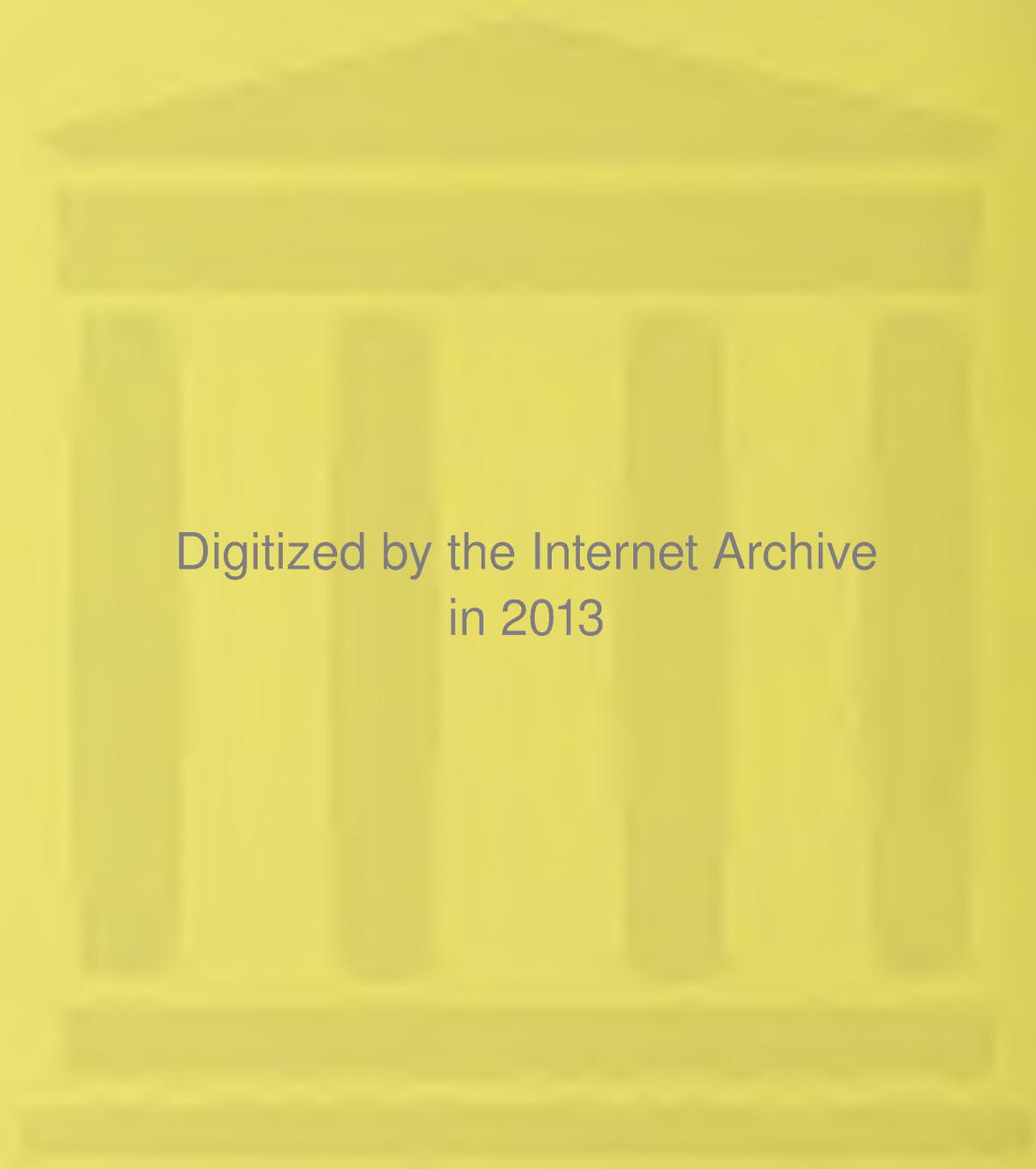
CONSOLIDATED ANNUAL REPORT

on

State and Territorial Public Health Laboratories

Fiscal Year 1982

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333



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JUNE 1984

A Collaborative Compilation
by the
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
Laboratory Program Office
Atlanta, Georgia 30333
and the
Association of State and Territorial
Public Health Laboratory Directors

HHS Publication No. (CDC) 84-8111

ASSOCIATION OF STATE AND TERRITORIAL
PUBLIC HEALTH LABORATORY DIRECTORS

1982 – 1983

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Preface

To Readers of the Consolidated Annual Report

The intent and purpose of the Consolidated Annual Report is to provide data for planning, management and evaluation to the members of the Association of State and Territorial Public Health Laboratory Directors.

Some readers have attempted to utilize the summary tables for comparison of specific state laboratories in relation to the national average and by rank. Comparisons were made as to expenditures, personnel, specimen load and services without studying the data in the detailed tables or consulting the state laboratory director. The conclusions reached were not valid as the comparisons were in error due to lack of knowledge of the state laboratory activities and budgetary system.

The CAR Committee strongly recommends that readers exercise caution when utilizing the summary tables in making comparisons between state laboratories and that the individual state laboratory director be consulted regarding the use of the comparative data.

Charles E. Sweet, Dr. P.H.
Chairman, CAR Committee

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SPECIAL QUESTIONS

INTRODUCTION

This, the nineteenth edition of the Consolidated Annual Report (CAR) provides quantitative information about laboratory personnel, expenditures, source of funds and services identified in fifteen workload areas. This information is provided by the Association of State and Territorial Public Health Laboratory Directors (ASTPHLD). ASTPHLD consists of the public health laboratories in each of the fifty states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

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 Officers and the Centers for Disease Control.

Forty-nine of the fifty-four member laboratories provided data for this edition. New York, Massachusetts, Nebraska, Nevada, and the Virgin Islands did not report to the CAR for fiscal year 1982. Therefore, national totals found in this edition represent only forty-nine state and territorial public health laboratories.

The CAR deals with financial, personnel, and workload activities of ASTPHLD. Therefore, this report understates the additional resources expended on public health laboratory services in nearly every state/territory having local health departments. It totally omits those funds expended for public health laboratory services by other state/territorial agencies. 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 sub-category or a material which is divided into aliquots for testing in multiple categories or sub-categories and is counted as one specimen for each category or sub-category. 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 sub-category 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 sub-category in the fifteen 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.

To assure complete coverage of laboratory activities the questionnaire for the 1982 CAR was composed of four sections: (1) financial, (2) personnel, (3) workload reporting, and (4) special questions. The *Financial Section* requested data in three areas: (1) expenditure, (2) source of funds, and (3) allocations of expenditure data into workload categories. 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 (FTE) full-time equivalent 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. The *Special Questions Section* requested information on a variety of topics of current interest, such as premarital examination laws, facilities, automatic data processing, and cutback management.

NOTE: DATA COMPARISONS

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

USE OF SYMBOLS AND TERMS

Basically, the data display format is the same as that of the FY 1981 CAR. The following matrix identifies the symbols found in this edition .

SYMBOL	MEANING AND PURPOSE
*, #	Footnote
–	A report with no activity for that particular item
X	A positive response

The term "specimen" indicates an animal or human source, while "sample" indicates an environmental source; however, in Tables 1-5 through 1-8 the term "specimens" refers to both human sources and environmental samples. Average is the total divided by the number of participating laboratories reporting activity in a given category or sub-category.

PUBLICATION

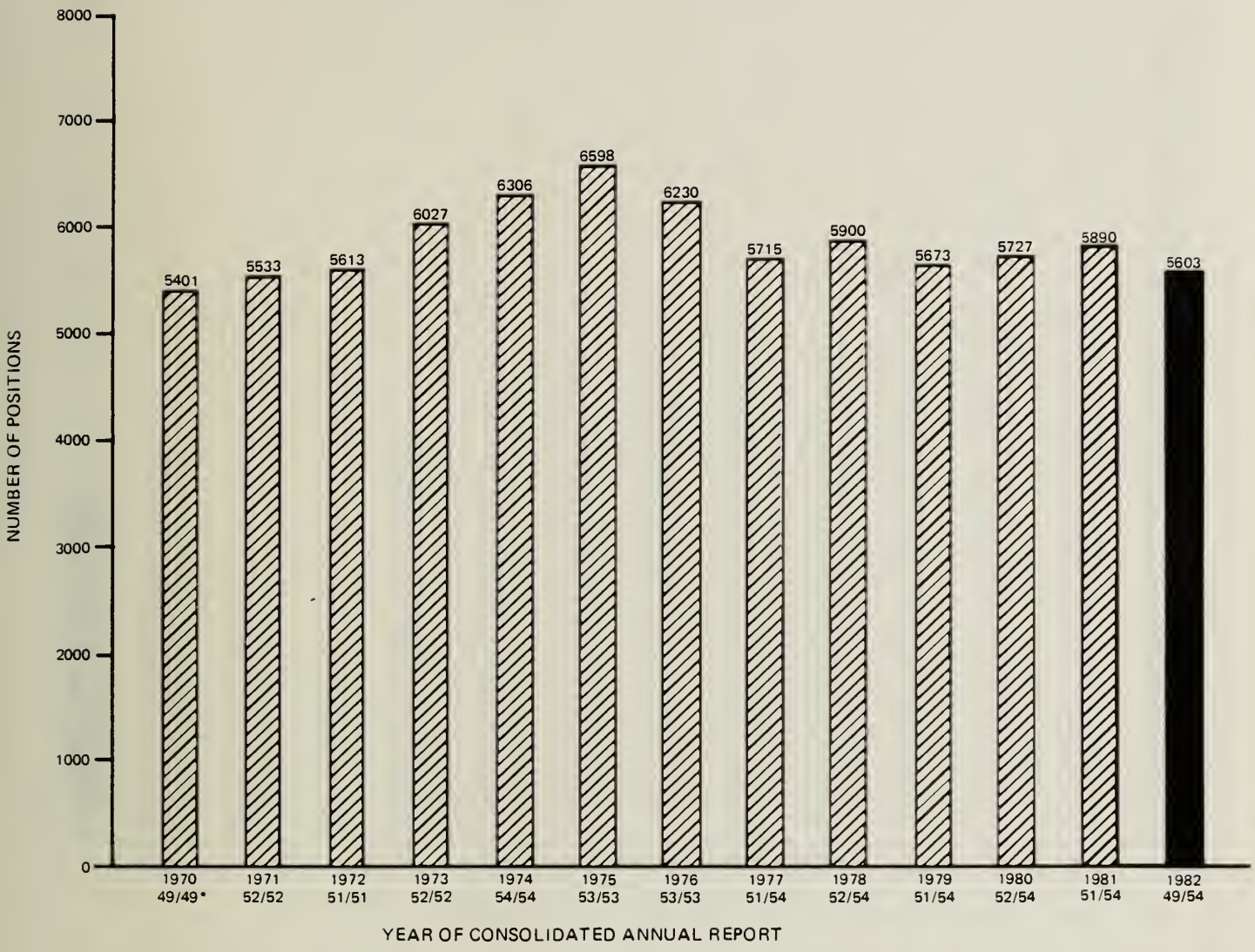
The CAR was initiated by ASTPHLD in 1963. The report is designed to provide comprehensive data concerning state and territorial laboratories to ASTPHLD.

