.00	19.00	1.00	28.00	5.00	5.00	1.00
MOUNTAIN	46.78	-0.14	25.00	0.00	26.00	1.50	21.00	1.00	20.00	0.50
Arizona	4.00	-1.00	2.00	-1.00	9.00	2.00	0.00	0.00	5.00	0.00
Colorado	3.50	-2.00	1.00	0.00	6.00	-1.00	11.00	1.00	3.50	-1.00
Idaho	13.28	-1.64	3.00	0.00	1.00	0.00	(21)**		(2)**	
Montana	3.00	0.00	5.00	0.00	(4)**		2.00	0.00	3.00	1.00
Nevada	4.00	0.50	0.00	0.00	3.00	0.50	0.00	0.00	2.00	0.50
New Mexico	11.00	2.00	10.00	0.00	(4)**	0.00	5.00	1.00	4.50	0.00
Utah	5.00	2.00	4.00	1.00	5.00	0.00	3.00	-1.00	1.00	0.00
Wyoming	3.00	0.00	(6)**		2.00	0.00	0.00	0.00	1.00	0.00
PACIFIC	78.80	0.30	62.50	0.00	27.00	1.50	63.00	6.00	24.00	2.80
Alaska	6.80	0.30	4.00	0.00	4.50	1.50	0.00	0.00	NA	-0.20
California	40.00	0.00	35.00	0.00	13.50	0.00	40.00	0.00	2.00	2.00
Hawaii	9.00	0.00	7.00	0.00	2.00	0.00	0.00	0.00	13.00	0.00
Oregon	6.00	0.00	11.50	0.00	4.00	0.00	11.00	1.00	3.00	0.00
Washington	17.00	0.00	5.00	0.00	3.00	0.00	12.00	5.00	6.00	1.00
TERRITORIES	15.00	-3.00	3.00	-1.00	1.00	0.00	3.00	0.00	11.00	3.00
Guam	4.00	-2.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Puerto Rico	3.00	-1.00	2.00	-1.00	0.00	0.00	1.00	0.00	10.00	3.00
Virgin Islands	8.00	0.00	(2)**		0.00	0.00	1.00	0.00	1.00	0.00

* New York did not report for fiscal year 1990.

** Personnel are included in entry of column number.

NOTE: NA = Data not available.

TABLE 71. STAFFING PATTERN OF PROFESSIONAL AND TECHNICAL PERSONNEL (continued)