The Consolidated Annual Report is a joint activity of ASTPHLD and CDC, Laboratory Program Office. Because it is compiled by CDC personnel all comments, suggestions, and correspondence on its contents should be forwarded to:

Division of Management Development
and Consultation, LPO
Attn: CAR Editor
Building 6, Room 210
Centers for Disease Control
Atlanta, Georgia 30333

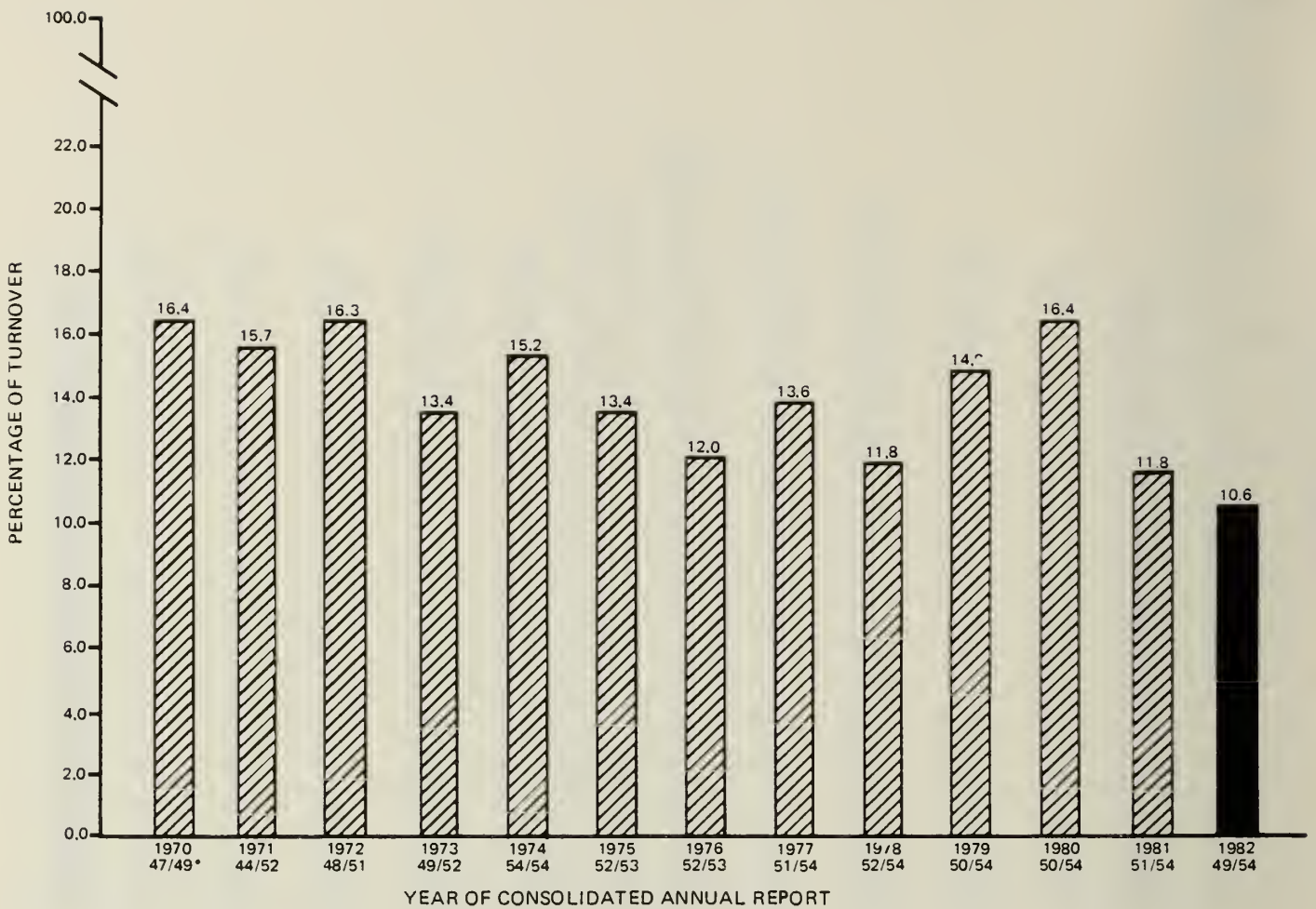
SECTION I
SUMMARY TABLES

TABLE 1-1. BUDGETED POSITIONS FOR STATE AND TERRITORIAL PUBLIC HEALTH LABORATORIES



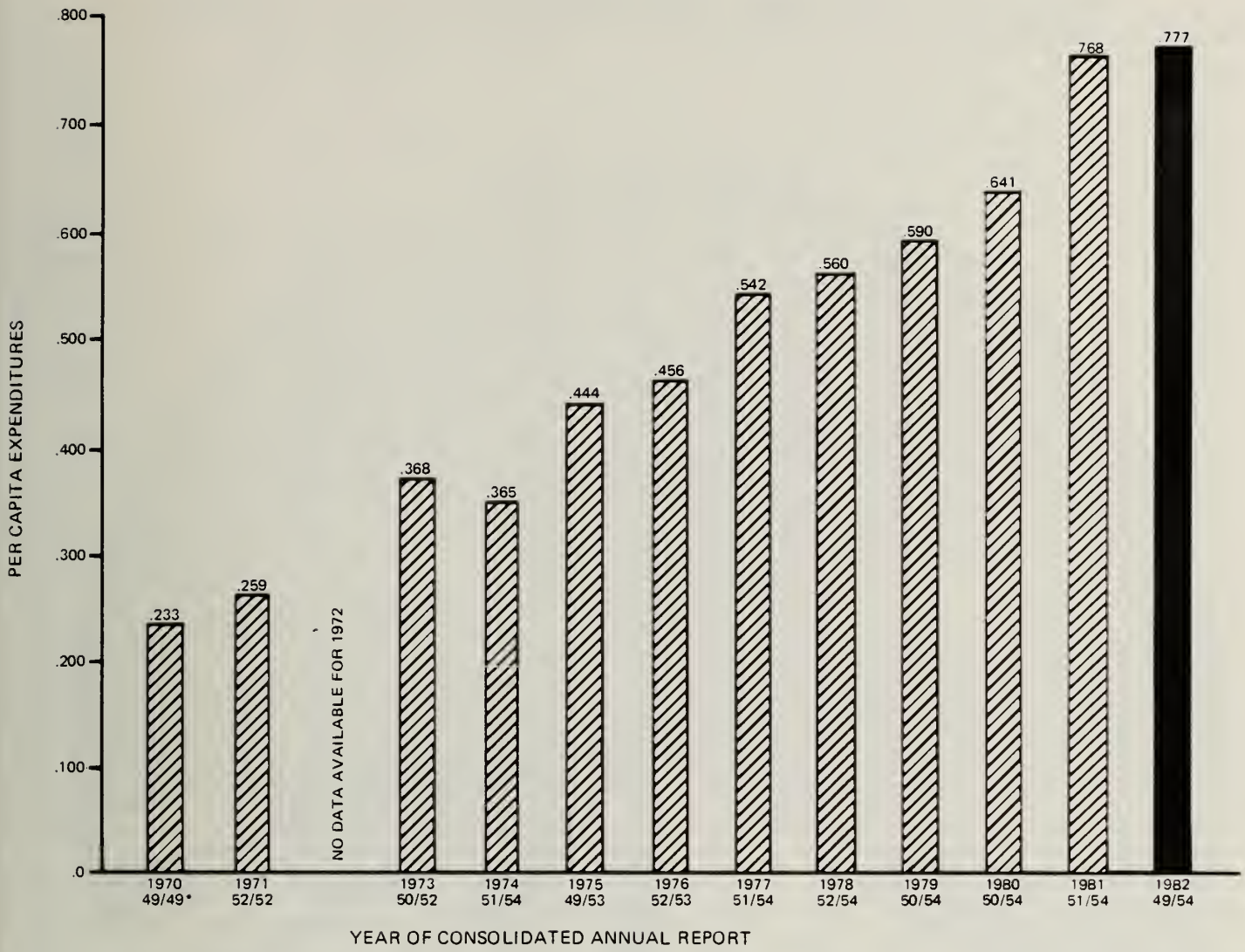
*49/49 = INDICATES 49 LABS REPORTED THIS TYPE DATA OUT OF A UNIVERSE OF 49 LABS.

TABLE 1-2. PERCENTAGE OF TURNOVER IN ALL POSITIONS



*47/49 = INDICATES 47 LABS REPORTED THIS TYPE DATA OUT OF A UNIVERSE OF 49 LABS.

TABLE 1-3. LABORATORY EXPENDITURES PER CAPITA



*49/49 = INDICATES 49 LABS REPORTED THIS TYPE OF DATA OUT OF A UNIVERSE OF 49 LABS.

Table 1-4
SPECIMENS/SAMPLES RECEIVED BY THE STATE AND TERRITORIAL PUBLIC HEALTH LABORATORIES

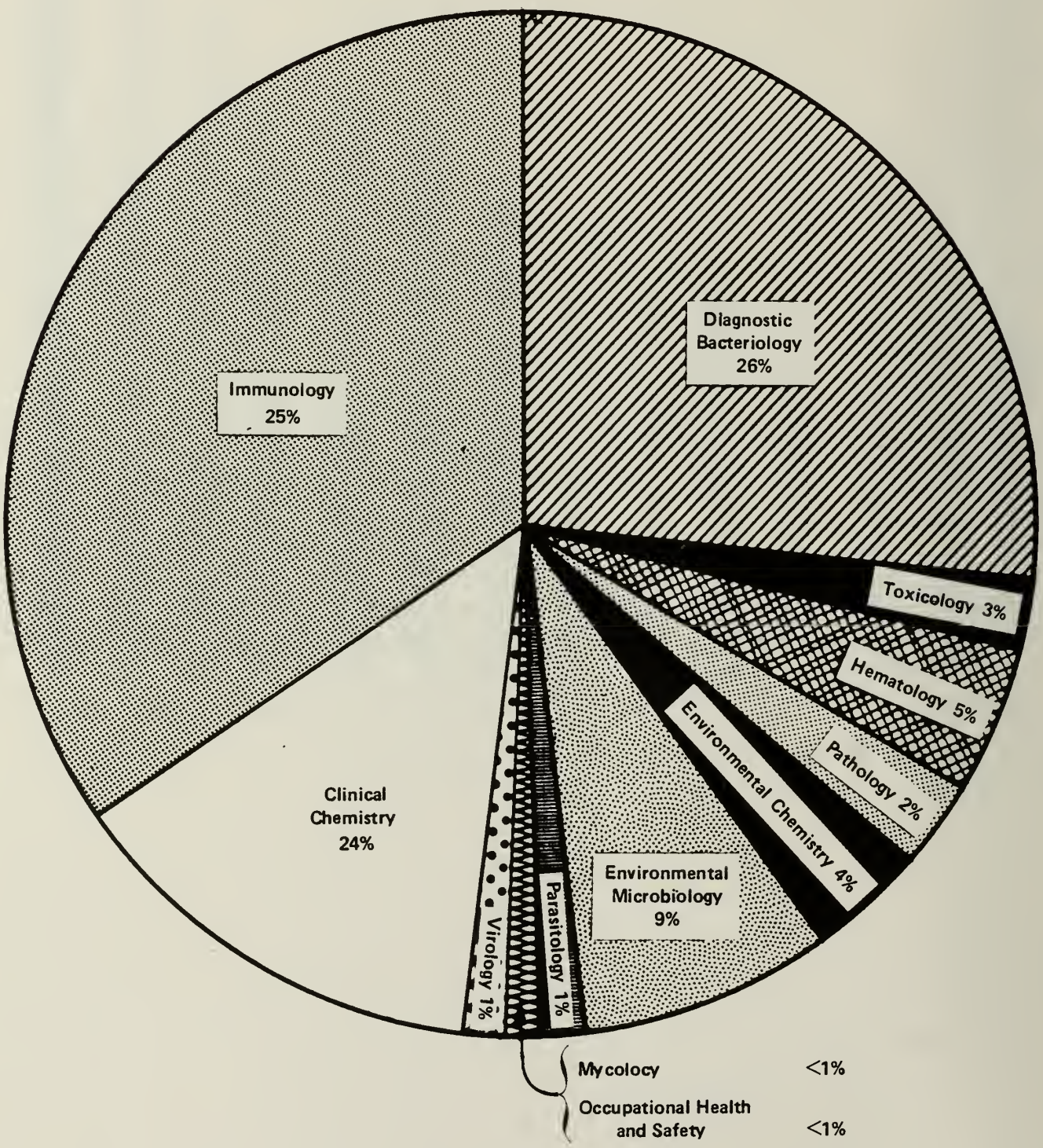


Table 1-5
SUMMARY OF LABORATORY EXPENDITURES, POSITIONS, AND SPECIMENS

Lab. & Region	Population X 1000	Expenditures		Laboratory Personnel						Specimens	
				Budgeted Positions			Budgeted Prof. & Tech. Positions				
		Total Laboratory	Expenditure Per Capita	Budgeted Positions	Positions To Population	Expenditure Per Position	Budgeted Positions	Positions To Population	Expenditure Per Position	Total Lab. Specimens	Specimens Per Capita
Total	**206,816***	**160,704,450**	**0.777**	**5,603.03**	**1:36,911**	**28,682**	**3613.23**	**1:57,239**	**44,477**	**23,523,947**	**0.114**
Average	4,221*	3,279,683	–	114.3	–	–	73.7	–	–	480,081	–
New England	**6,672***	**10,774,884**	**1.615**	**424.0**	**1:15,736**	**25,412**	**294.0**	**1:22,694**	**36,649**	**1,029,761**	**0.154**
Conn.	3,134	5,595,953	1.786	227.0	1:13,806	24,652	163.0	1:19,227	34,331	434,552	0.139
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	1,133	1,124,027	0.992	48.0	1:23,604	23,417	33.0	1:34,333	34,061	105,527	0.093
N.H.	936	637,318	0.681	20.0	1:46,800	31,866	11.0	1:85,091	57,938	62,473	0.067
R.I.	953	2,773,711	2.911	99.0	1:9,626	28,017	68.0	1:14,015	40,790	332,808	0.349
Vt.	516	643,875	1.248	30.0	1:17,200	21,463	19.0	1:27,158	33,888	94,401	0.183
Middle Atlantic	**19,275***	**8,402,853**	**0.436**	**285.0**	**1:67,632**	**29,484**	**176.0**	**1:109,517**	**47,743**	**984,394**	**0.051**
N.J.	7,404	5,602,853	0.757	208.0	1:35,596	26,937	144.0	1:51,417	38,909	625,528	0.084
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	11,871	2,800,000	0.236	77.0	1:154,169	36,364	32.0	1:370,969	87,500	358,866	0.030
East North Central	**41,657**	**29,990,297**	**0.720**	**967.25**	**1:43,067**	**31,006**	**584.75**	**1:71,239**	**51,287**	**2,708,007**	**0.065**
Ill.	11,462	3,470,300	0.303	133.0	1:86,180	26,092	79.0	1:145,089	43,928	442,619	0.039
Ind.	5,468	2,101,442	0.384	86.0	1:63,581	24,435	67.0	1:81,612	31,365	154,523	0.028
Mich.	9,204	12,961,994	1.408	365.0	1:25,216	35,512	202.0	1:45,564	64,168	821,489	0.089
Ohio	10,781	4,748,594	0.440	168.0	1:64,173	28,265	109.0	1:98,908	43,565	456,192	0.042
Wisc.	4,742	6,707,967	1.415	215.25	1:22,030	31,164	127.75	1:37,119	52,509	833,184	0.176
West North Central	**15,661***	**10,811,880**	**0.690**	**408.1**	**1:38,375**	**26,493**	**248.1**	**1:63,124**	**43,579**	**1,735,516**	**0.111**
Ia.	2,899	3,470,530	1.197	123.0	1:23,569	28,216	78.0	1:37,167	44,494	409,536	0.141
Kans.	2,383	1,787,317	0.750	77.0	1:30,948	23,212	49.0	1:48,633	36,476	292,203	0.123
Minn.	4,094	1,782,477	0.435	65.0	1:62,985	27,423	34.0	1:120,412	52,426	299,205	0.073
Mo.	4,941	1,731,103	0.350	74.0	1:66,770	23,393	47.0	1:105,128	36,832	482,510	0.098
Nebr.	–	–	–	–	–	–	–	–	–	–	–
N.D.	658	1,208,387	1.836	33.0	1:19,939	36,618	18.0	1:36,556	67,133	148,517	0.226
S.D.	686	832,066	1.213	36.1	1:19,003	23,049	22.1	1:31,041	37,650	103,545	0.151
South Atlantic	**37,751**	**34,976,824**	**0.927**	**1,420.0**	**1:26,585**	**24,632**	**965.0**	**1:39,120**	**36,245**	**7,321,734**	**0.194**
Del.	598	771,234	1.290	36.0	1:16,611	21,423	26.0	1:23,000	29,663	159,519	0.267
D.C.	631	1,155,433	1.831	36.0	1:17,528	32,095	29.0	1:21,759	39,843	286,467	0.454
Fla.	10,183	6,629,988	0.651	277.0	1:36,762	23,935	179.0	1:56,888	37,039	2,065,010	0.203
Ga.	5,574	3,307,733	0.593	126.0	1:44,238	26,252	63.0	1:88,476	52,504	891,192	0.160
Md.	4,263	5,403,816	1.268	267.0	1:15,966	20,239	189.0	1:22,556	28,592	1,387,984	0.326
N.C.	5,953	3,848,502	0.646	165.0	1:36,079	23,324	107.0	1:55,636	35,967	774,592	0.130
S.C.	3,167	3,496,423	1.104	110.0	1:28,791	31,786	78.0	1:40,603	44,826	642,685	0.203
Va.	5,430	9,193,327	1.693	346.0	1:15,694	26,570	259.0	1:20,965	35,495	795,146	0.146
W.Va.	1,952	1,170,368	0.600	57.0	1:34,246	20,533	35.0	1:55,771	33,439	319,139	0.163
East South Central	**14,723**	**9,595,445**	**0.652**	**424.5**	**1:34,683**	**22,604**	**267.0**	**1:55,142**	**35,938**	**2,665,890**	**0.181**
Ala.	3,917	3,868,334	0.988	140.0	1:27,979	27,631	101.0	1:38,782	38,300	997,936	0.255
Ky.	3,662	1,947,992	0.532	65.5	1:55,908	29,740	41.0	1:89,317	47,512	243,557	0.067
Miss.	2,531	1,258,822	0.497	54.0	1:46,870	23,312	32.0	1:79,094	39,338	702,269	0.277
Tenn.	4,612	2,520,297	0.546	165.0	1:27,952	15,275	93.0	1:49,591	27,100	722,128	0.157
West South Central	**24,470**	**14,411,023**	**0.589**	**494.0**	**1:49,534**	**29,172**	**317.0**	**1:77,192**	**45,461**	**4,711,120**	**0.193**
Ark.	2,296	1,678,553	0.731	77.0	1:29,818	21,799	54.0	1:42,519	31,084	448,025	0.195
La.	4,308	4,087,873	0.949	170.0	1:25,341	24,046	92.0	1:46,826	44,433	794,340	0.184
Okla.	3,100	1,455,097	0.469	51.0	1:60,784	28,531	39.0	1:79,487	37,310	425,933	0.137
Tex.	14,766	7,189,500	0.487	196.0	1:75,337	36,681	132.0	1:111,864	54,466	3,042,822	0.206
Mountain	**10,849***	**11,832,332**	**1.091**	**399.4**	**1:27,163**	**29,625**	**259.23**	**1:41,851**	**45,644**	**1,223,469**	**0.113**
Anz.	2,794	1,977,519	0.708	65.0	1:42,985	30,423	40.0	1:69,850	49,438	78,443	0.028
Colo.	2,965	2,049,018	0.691	69.0	1:42,971	29,696	48.0	1:61,771	42,688	406,623	0.137
Ida.	959	1,818,400	1.896	72.9	1:13,155	24,944	46.73	1:20,522	38,913	97,259	0.101
Mont.	793	616,855	0.778	19.0	1:41,737	32,466	12.0	1:66,083	51,405	86,033	0.108
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	1,328	2,878,700	2.168	90.0	1:14,756	31,986	56.0	1:23,714	51,405	208,551	0.157
Utah	1,518	2,065,053	1.360	66.5	1:22,827	31,053	45.5	1:33,363	45,386	171,968	0.113
Wyo.	492	426,787	0.867	17.0	1:28,941	25,105	11.0	1:44,727	38,799	174,592	0.355
Pacific	**32,456**	**28,817,230**	**0.888**	**635.78**	**1:51,049**	**45,326**	**393.15**	**1:82,554**	**73,298**	**1,006,152**	**0.031**
Alaska	412	1,634,500	3.967	41.0	1:10,049	39,866	24.0	1:17,167	68,104	155,172	0.377
Cal.	24,196	21,431,773	0.886	414.45	1:58,381	51,711	267.9	1:90,317	79,999	111,006	0.005
Hawaii	981	1,149,084	1.171	56.5	1:17,363	20,338	39.5	1:24,835	29,091	260,737	0.266
Ore.	2,651	2,102,318	0.793	47.83	1:55,425	43,954	29.75	1:89,109	70,666	282,112	0.106
Wash.	4,217	2,499,555	0.593	76.0	1:55,487	32,889	32.0	1:131,781	78,111	197,125	0.047
Territories	**3,302***	**1,091,682**	**0.331**	**145.0**	**1:22,772**	**7,529**	**109.0**	**1:30,294**	**10,015**	**137,904**	**0.042**
Guam	105	266,176	2.535	12.0	1:8,750	22,181	8.0	1:13,125	33,272	35,005	0.333
P.R.	3,197	825,506	0.258	133.0	1:24,038	6,207	101.0	1:31,653	8,173	102,899	0.032
V.I.	–	–	–	–	–	–	–	–	–	–	–

*Mass., N.Y.; Nebr., Nev., and V.I. not included in totals.