Lab & Region	Environmental Chemistry		Toxicology		Laboratory Improvement Program		Biologic, Reagent, Media Production		Other Professional/ Technical		Total Prof. and Tech. Positions Reported in Workload Categories	Total Net Changes Reported
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)		
	Number	Changes	Number	Changes	Number	Changes	Number	Changes	Number	Changes	Number	Changes
TOTAL	953.36	25.96	200.05	-4.50	201.95	30.00	199.30	3.90	238.21	13.84	4,042.87	106.54
NEW ENGLAND	101.60	2.90	92.50	-2.50	11.70	-2.50	23.00	-1.00	19.10	2.10	402.10	-22.60
Connecticut	48.00	2.00	35.00	-3.00	8.00	-1.00	4.00	0.00	15.00	-1.00	153.00	-13.00
Massachusetts	4.00	-3.00	19.00	0.00	1.00	0.00	16.00	-1.00	0.00	0.00	89.50	-15.50
Maine	11.00	-1.20	8.50	0.20	1.00	-1.00	3.00	0.00	0.00	0.00	37.50	-2.00
New Hampshire	0.10	0.10	5.50	-1.70	0.20	0.10	0.00	0.00	4.10	3.10	24.10	0.20
Rhode Island	27.00	1.00	21.00	2.00	1.00	-0.80	0.00	0.00	(13)**		73.00	3.20
Vermont	11.50	4.00	3.50	0.00	0.50	0.20	0.00	0.00	0.00	0.00	25.00	4.50
MIDDLE ATLANTIC	61.00	0.00	17.00	-2.00	23.00	-1.00	0.00	0.00	2.00	0.00	198.00	0.00
New Jersey	61.00	0.00	12.00	-2.00	10.00	-1.00	0.00	0.00	(15)**	0.00	161.00	-2.00
New York*											0.00	0.00
Pennsylvania	0.00	0.00	5.00	0.00	13.00	0.00	0.00	0.00	2.00	0.00	37.00	2.00
EAST NORTH CENTRAL	112.75	9.30	13.00	-6.00	29.00	6.50	110.00	11.40	51.00	5.50	611.95	20.90
Illinois	7.00	-3.00	2.00	0.00	3.00	1.00	2.00	0.00	0.00	0.00	78.00	-2.00
Indiana	29.00	7.20	(13)**		4.00	0.00	0.00	-1.60	4.00	3.00	75.20	-0.40
Michigan	23.00	NA	NA	NA	9.00	NA	101.00	9.00	NA	NA	208.00	15.00
Ohio	20.00	2.00	3.00	-5.00	7.00	3.00	1.00	-2.00	1.00	-5.00	77.00	-1.00
Wisconsin	33.75	3.10	8.00	-1.00	6.00	2.50	6.00	6.00	46.00	7.50	173.75	9.30
WEST NORTH CENTRAL	139.86	11.76	4.50	0.00	12.30	-1.10	4.30	-1.50	14.21	0.74	331.59	10.28
Iowa	63.06	9.56	(8)**		2.00	0.00	2.00	-0.50	7.31	1.79	105.59	13.68
Kansas	18.00	2.00	0.00	0.00	5.00	-2.00	0.00	-2.00	1.00	0.00	48.00	-1.00
Minnesota	23.50	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	59.00	1.00
Missouri	12.00	1.00	(8)**		1.00	0.00	1.00	1.00	2.00	-1.00	61.00	-1.00
Nebraska	6.30	0.20	0.50	0.00	0.20	0.00	0.50	0.00	0.70	0.00	14.00	-0.40
North Dakota	13.00	-1.00	3.00	0.00	1.10	0.90	0.80	0.00	0.20	-0.05	28.00	-2.00
South Dakota	4.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	16.00	0.00
SOUTH ATLANTIC	103.85	-1.00	17.55	0.00	27.75	2.00	17.00	0.00	83.90	-0.50	915.75	8.00
Delaware	3.35	0.00	1.05	0.00	0.35	0.00	0.00	0.00	3.15	0.00	31.25	0.00
District of Columbia	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	11.00	-1.00	40.00	-4.00
Florida	NA		NA		NA		NA		NA		225.00	NA
Georgia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.25	1.50	69.00	5.00
Maryland	71.00	1.00	2.00	0.00	11.00	2.00	13.00	0.00	24.00	-4.00	259.00	3.00
North Carolina	23.00	-1.00	2.00	0.00	11.00	0.00	0.00	0.00	31.00	0.00	121.00	3.00
South Carolina	0.50	0.00	10.50	0.00	2.40	0.00	3.00	0.00	4.50	0.00	65.00	0.00
Virginia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(6)**		69.50	0.00
West Virginia	4.00	-1.00	0.00	0.00	3.00	0.00	1.00	0.00	3.00	3.00	36.00	1.00
EAST SOUTH CENTRAL	43.00	4.00	5.00	0.00	15.00	3.00	24.00	-1.00	11.00	-5.00	325.40	22.40
Alabama	0.00	0.00	0.00	0.00	4.00	3.00	13.00	-2.00	(8)**	-6.00	109.00	11.00
Kentucky	3.00	1.00	5.00	0.00	3.00	0.00	0.00	0.00	4.00	1.00	46.40	4.40
Mississippi	NA		NA		NA		NA		NA		40.00	NA
Tennessee	40.00	3.00	0.00	0.00	8.00	0.00	11.00	1.00	7.00	0.00	130.00	7.00
WEST SOUTH CENTRAL	88.00	16.00	6.00	-1.00	4.00	0.00	7.00	-6.00	3.00	-7.00	336.00	22.00
Arkansas	26.00	5.00	4.00	-1.00	2.00	0.00	0.00	0.00	1.00	0.00	76.00	5.00
Louisiana	24.00	10.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00	0.00	104.00	24.00
Oklahoma	NA		NA		1.00	0.00	5.00	0.00	1.00	0.00	31.00	2.00
Texas	38.00	1.00	1.00	0.00	1.00	0.00	0.00	-6.00	0.00	-7.00	125.00	-9.00
MOUNTAIN	91.80	-2.00	39.00	6.00	25.50	6.00	8.00	0.00	9.00	1.00	312.08	13.86
Arizona	20.00	-2.00	(10)**		11.00	5.00	1.00	0.00	1.00	1.00	53.00	4.00
Colorado	16.00	1.00	12.00	2.00	2.00	0.00	2.00	0.00	0.00	0.00	57.00	0.00
Idaho	4.80	0.00	5.00	0.00	2.00	0.00	0.00	0.00	3.00	0.00	32.08	-1.64
Montana	5.00	0.00	(13)**		0.00	0.00	2.00	0.00	(2),(13)**		20.00	1.00
Nevada	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.00	1.50
New Mexico	26.00	1.00	13.00	3.00	4.50	0.00	3.00	0.00	3.00	0.00	80.00	7.00
Utah	15.00	-2.00	5.00	1.00	5.00	1.00	0.00	0.00	2.00	0.00	45.00	2.00
Wyoming	0.00	0.00	4.00	0.00	1.00	0.00	0.00	0.00	(6)**		11.00	0.00
PACIFIC	196.50	-15.50	2.50	0.00	50.70	16.10	4.00	1.00	43.00	17.00	552.00	29.20
Alaska	0.00	0.00	0.50	0.00	0.20	0.60	0.00	0.00	1.00	1.00	17.00	3.20
California	148.50	-8.50	(13)**		45.50	15.50	3.00	1.00	25.00	0.00	352.50	10.00
Hawaii	33.00	0.00	2.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00
Oregon	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	39.50	1.00
Washington	15.00	-7.00	0.00	0.00	0.00	0.00	1.00	0.00	17.00	16.00	76.00	15.00
TERRITORIES	15.00	0.50	3.00	1.00	3.00	1.00	2.00	1.00	2.00	0.00	58.00	2.50
Guam	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	9.00	-2.00
Puerto Rico	14.00	0.50	3.00	1.00	3.00	1.00	1.00	1.00	1.00	0.00	38.00	4.50
Virgin Islands	1.00	0.00	(2)**		0.00	0.00	0.00	0.00	(8)**		11.00	0.00