Table 1-6
NATIONAL RANKING OF STATE & TERRITORIAL PUBLIC HEALTH LABORATORIES BY EXPENDITURES, POSITIONS, AND SPECIMENS*

Rank	Expenditures				Laboratory Personnel												Specimens			
	Total Laboratory X1000		Expenditure Per Capita		Budgeted Positions						Budgeted Prof. & Tech. Positions						Total Lab. Specimens X1000		Specimens Per Capita	
					Budgeted Positions		Positions To Pop.		Expenditure Per Position		Budgeted Positions		Positions To Pop.		Expenditure Per Position					
	State	$	State	Ratio	State	#	State	Ratio (X1000)	State	$	State	#	State	Ratio (X1000)	State	$	State	#	State	Ratio
Total		160,704		0.777		5,603.0		1:37		28,682		3,613.2		1:57		44,477		23,524		0.114
Average		3,280		–		114.3		–		–		73.7		–		–		480		–
1	Cal.	21,432	Alaska	3.967	Cal.	414.5	Guam	1:9	Cal.	51,711	Cal.	267.9	Guam	1:13	Pa	87,500	Tex	3,043	D.C.	0.454
2	Mich.	12,962	R.I.	2.911	Mich.	365.0	Alaska	1:10	Ore.	43,954	Va.	259.0	R.I.	1:14	Cal.	79,999	Fla.	2,065	Alaska	0.377
3	Va.	9,193	Guam	2.535	Va.	346.0	R.I.	1:10	Alaska	39,866	Mich.	202.0	Alaska	1:17	Wash.	78,111	Md.	1,388	Wyo.	0.355
4	Tex.	7,190	N.M.	2.168	Fla.	277.0	Ida.	1:13	Tex.	36,681	Md.	189.0	Conn.	1:19	Ore.	70,666	Ala.	998	R.I.	0.349
5	Wisc.	6,708	Ida.	1.896	Md.	267.0	Conn.	1:14	N.D.	36,618	Fla.	179.0	Ida.	1:21	Alaska	68,104	Ga.	891	Guam	0.333
6	Fla.	6,630	N.D.	1.836	Conn.	227.0	N.M.	1:15	PA.	36,364	Conn.	163.0	Va.	1:21	N.D.	67,133	Wisc.	833	Md.	0.326
7	N.J.	5,603	D.C.	1.831	Wisc.	215.3	Md.	1:16	Mich.	35,512	N.J.	144.0	D.C.	1:22	Mich.	64,168	Mich.	821	Miss.	0.277
8	Conn.	5,596	Conn.	1.786	N.J.	208.0	Va.	1:16	Wash.	32,889	Tex.	132.0	Del.	1:23	N.H.	57,938	Va.	795	Del.	0.267
9	Md.	5,404	Va.	1.693	Tex.	196.0	Del.	1:17	Mont.	32,466	Wisc.	127.8	Md.	1:23	Tex.	54,466	La.	794	Hawaii	0.266
10	Ohio	4,749	Wisc.	1.415	La.	170.0	Hawaii	1:17	D.C.	32,095	Ohio	109.0	N.M.	1:24	Wisc.	52,509	N.C.	775	Ala.	0.255
11	La.	4,088	Mich.	1.408	Ohio	168.0	Vt.	1.17	N.M.	31,986	N.C.	107.0	Hawaii	1:25	Ga.	52,504	Tenn.	722	N.D.	0.226
12	Ala.	3,868	Utah	1.360	N.C.	165.0	D.C.	1:18	N.H.	31,866	Ala.	101.0	Vt.	1:27	Minn.	52,426	Miss.	702	Tex.	0.206
13	N.C.	3,849	Del.	1.290	Tenn.	165.0	S.D.	1:19	S.C.	31,786	P.R.	101.0	S.D.	1:31	Mont.	51,405	S.C.	643	Fla.	0.203
14	S.C.	3,496	Md.	1.268	Ala.	140.0	N.D.	1:20	Wisc.	31,164	Tenn.	93.0	P.R.	1:32	N.M.	51,405	N.J.	626	S.C.	0.203
15	Ia.	3,471	Vt.	1.248	Ill.	133.0	Wisc.	1:22	Utah	31,053	La.	92.0	Utah	1:33	Ariz.	49,438	Mo.	483	Ark.	0.195
16	Ill.	3,470	S.D.	1.213	P.R.	133.0	Utah	1:23	Ariz.	30,423	Ill.	79.0	Me.	1:34	Ky.	47,512	Ohio	456	La.	0.184
17	Ga.	3,308	Ia.	1.197	Ga.	126.0	Ia.	1:24	Ky.	29,740	Ia.	78.0	Ia.	1:37	Utah	45,386	Ark	448	Vt.	0.183
18	N.M.	2,879	Hawaii	1.171	Ia.	123.0	Me.	1:24	Colo.	29,696	S.C.	78.0	N.D.	1:37	S.C.	44,826	Ill.	443	Wisc.	0.176
19	Pa.	2,800	S.C.	1.104	S.C.	110.0	P.R.	1:24	Okla.	28,531	R.I.	68.0	Wisc.	1:37	Ia.	44,494	Conn.	435	W.Va.	0.163
20	R.I.	2,774	Me.	0.992	R.I.	99.0	La.	1:25	Ohio.	28,265	Ind.	67.0	Ala.	1:39	La.	44,433	Okla.	426	Ga.	0.160
21	Tenn.	2,520	Ala.	0.988	N.M.	90.0	Mich.	1:25	Ia.	28,216	Ga.	63.0	S.C.	1:41	Ill.	43,928	Ia	410	N.M.	0.157
22	Wash.	2,500	La.	0.949	Ind	86.0	Ala.	1:28	R.I.	28,017	N.M.	56.0	Ark.	1:43	Ohio	43,565	Colo.	407	Tenn.	0.157
23	Ore.	2,102	Cal.	0.886	Pa.	77.0	Tenn.	1:28	Ala.	27,631	Ark.	54.0	Wyo.	1:45	Colo.	42,688	Pa.	359	S.D.	0.151
24	Ind.	2,101	Wyo.	0.867	Kans.	77.0	S.C.	1:29	Minn.	27,423	Kans.	49.0	Mich.	1:46	R.I.	40,790	R.I.	333	Va	0.146
25	Utah	2,065	Ore	0.793	Ark.	77.0	Wyo.	1:29	N.J.	26,937	Colo.	48.0	La.	1:47	D.C.	39,843	W.Va.	319	Ia	0.141
26	Colo.	2.049	Mont.	0.778	Wash.	76.0	Ark.	1:30	Va.	26,570	Mo.	47.0	Kans.	1:49	Miss.	39,338	Minn.	299	Conn.	0.139
27	Ariz.	1,978	N.J.	0.757	Mo.	74.0	Kans.	1:31	Ga.	26,252	Ida.	46.7	Tenn.	1:50	Ida.	38,913	Kans.	292	Colo.	0.137
28	Ky.	1,948	Kans.	0.750	Ida.	72.9	W.Va.	1:34	Ill.	26,092	Utah	45.5	N.J.	1:51	N.J.	38,909	D.C.	286	Okla.	0.137
29	Ida	1,818	Ark.	0.731	Colo.	69.0	N.J.	1:36	Wyo.	25,105	Ky.	41.0	N.C.	1:56	Wyo.	38,799	Ore.	282	N.C.	0.130
30	Kans.	1,787	Ariz.	0.708	Utah	66.5	N.C.	1:36	Ida.	24,944	Ariz.	40.0	W.Va.	1:56	Ala.	38,300	Hawaii	261	Kans.	0.123
31	Minn.	1,782	Colo.	0.691	Ky.	65.5	Fla.	1:37	Conn.	24,652	Hawaii	39.5	Fla.	1:57	S.D.	37,650	Ky.	244	Utah	0.113
32	Mo.	1,731	N.H.	0.681	Minn.	65.0	Mont.	1:42	Ind.	24,435	Okla.	39.0	Colo.	1:62	Okla.	37,310	N.M	209	Mont.	0.108
33	Ark.	1,679	Fla.	0.651	Ariz.	65.0	Ariz.	1:43	La.	24,046	W.Va.	35.0	Mont.	1:66	Fla.	37,039	Wash.	197	Ore.	0.106
34	Alaska	1,635	N.C.	0.646	W.Va.	57.0	Colo.	1:43	Fla.	23,935	Minn.	34.0	Ariz.	1:70	Mo.	36,832	Wyo.	175	Ida.	0.101
35	Okla.	1,455	W.Va.	0.600	Hawaii	56.5	Ga.	1:44	Me.	23,417	Me.	33.0	Okla.	1:79	Kans.	36,476	Utah	172	Mo.	0.098
36	Miss.	1,259	Ga.	0.593	Miss.	54.0	Miss.	1:47	Mo.	23,393	Miss.	32.0	Miss.	1:79	N.C.	35,967	Del	160	Me.	0.093
37	N.D.	1,208	Wash.	0.593	Okla.	51.0	N.H.	1:47	N.C.	23,324	Pa.	32.0	Ind.	1:82	Va.	35,495	Alaska	155	Mich.	0.089
38	W.Va.	1,170	Tenn.	0.546	Me.	48.0	Ore.	1:55	Miss.	23,312	Wash.	32.0	N.H.	1:85	Conn.	34,331	Ind.	155	N.J.	0.084
39	D.C.	1,155	Ky.	0.532	Ore.	47.8	Wash.	1:55	Kans.	23,212	Ore.	29.8	Ga.	1:88	Me.	34,061	N.D.	149	Minn.	0.073
40	Hawaii	1,149	Miss.	0.497	Alaska	41.0	Ky.	1:56	S.D.	23,049	D.C.	29.0	Miss.	1:89	Vt.	33,888	Cal.	111	Ky.	0.067
41	Me.	1,124	Tex.	0.487	S.D.	36.1	Col.	1:58	Guam	22,181	Del.	26.0	Ore.	1:89	W Va.	33,439	Me.	106	N.H.	0.067
42	S.D.	832	Okla.	0.469	Del.	36.0	Okla.	1:61	Ark.	21,799	Alaska	24.0	Cal.	1:90	Guam	33,272	S.D.	104	Wash.	0.047
43	P.R.	826	Ohio	0.440	D.C.	36.0	Minn.	1:63	Vt.	21,463	S.D.	22.1	Ohio	1:99	Ind.	31,365	P.R.	103	Ohio	0.042
44	Del.	771	Minn.	0.435	N.D.	33.0	Ind.	1:64	Del.	21,423	Vt.	19.0	Mo.	1:105	Ark	31,084	Ida.	97	Ill.	0.039
45	Vt.	644	Ind.	0.384	Vt.	30.0	Ohio.	1:64	W Va.	20,533	N.D.	18.0	Tex.	1:112	Del.	29,663	Vt.	94	P.R.	0.032
46	N.H.	637	Mo.	0.350	N.H.	20.0	Mo.	1:67	Hawaii	20,338	Mont.	12.0	Minn.	1:120	Hawaii	29,091	Mont.	86	Pa.	0.030
47	Mont.	617	Ill.	0.303	Mont.	19.0	Tex.	1:75	Md.	20,239	N.H.	11.0	Wash.	1:132	Md	28,592	Ariz	78	Ariz.	0.028
48	Wyo	427	P.R.	0.258	Wyo.	17.0	Ill.	1:86	Tenn.	15,275	Wyo.	11.0	Ill.	1:145	Tenn.	27,100	N.H.	62	Ind	0.028
49	Guam	266	Pa.	0.236	Guam	12.0	Pa.	1:154	P.R.	6,207	Guam	8.0	Pa.	1:371	P.R.	8,173	Guam	35	Cal.	0.005

Table 1-7
INTER-REGIONAL RANKING OF STATE AND TERRITORIAL PUBLIC HEALTH LABORATORIES BY EXPENDITURES, POSITIONS, AND SPECIMENS

Rank	Expenditures				Laboratory Personnel										Specimens			
					Budgeted Positions						Budgeted Prof. & Tech. Positions							
	Total Laboratory X1000		Expenditure Per Capita		Budgeted Positions		Positions To Population		Expenditure Per Positions		Budgeted Positions		Positions To Population		Expenditure Per Position		Total Lab Specimens X1000		Specimens Per Capita	
	State	$	State	Ratio	State	#	State	Ratio (X1000)	State	$	State	#	State	Ratio (X1000)	State	$	State	#	State	Ratio
Total		**160,704**		**0.777**		**5,603.0**		**1.37**		**28,682**		**3,613.2**		**1:57**		**44,477**		**23,524**		**0.114**
Average		3,280		–		114.3		–		–		73.7						480		
New England		**10,775**		**1.615**		**424.0**		**1:16**		**25,412**		**294.0**		**1:23**		**36,649**		**1,030**		**0.154**
1	Conn.	5,596	R.I.	2.911	Conn.	227.0	R.I.	1.10	N.H.	31,866	Conn	163.0	R.I	1.14	N.H.	57,938	Conn	435	R.I	0.349
2	R.I	2,774	Conn	1.786	R.I.	99.0	Conn	1.14	R.I	28,017	R.I.	68.0	Conn	1.19	R.I	40,790	R.I	333	Vt	0.183
3	Me	1,124	Vt	1.248	Me.	48.0 *	Vt	1.17	Conn.	24,652	Me	33.0	Vt	1.27	Conn	34,331	Me	106	Conn	0.139
4	Vt.	644	Me	0.992	Vt.	30.0	Me	1:24	Me.	23,417	Vt	19.0	Me	1.34	Me	34,061	Vt	94	Me	0.093
5	N.H	637	N.H	0.681	N.H.	20.0	N.H	1.47	Vt	21,463	N.H	11.0	N.H	1.85	Vt	33,888	N.H	62	N.H	0.067
6	Mass	–	Mass	–	Mass.	–	Mass	–	Mass.	–	Mass	–	Mass	–	Mass		Mass		Mass	–
Middle Atlantic		**8,403**		**0.436**		**285.0**		**1.68**		**29,484**		**176.0**		**1:110**		**47,743**		**984**		**0.051**
1	N.J	5,603	N.J	0.757	N.J	208.0	N.J	1:36	Pa.	36,364	N.J.	144.0	N.J	1.51	Pa	87,500	N.J	626	N.J	0.084
2	Pa	2,800	Pa	0.236	Pa.	77.0	Pa	1.154	N.J	26,937	Pa	32.0	Pa	1:371	N.J.	38,909	Pa	359	Pa	0.030
3	N.Y	–	N.Y.	–	N.Y	–	N.Y	–	N.Y		N.Y		N.Y	–	N.Y		N.Y		N.Y	–
East North Central		**29,990**		**0.720**		**967.3**		**1.43**		**31,006**		**584.8**		**1.71**		**51,287**		**2,708**		**0.065**
1	Mich	12,962	Wisc.	1.415	Mich	365.0	Wisc.	1.22	Mich	35,512	Mich.	202.0	Wisc	1.37	Mich	64,168	Wisc	833	Wisc	0.176
2	Wisc	6,708	Mich.	1.408	Wisc	215.3	Mich	1.25	Wisc	31,164	Wisc.	127.8	Mich	1.46	Wisc	52,509	Mich	821	Mich	0.089
3	Ohio	4,749	Ohio	0.440	Ohio	168.0	Ind	1.64	Ohio	28,265	Ohio	109.0	Ind	1.82	Ill	43,928	Ohio	456	Ohio	0.042
4	Ill.	3,470	Ind.	0.384	Ill	133.0	Ohio	1.64	Ill	26,092	Ill	79.0	Ohio	1.99	Ohio	43,565	Ill	443	Ill	0.039
5	Ind.	2,101	Ill.	0.303	Ind.	86.0	Ill	1.86	Ind	24,435	Ind	67.0	Ill	1.145	Ind.	31,365	Ind	155	Ind	0.028
West North Central		**10,812**		**0.690**		**408.1**		**1.38**		**26,493**		**248.1**		**1:63**		**43,579**		**1,736**		**0.111**
1	Ia	3,471	N.D	1.836	Ia.	123.0	S.D	1.19	N.D	36,618	Ia	78.0	S.D	1.31	N.D	67,133	Mo	483	N.D	0.226
2	Kans	1,787	S.D.	1.213	Kans	77.0	N.D.	1.20	Ia	28,216	Kans.	49.0	N.D	1.37	Minn	52,426	Ia	410	S.D	0.151
3	Minn	1,782	Ia	1.197	Mo	74.0	Ia	1:24	Minn	27,423	Mo.	47.0	Ia	1.37	Ia	44,494	Minn	299	Ia	0.141
4	Mo	1,731	Kans	0.750	Minn.	65.0	Kans	1.31	Mo.	23,393	Minn	34.0	Kans	1.49	S.D.	37,650	Kans	292	Kans	0.123
5	N.D	1,208	Minn	0.435	S.D	36.1	Minn	1.63	Kans	23,212	S.D	22.1	Mo	1.105	Mo	36,832	N.D	149	Mo	0.098
6	S.D	832	Mo	0.350	N.D	33.0	Mo	1.67	S.D.	23,049	N.D	18.0	Minn	1.120	Kans	36,476	S.D	104	Minn	0.073
7	Nebr	–	Nebr	–	Nebr		Nebr	–	Nebr	–	Nebr	–	Nebr	–	Nebr	–	Nebr		Nebr	–
South Atlantic		**34,977**		**0.927**		**1,420.8**		**1.27**		**24,632**		**965.8**		**1:39**		**36,245**		**7,322**		**0.194**
1	Va	9,193	D.C.	1.831	Va	346.0	Va	1.16	D.C	32,095	Va	259.0	Va	1.21	Ga	52,504	Fla	2,065	D.C	0.454
2	Fla	6,630	Va	1.693	Fla	277.0	Md	1.16	S.C.	31,786	Md	189.0	D.C	1.22	S.C	44,826	Md	1,388	Md	0.326
3	Md.	5,404	Del.	1.290	Md.	267.0	Del	1.17	Va	26,570	Fla	179.0	Md	1.23	D.C.	39,843	Ga	891	Del	0.267
4	N.C.	3,849	Md.	1.268	N.C	165.0	D.C	1.18	Ga	26,252	N.C.	107.0	Del	1.23	Fla	37,039	Va	795	S.C	0.203
5	S.C	3,496	S.C	1.104	Ga.	126.0	S.C	1.29	Fla	23,935	S.C	78.0	S.C.	1.41	N.C.	35,967	N.C	775	Fla	0.203
6	Ga.	3,308	Fla	0.651	S.C	110.0	W.Va	1.34	N.C.	23,324	Ga	63.0	N.C	1.56	Va.	35,495	S.C	643	W.Va	0.163
7	W.Va	1,170	N.C	0.646	W.Va	57.0	N.C	1.36	Del	21,423	W.Va	35.0	W.Va	1.56	W.Va	33,439	W.Va	319	Ga	0.160
8	D.C.	1,155	W.Va	0.600	Del	36.0	Fla	1.37	W.Va	20,533	D.C.	29.0	Fla	1.57	Del	29,663	D.C	286	Va	0.146
9	Del	771	Ga	0.593	D.C	36.0	Ga	1.44	Md	20,239	Del	26.0	Ga	1.88	Md	28,592	Del	160	N.C	0.130
East South Central		**9,595**		**0.652**		**424.5**		**1.35**		**22,604**		**267.0**		**1:55**		**35,938**		**2,666**		**0.181**
1	Ala	3,868	Ala	0.988	Tenn	165.0	Tenn	1.28	Ky	29,740	Ala	101.0	Ala	1.39	Ky	47,512	Ala	998	Miss	0.277
2	Tenn	2,520	Tenn.	0.546	Ala	140.0	Ala	1.28	Ala	27,631	Tenn.	93.0	Tenn	1.50	Miss	39,338	Tenn	722	Ala	0.255
3	Ky	1,948	Ky	0.532	Ky	65.5	Miss	1.47	Miss	23,312	Ky	41.0	Miss	1.79	Ala	38,300	Miss	702	Tenn	0.157
4	Miss	1,259	Miss	0.497	Miss	54.0	Ky	1.56	Tenn	15,275	Miss.	32.0	Ky	1.89	Tenn.	27,100	Ky	244	Ky	0.067
West South Central		**14,411**		**0.589**		**494.0**		**1.50**		**29,172**		**317.0**		**1:77**		**45,461**		**4,711**		**0.193**
1	Tex	7,190	La	0.949	Tex	196.0	La	1.25	Tex	36,681	Tex	132.0	Ark	1.43	Tex	54,466	Tex	3,043	Tex	0.206
2	La	4,088	Ark	0.731	La	170.0	Ark	1.30	Okla	28,531	La	92.0	La	1.47	La	44,433	La	794	Ark	0.195
3	Ark	1,679	Tex	0.487	Ark	77.0	Okla	1.61	La	24,046	Ark	54.0	Okla	1.79	Okla	37,310	Ark	448	La	0.184
4	Okla	1,455	Okla	0.469	Okla	51.0	Tex	1.75	Ark	21,799	Okla	39.0	Tex	1.112	Ark	31,084	Okla	426	Okla	0.137
Mountain		**11,832**		**1.091**		**399.4**		**1:27**		**29,625**		**259.2**		**1.42**		**45,644**		**1,223**		**0.113**
1	N.M.	2,879	N.M.	2.168	N.M	90.0	Ida	1.13	Mont	32,466	N.M	56.0	Ida	1.21	Mont	51,405	Colo	407	Wyo	0.355
2	Utah	2,065	Ida	1.896	Ida	72.9	N.M	1.15	N.M	31,986	Colo.	48.0	N.M	1.24	N.M	51,405	N.M	209	N.M	0.157
3	Colo	2,049	Utah	1.360	Colo	69.0	Utah	1.23	Utah	31,053	Ida	46.7	Utah	1.33	Ariz	49,438	Wyo	175	Colo	0.137
4	Ariz	1,978	Wyo	0.867	Utah	66.5	Wyo	1.29	Ariz	30,423	Utah	45.5	Wyo	1.45	Utah	45,386	Utah	172	Utah	0.113
5	Ida	1,818	Mont	0.778	Ariz	65.0	Mont	1.42	Colo	29,696	Ariz	40.0	Colo	1.62	Colo	42,688	Ida	97	Mont	0.108
6	Mont.	617	Ariz	0.708	Mont	19.0	Colo	1.43	Wyo	25,105	Mont	12.0	Mont	1.66	Ida	38,913	Mont	86	Ida	0.101
7	Wyo	427	Colo	0.691	Wyo	17.0	Ariz	1.43	Ida	24,944	Wyo	11.0	Ariz	1.70	Wyo	38,799	Ariz	78	Ariz	0.028
8	Nev	–	Nev		Nev		Nev		Nev		Nev		Nev		Nev		Nev		Nev	
Pacific		**28,817**		**0.888**		**635.8**		**1.51**		**45,326**		**393.2**		**1.83**		**73,298**		**1,006**		**0.031**
1	Cal	21,432	Alaska	3.967	Cal	414.5	Alaska	1.10	Cal	51,711	Cal	267.9	Alaska	1.17	Cal	79,999	Ore	282	Alaska	0.377
2	Wash	2,500	Hawaii	1.171	Wash	76.0	Hawaii	1.17	Ore	43,954	Hawaii	39.5	Hawaii	1.25	Wash	78,111	Hawaii	261	Hawaii	0.266
3	Ore	2,102	Cal.	0.886	Hawaii	56.5	Ore	1.55	Alaska	39,866	Wash	32.0	Ore	1.89	Ore	70,666	Wash	197	Ore	0.106
4	Alaska	1,635	Ore	0.793	Ore	47.8	Wash	1.55	Wash	32,889	Ore	29.8	Cal	1.90	Alaska	68,104	Alaska	155	Wash	0.047
5	Hawaii	1,149	Wash	0.593	Alaska	41.0	Cal	1.58	Hawaii	20,338	Alaska	24.0	Wash	1.132	Hawaii	29,091	Cal	111	Cal	0.005
Territories		**1,092**		**0.331**		**145.0**		**1.23**		**7,529**		**109.0**		**1.30**		**10,015**		**138**		**0.042**
1	P.R	826	Guam	2.535	P.R	133.0	Guam	1.9	Guam	22,181	P.R	101.0	Guam	1.13	Guam	33,272	P.R	103	Guam	0.333
2	Guam	266	P.R	0.258	Guam	12.0	P.R	1.24	P.R	6,207	Guam	8.0	P.R	1.32	P.R	8,173	Guam	35	P.R	0.032
3	V.I		V.I		V.I	–	V.I		V.I		V.I		V.I		V.I		V.I		V.I	