* New York did not report for fiscal year 1990.

** Personnel are included in entry of column number.

NOTE: NA = Data not available.

NOTES AND DEFINITIONS

Every attempt has been made to ensure the accuracy of the raw data which are included in this report. However, because of the various accounting practices employed, great diversity exists among Association laboratories. Therefore, the reader is advised to exercise great care in making comparative analyses without first consulting the laboratory director involved.

An "average," in a table, is the total divided by the number of participating laboratories reporting activity in a given category or subcategory.

SYMBOLS

The data display format conforms to that of previous CAR reports. The following matrix identifies the symbols found in this edition.

<i>Symbol</i>	<i>Meaning and Purpose</i>
Blank or 0	A report with no activity for that particular item
X	A positive response
NA	The laboratory reported that data were not available.

THE FOLLOWING DEFINITIONS APPLY TO TABLES 1 THROUGH 60:

Workload

Workload is reported by the number of specimens/samples in each category or subcategory. Workload includes procedures routinely followed in the laboratory. It does not include those procedures that the laboratory has the capability of performing but does not do on a routine basis. Routine tests are those tests performed as part of a standard operating procedure on a specimen or sample.

Specimen/Sample

Any material received in the laboratory for testing in a workload category or subcategory or a material which is divided into aliquots for testing in multiple categories or subcategories is counted as one specimen for each category or subcategory. Specimens collected from the same site on the same patient (or same environmental source) at the same time are to be counted as one specimen in each category or subcategory in which it is tested. The term "specimen" indicates an animal or human source, while "sample" indicates an environmental source.