Table 1-8
SUMMARY OF LABORATORY SPECIMENS BY CATEGORY AND PERCENT OF CATEGORY TO TOTAL SPECIMENS

Lab & Region	Total No. of Specimens	Diagnostic Bacteriology		Mycology		Parasitology		Virology		Immunology		Hematology		Clinical Chemistry		Pathology		Environmental Microbiology		Environmental Chemistry		Occupational Safety/Health		Toxicology	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
No. States Reporting	49	48		43		49		49		48		30		40		12		47		42		24		36	
Total	**23,523,947**	**6,160,079**	**26.2**	**55,009**	**0.2**	**299,182**	**1.3**	**259,173**	**1.1**	**5,849,199**	**24.8**	**1,092,947**	**4.6**	**5,544,190**	**23.6**	**476,020**	**2.0**	**2,150,520**	**9.1**	**873,800**	**3.7**	**75,757**	**0.3**	**688,071**	**2.9**
Average	480,081	128,335	–	1,279	–	6,106	–	5,289	–	121,858	–	36,432	–	138,605	–	39,668	–	45,756	–	20,805	–	3,157	–	19,113	–
New England	**1,028,761**	**305,758**	**29.7**	**2,821**	**0.3**	**18,448**	**1.9**	**7,854**	**0.8**	**210,428**	**20.4**	**9,212**	**0.8**	**147,456**	**14.3**	–	–	**77,326**	**7.5**	**116,527**	**11.3**	**5,332**	**0.5**	**128,597**	**12.5**
Conn.	434,552	102,294	23.5	1,837	0.4	10,294	2.4	6,197	1.4	85,987	19.8	7,818	1.7	87,894	20.2	–	–	14,928	3.4	26,841	6.2	2,443	0.6	88,219	20.3
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	105,527	23,149	21.9	309	0.3	348	0.3	1,275	1.2	17,168	16.3	–	–	16,910	16.0	–	–	17,232	16.3	22,282	21.1	196	0.2	6,658	6.3
N.H.	62,473	34,519	55.3	84	0.1	116	0.2	193	0.3	5,845	9.4	–	–	19,099	30.6	–	–	2,085	3.3	–	–	–	–	532	0.8
R.I.	332,808	130,591	39.2	374	0.1	6,312	1.9	69	–	72,765	21.8	594	0.2	23,553	7.1	–	–	18,443	5.5	50,430	15.1	1,979	0.6	27,698	8.3
Vt.	94,401	15,205	16.1	217	0.2	2,379	2.5	120	0.1	28,664	30.4	–	–	–	–	–	–	24,638	26.1	16,974	18.0	714	0.7	5,490	5.8
Middle Atlantic	**884,394**	**246,781**	**25.1**	**1,463**	**0.1**	**1,616**	**0.2**	**13,315**	**1.3**	**225,215**	**22.8**	**110**	–	**341,604**	**34.7**	–	–	**9,282**	**0.9**	**11,286**	**1.1**	**3,167**	**0.3**	**130,555**	**13.3**
N.J.	625,528	238,788	38.2	1,233	0.2	1,258	0.2	12,325	2.0	219,678	35.1	–	–	–	–	–	–	9,158	1.5	11,272	1.8	3,160	0.5	128,656	20.6
N.Y	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pe.	358,866	7,993	2.2	230	0.1	358	0.1	990	0.3	5,537	1.5	110	–	341,604	95.2	–	–	124	–	14	–	7	–	1,899	0.5
East North Central	**2,708,007**	**361,999**	**13.4**	**7,187**	**0.3**	**18,226**	**0.7**	**55,120**	**2.0**	**567,238**	**20.9**	**52,138**	**1.8**	**1,042,335**	**38.5**	**86,373**	**3.2**	**314,169**	**11.6**	**122,784**	**4.5**	**23,210**	**0.8**	**57,228**	**2.1**
Ill.	442,619	79,073	17.9	851	0.2	2,438	0.5	15,919	3.6	78,676	17.8	–	–	200,950	45.4	–	–	38,110	8.6	9,149	2.1	–	–	17,453	3.9
Ind.	154,523	10,117	6.5	594	0.4	2,257	1.5	3,654	2.4	41,583	26.9	–	–	–	–	–	–	64,871	42.0	31,445	20.3	–	–	2	–
Mich.	821,489	168,023	20.5	1,255	0.1	5,407	0.7	6,639	0.8	237,593	28.9	12,416	1.5	255,518	31.1	–	–	102,116	12.4	32,522	3.9	–	–	–	–
Ohio	456,192	67,905	14.9	1,013	0.2	757	0.2	18,259	4.0	69,471	15.2	1,882	0.4	208,309	45.7	–	–	47,095	10.3	20,039	4.4	2,411	0.5	19,051	4.2
Wisc.	833,164	36,881	4.4	3,474	0.4	7,367	0.9	10,649	1.3	139,915	16.8	378,40	4.5	377,558	45.3	86,373	10.4	61,977	7.4	29,629	3.6	20,799	2.5	20,722	2.5
West North Central	**1,735,516**	**467,941**	**26.9**	**5,387**	**0.31**	**24,341**	**1.4**	**36,614**	**2.1**	**397,836**	**22.8**	**18,438**	**1.1**	**341,455**	**19.7**	**160**	–	**229,417**	**13.2**	**190,691**	**11.0**	**12,762**	**0.7**	**9,463**	**0.5**
Ie.	409,536	101,198	24.7	814	0.2	3,859	0.9	5,124	1.2	90,893	22.2	–	–	31,398	7.7	–	–	37,946	9.3	126,276	30.8	12,028	2.9	–	–
Kens.	292,203	60,610	20.7	1,067	0.4	8,132	2.8	1,083	0.3	77,000	26.4	–	–	67,277	23.0	–	–	55,051	18.8	17,144	5.9	704	0.2	4,135	1.4
Minn.	299,205	121,159	40.5	2,950	1.0	5,887	1.9	6,804	2.3	66,036	22.1	12,854	4.3	83,355	27.9	160	–	–	–	–	–	–	–	–	–
Mo.	482,510	124,929	25.9	359	0.1	2,885	0.6	3,647	0.7	101,308	21.0	–	–	138,382	28.7	–	–	99,871	20.7	10,641	2.2	–	–	488	0.1
Nebr	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	148,517	38,673	26.0	207	0.2	2,445	1.6	19,236	12.9	34,945	23.5	6,585	4.4	21,043	14.2	–	–	15,383	10.4	9,900	6.7	30	–	70	0.1
S.D.	103,545	21,372	20.6	–	–	1,133	1.1	720	0.7	27,654	28.7	–	–	–	–	–	–	21,166	20.4	26,730	25.8	–	–	4,770	4.6
South Atlantic	**7,321,734**	**2,022,017**	**27.6**	**11,856**	**0.2**	**132,181**	**1.8**	**37,857**	**0.5**	**2,068,150**	**28.2**	**518,901**	**7.1**	**1,320,165**	**18.0**	**344,908**	**4.7**	**502,952**	**6.8**	**141,878**	**1.9**	**14,899**	**0.2**	**205,870**	**2.8**
Del.	159,519	42,953	26.9	–	–	316	0.2	1,220	0.8	42,962	26.9	2,749	1.7	2,944	1.8	41,055	25.7	13,201	8.3	5,346	3.3	–	–	6,773	4.2
D.C.	286,467	85,941	30.0	–	–	145	–	91	–	87,282	30.5	54,424	18.9	–	–	14,573	5.1	711	0.2	1,220	0.4	–	–	42,080	14.7
Fla.	2,065,010	679,773	32.9	2,782	0.1	63,029	3.1	8,138	0.4	600,119	29.1	137,401	6.6	315,109	15.3	–	–	226,988	25.5	5,008	0.6	1,346	0.1	25,317	2.8
Ge.	891,192	255,253	28.8	893	0.1	22,888	2.6	4,252	0.5	373,771	41.9	100,232	11.2	133,792	15.0	–	–	111	–	–	–	–	–	–	–
Md.	1,387,984	430,282	31.0	2,774	0.2	10,685	0.8	7,932	0.6	370,705	26.7	81,002	5.8	225,580	16.3	63,294	4.6	83,215	6.0	50,035	3.6	4,771	0.3	57,709	4.2
N.C.	774,592	21,609	2.8	1,175	0.1	6,398	0.8	5,797	0.7	212,310	27.4	61,209	7.9	191,292	24.7	174,155	22.5	59,282	7.7	22,330	2.9	4,556	0.6	14,479	1.9
S.C.	642,685	164,525	25.7	1,767	0.3	8,310	1.3	7,603	1.2	154,144	24.0	60,971	9.5	146,891	22.9	–	–	11,579	1.8	13,031	2.0	1,857	0.3	52,007	8.1
Ve.	795,146	222,456	28.0	2,007	0.2	17,221	2.2	1,582	0.2	176,547	22.2	19,856	2.5	229,662	28.9	–	–	71,033	8.9	44,908	5.6	2,369	0.3	7,505	0.9
W Ve	319,139	99,225	31.1	458	0.1	3,189	0.9	1,342	0.4	50,310	15.8	1,057	0.3	74,895	23.5	51,831	16.2	36,832	11.5	–	–	–	–	–	–
East South Central	**2,665,890**	**891,858**	**33.5**	**8,714**	**0.3**	**32,705**	**1.2**	**8,892**	**0.4**	**757,020**	**28.4**	**150,873**	**5.7**	**473,406**	**17.7**	**18,883**	**0.7**	**256,486**	**9.6**	**59,842**	**2.2**	**2,232**	**0.1**	**3,778**	**0.2**
Ale.	997,936	342,241	34.3	4,378	0.4	12,920	1.3	3,054	0.3	249,939	25.0	64,682	8.5	198,511	19.9	18,696	1.9	102,896	10.3	619	0.1	–	–	–	–
Ky	243,557	16,713	6.9	–	–	4,454	1.8	2,279	0.9	69,805	28.7	5,964	2.4	116,854	48.0	187	0.1	12,066	4.9	9,224	3.8	2,232	0.9	3,779	1.6
Miss	702,269	225,707	32.1	2,101	0.3	9,031	1.3	661	0.1	224,718	32.0	80,227	11.4	80,412	11.4	–	–	76,521	10.9	2,891	0.4	–	–	–	–
Tenn.	722,128	307,298	42.6	2,235	0.3	6,390	0.9	3,898	0.5	212,567	29.4	–	–	77,629	10.7	–	–	65,003	9.0	47,108	6.5	–	–	–	–
West South Central	**4,711,120**	**1,181,344**	**25.3**	**11,415**	**0.2**	**32,215**	**0.7**	**42,622**	**0.8**	**1,153,100**	**24.5**	**258,386**	**5.5**	**1,260,048**	**26.7**	–	–	**597,019**	**12.7**	**89,848**	**1.9**	**2,200**	**0.1**	**72,923**	**1.5**
Ark.	448,025	116,667	26.0	2,514	0.6	1,941	0.4	2,034	0.4	107,308	23.9	24,744	5.5	76,494	17.1	–	–	81,127	18.1	22,541	5.0	–	–	12,657	2.8
La.	794,340	144,377	18.2	1,745	0.2	16,167	2.0	2,375	0.3	209,596	26.4	67,232	8.5	173,345	2.18	–	–	112,899	14.2	33,567	4.2	–	–	33,037	4.2
Okle	425,933	127,877	30.0	3,174	0.7	3,659	0.8	5,238	1.2	106,176	24.9	9,017	2.1	111,108	26.1	–	–	44,544	10.5	15,140	3.6	–	–	–	–
Tex.	3,042,822	802,423	26.4	3,982	0.1	10,448	0.3	32,975	1.1	730,022	24.0	157,393	5.2	899,101	29.5	–	–	358,449	11.8	18,600	0.6	2,200	0.1	27,229	0.9
Mountain	**1,223,469**	**365,799**	**28.8**	**3,965**	**0.3**	**10,230**	**0.8**	**28,435**	**2.4**	**206,865**	**16.9**	**14,858**	**1.2**	**302,056**	**24.7**	**24,024**	**2.0**	**128,189**	**10.6**	**61,882**	**5.1**	**2,552**	**0.2**	**72,514**	**5.8**
Ariz.	78,443	6,144	7.8	1,111	1.4	112	0.1	3,740	4.8	46,513	59.3	–	–	–	–	–	–	14,208	18.1	5,978	7.6	637	0.8	–	–
Colo.	406,623	63,244	15.8	283	0.1	2,764	0.7	843	0.1	64,035	15.7	9,392	2.3	171,403	42.2	–	–	33,989	8.4	19,070	4.7	–	–	41,800	10.3
Ide.	97,259	39,804	40.9	1,238	1.3	1,299	1.3	1,772	1.8	11,365	11.7	3,656	3.8	5,533	5.7	493	0.5	23,854	24.5	3,834	3.9	–	–	4,411	4.5
Mont.	86,033	14,937	17.4	213	0.2	1,368	1.8	651	0.7	49,267	57.3	–	–	–	–	–	–	10,059	11.7	9,103	10.6	403	0.5	32	–
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M	208,551	76,256	36.6	900	0.4	2,050	1.0	18,557	8.9	3,422	1.8	1,910	0.9	40,973	19.6	23,531	11.3	16,410	7.9	14,542	7.0	243	0.1	9,757	4.7
Utah	171,968	24,304	14.1	220	0.1	2,486	1.4	3,530	2.1	20,918	12.2	–	–	84,147	48.9	–	–	19,490	11.3	9,355	5.4	1,269	0.7	6,251	3.6
Wyo	174,592	141,110	80.8	–	–	151	0.1	542	0.3	11,347	8.5	–	–	–	–	–	–	11,179	6.4	–	–	–	–	10,263	5.9
Pacific	**1,006,152**	**300,141**	**29.8**	**2,055**	**0.2**	**21,410**	**2.1**	**19,382**	**1.8**	**261,047**	**26.0**	**2,621**	**0.3**	**280,719**	**27.8**	–	–	**34,462**	**3.4**	**60,422**	**6.8**	**9,403**	**0.9**	**6,490**	**0.7**
Alaske	155,172	89,970	58.0	323	0.2	3,278	2.1	6,906	4.4	52,472	33.8	–	–	–	–	–	–	1,626	1.0	597	0.4	–	–	–	–
Cal.	111,006	21,270	19.2	482	4.4	1,102	1.0	5,961	5.4	37,053	33.4	–	–	3,441	3.1	–	–	5,937	5.3	22,296	20.1	9,340	8.4	4,124	3.7
Hewaii	260,737	145,729	55.9	911	0.3	6,749	2.6	2,813	1.1	44,453	17.0	–	–	6,227	2.4	–	–	10,618	4.1	40,937	15.7	–	–	2,300	0.9
Ore.	282,112	7,437	2.6	180	0.1	3,379	1.2	2,621	0.9	96,112	34.1	–	–	162,896	57.7	–	–	9,487	3.4	–	–	–	–	–	–
Wash	197,125	35,735	18.1	159	0.1	6,902	3.5	1,081	0.5	30,957	15.7	2,621	1.3	108,155	54.9	–	–	6,794	3.4	4,592	2.3	63	–	66	–
Territories	**137,904**	**6,340**	**4.6**	**136**	**0.1**	**6,718**	**4.8**	**6,902**	**5.1**	**2,290**	**1.7**	**67,309**	**48.8**	**34,946**	**25.3**	**1,672**	**1.2**	**218**	**0.1**	**10,640**	**7.7**	–	–	**652**	**0.5**
Guam	35,005	6,340	18.1	136	0.4	1,639	4.7	247	0.7	2,290	6.5	15,375	44.0	7,088	20.2	1,672	4.8	218	0.6	–	–	–	–	–	–
P.R.	102,899	–	–	–	–	5,080	4.9	6,735	6.5	–	–	51,934	50.5	27,858	27.1	–	–	–	–	10,640	10.3	–	–	652	0.6
V.I	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SECTION II
PERSONNEL

Table 2-1
BUDGETED POSITIONS BY CATEGORIES AND POSITION VACANCIES

Lab & Region	Total Budgeted Positions	Management			Clerical			Prof. & Tech.			Support Ser.			Maintenance			Total Filled Positions	
		#	%	# Vac	#	%	# Vac	#	%	# Vac	#	%	# Vac	#	%	# Vac	#	%
Total	**5,603.03**	**360.6**	**6.4**	**15.5**	**727.9**	**13.0**	**48.83**	**3,613.23**	**64.5**	**183.0**	**786.3**	**14.0**	**49.25**	**115.0**	**2.1**	**3.0**	**5303.45**	**94.7**
Average	114 3	7 4	6.4	0.3	14 9	13.0	1 0	73 7	64 5	3.7	16.0	14 0	1 0	2 3	2.1	0 1	108 2	94 7
New England	**424.0**	**18.0**	**4.2**	–	**56.0**	**13.2**	**6.0**	**294.0**	**69.3**	**24.0**	**53.0**	**12.5**	**9.0**	**3.0**	**0.7**	–	**385.0**	**90.8**
Conn.	227 0	7 0	3.1	-	30 0	13.2	5 0	163 0	71 8	13 0	26 0	11 5	9 0	1 0	0 4	-	200 0	88 1
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	48 0	2 0	4 1	–	7 0	14 6	1 0	33 0	68 8	6 0	6 0	12 5	–	–	–	–	41 0	85 4
N.H	20 0	2 0	10 0	–	4 0	20 0	–	11 0	55 0	1 0	3 0	15 0	–	–	–	–	19 0	95 0
R.I.	99 0	4 0	4 0	–	10 0	10 1	–	68 0	68 7	4 0	15 0	15 2	–	2 0	2 0	–	95 0	96 0
Vt.	30 0	3 0	10 0	–	5 0	16 7	–	19 0	63 3	–	3 0	10 0	–	–	–	–	30 0	100 0
Middle Atlantic	**285.0**	**29.0**	**10.2**	**1.0**	**36.0**	**12.6**	**1.0**	**176.0**	**61.8**	**8.0**	**42.0**	**14.7**	**1.0**	**2.0**	**0.7**	–	**274.0**	**96.1**
N.J.	208.0	8.0	3.8	1 0	25.0	12.0	1 0	144 0	69.2	6.0	31 0	15.0	1 0	–	–	–	199 0	95.7
N Y	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	77 0	21.0	27.3	-	11 0	14 3	–	32.0	41 6	2.0	11 0	14.2	–	2 0	2.6	–	75.0	97 4
East North Central	**967.25**	**76.5**	**7.9**	**5.5**	**97.5**	**10.1**	**6.5**	**584.75**	**60.4**	**33.75**	**151.5**	**15.7**	**11.5**	**57.0**	**5.9**	–	**910.0**	**94.1**
Ill.	133.0	13.0	9.8	1.0	23.0	17 3	1.0	79.0	59.4	1.0	18.0	13.5	1 0	–	–	–	129.0	97 0
Ind.	86.0	6.0	7 0	–	–	–	–	67 0	77 9	5 0	12.0	14 0	1 0	1 0	1 1	–	80 0	93 0
Mich.	365.0	14.0	3.8	1 0	22.0	6.1	–	202.0	55.3	7.0	80.0	21 9	6 0	47 0	12.9	–	351 0	96.2
Ohio	168 0	7 0	4 2	–	21 0	12.5	3 0	109.0	64 9	6.0	22 0	13.0	–	9 0	5.4	–	159 0	94 6
Wisc.	215 25	36.5	17 0	3.5	31 5	14 6	2.5	127 75	59 3	14 75	19 5	9 1	3.5	–	–	–	191.0	88.7
West North Central	**408.1**	**43.0**	**10.5**	**3.0**	**58.0**	**14.2**	**2.0**	**248.1**	**60.8**	**11.0**	**57.0**	**14.0**	**5.0**	**2.0**	**0.5**	–	**387.1**	**94.9**
Ia	123 0	10.0	8.1	1 0	18 0	14 7	2 0	78 0	63.4	7 0	16.0	13.0	3 0	1 0	0 8	-	110 0	89 4
Kans.	77 0	11 0	14 3	2.0	8.0	10 4	–	49 0	63.6	1 0	9 0	11 7	–	–	–	–	74 0	96 1
Minn.	65.0	9.0	13.9	-	11 0	16 9	–	34 0	52 3	–	11 0	16 9	–	–	–	–	65 0	100.0
Mo	74 0	5.0	6.8	–	12 0	16.2	–	47 0	63.5	2.0	9.0	12.2	–	1 0	1 3	–	72.0	97 3
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	33.0	4 0	12.1	–	6.0	18.2	–	18.0	54.5	–	5.0	15 2	–	–	–	–	33.0	100.0
S.D.	36 1	4 0	11.1	-	3 0	1 0	–	22.1	61 2	1 0	7 0	19.4	2.0	–	–	–	33.1	91 7
South Atlantic	**1420.0**	**65.0**	**4.6**	**2.0**	**201.0**	**14.1**	**9.0**	**965.0**	**68.0**	**43.5**	**172.0**	**12.1**	**8.0**	**17.0**	**1.2**	**1.0**	**1356.5**	**95.5**
Del.	36.0	1.0	2.8	–	4 0	11.1	–	26.0	72.2	2.0	5.0	13.9	–	–	–	–	34 0	94 4
D.C.	36 0	2.0	5.6	–	3 0	8.3	–	29.0	80.5	5.0	2.0	5.6	–	–	–	–	31 0	86.1
Fla.	277.0	17 0	6.1	1 0	44 0	15.9	1 0	179.0	64 6	12.0	36.0	13.0	5.0	1 0	0.4	–	258.0	93.1
Ga.	126.0	8 0	6.3	–	21 0	16.7	1.0	63.0	50 0	3.0	33.0	26.2	–	1 0	0.8	–	122.0	96 8
Md.	267 0	4 0	1 5	–	37 0	13 9	1 0	189 0	70.7	3 0	33 0	12.4	2.0	4.0	1.5	-	261.0	97 7
N.C.	165.0	9.0	5.5	–	23.0	14 0	3.0	107.0	64 8	3.5	24 0	14.5	1 0	2.0	1 2	–	157 5	95.4
S.C.	110.0	8.0	7.3	1 0	13.0	11 8	–	78.0	70 9	1 0	8 0	7 3	-	3.0	2.7	1 0	107.0	97.3
Va.	346.0	14 0	4.0	–	47 0	13 6	3.0	259.0	75 0	13.0	24 0	6.9	–	2.0	0 6	–	330.0	95.4
W Va	57 0	2.0	3.5	-	9 0	15.8	–	35.0	61 4	1 0	7 0	12.3	–	4 0	7 0	–	56.0	98.2
East South Central	**424.5**	**18.0**	**4.2**	**1.0**	**53.0**	**12.5**	**1.0**	**267.0**	**62.9**	**5.0**	**76.5**	**18.0**	**2.0**	**10.0**	**1.8**	–	**415.5**	**97.9**
Ala.	140.0	6.0	4 3	·	21 0	15.0	–	101 0	72 1	–	4 0	2.9	-	8 0	5.7	–	140.0	100.0
Ky	65 5	5.0	7 6	1 0	6 0	9 2	1 0	41 0	62 6	1 0	12 5	19 1	–	1 0	1 5	–	62 5	95 4
Miss	54 0	2.0	3 7	–	8 0	14 8	-	32.0	59 3	1.0	12 0	22.2	2.0	–	–	–	51 0	94 4
Tenn.	165 0	5.0	3.0	–	18.0	10 9	-	93.0	56.4	3 0	48 0	29 1	-	1 0	0 6	–	162.0	98 2
West South Central	**494.0**	**38.0**	**7.7**	**1.0**	**69.0**	**14.0**	**7.0**	**317.0**	**64.2**	**10.0**	**61.0**	**12.3**	**3.0**	**9.0**	**1.8**	–	**473.0**	**95.7**
Ark.	77.0	4.0	5.2	–	9 0	11 7	-	54 0	70 1	-	10 0	13 0	-	–	–	–	77 0	100 0
La.	170.0	14 0	8.2	–	26.0	15.3	1 0	92.0	54 1	4.0	30.0	17 7	1 0	8 0	4 7	–	164 0	96 5
Okla.	51 0	5.0	9.8	–	4 0	7 8	–	39.0	76.5	-	3.0	5.9	–	–	–	–	51.0	100.0
Tex.	196.0	15 0	7 6	1 0	30.0	15.3	6.0	132.0	67 4	6.0	18.0	9 2	2.0	1 0	0.5	–	181.0	92.3
Mountain	**399.4**	**33.1**	**8.3**	–	**55.07**	**13.8**	**2.0**	**259.23**	**64.9**	**5.0**	**43.0**	**10.8**	**2.0**	**9.0**	**2.2**	–	**390.4**	**97.7**
Anz.	65.0	6.0	9 2	–	10.0	15.4	1.0	40.0	61.5	–	7.0	10.8	1 0	2.0	3.1	–	63.0	96.9
Colo.	69.0	3.0	4.3	–	10.0	14.5	–	48.0	69.6	–	8.0	11 6	–	–	–	–	69.0	100
Ida.	72.9	6.1	8.3	–	12.07	16.6	–	46.73	64.1	1.0	2.0	2.7	–	6.0	8.2	–	71.9	98.6
Mont.	19.0	3.0	15.8	–	2.0	10.5	–	12.0	63.2	–	2.0	10.5	–	–	–	–	19.0	100.0
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	90.0	7.0	7.8	–	10.0	11.1	1.0	56.0	62.2	2.0	16.0	17 8	1.0	1 0	1.1	–	86.0	95.5
Utah	66.5	7 0	10 5	–	9.0	13.5	–	45.5	68.4	–	5.0	7 6	–	–	–	–	66.5	100.0
Wyo.	17.0	1 0	5.9	–	2.0	11.8	–	11.0	64.7	2.0	3.0	17 6	–	–	–	–	15.0	88.2
Pacific	**635.78**	**34.0**	**5.3**	**2.0**	**87.33**	**13.7**	**7.33**	**393.15**	**61.8**	**7.75**	**120.3**	**18.9**	**3.75**	**1.0**	**0.2**	–	**615.78**	**96.9**
Alaska	41.0	5.0	12.2	-	8.0	19.5	–	24 0	58.5	–	4.0	9.8	–	–	–	–	41 0	100.0
Cal.	414.45	13.0	3.2	1.0	53.0	12.8	5.0	267.9	64 6	4.0	80.55	19.4	2.0	–	–	–	402.45	97 1
Hawaii	56.5	1.0	1 8	–	4.0	7.1	1.0	39.5	69.9	2.0	12.0	21.2	1.0	–	–	–	52.5	92.9
Ore.	47 83	3.0	6.3	1 0	9.33	19.5	1.33	29.75	62.2	1.75	5.75	12.0	.75	–	–	–	43.83	91.6
Wash.	76.0	12.0	15.8	–	13.0	17.1	–	32.0	42.1	–	18.0	23.7	–	1.0	1.3	–	76.0	100.0
Territories	**145.0**	**6.0**	**4.1**	–	**15.0**	**10.3**	**7.0**	**109.0**	**75.2**	**35.0**	**10.0**	**6.9**	**4.0**	**5.0**	**2.6**	**2.0**	**97.0**	**66.9**
Guam	12.0	3.0	25.0	–	1.0	8.3	–	8.0	66.7	1.0	–	–	–	–	–	–	11.0	91.6
P.R.	133.0	3.0	2.3	–	14 0	10 5	7.0	101.0	75.9	34.0	10.0	7.5	4.0	5.0	3.8	2.0	86.0	64 7
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

DEFINITIONS

1. **Management:** Include laboratory directors and assistant directors, lab supervisors, business managers, management officers and administrative officers who spend more than 50% of their time on administration and management of laboratory activities.

2. **Clerical:** Include secretaries, typists and clerks in the office of the director, office services staff, budget and fiscal clerks and others. Do not include those covered in supportive services categories.

3. **Professional and Technical:** Those primarily engaged in examining and testing specimens and samples, or in a laboratory improvement program; including bacteriologists, chemists, microbiologists, medical technicians and technologists, and those laboratory assistants and laboratory helpers who contribute directly to the performance of laboratory tests or work in laboratory improvement programs.

4. **Supportive Services:** All those except maintenance personnel not included in the first three categories. Examples are those engaged in preparation of glassware, media, shipping containers, animal handling work, messengers, and supply and procurement personnel.

5. **Maintenance:** Include those who install, repair, or perform preventive maintenance on equipment and maintenance of buildings including housekeeping.

Table 2-2
TURNOVER

Lab & Region	Total Filled Pos.	Total # Resig & Sep.	% Turnover Filled Pos.	Number of Resignations & Separations by Categories						
				Management	Clerical	Prof & Tech Positions			Supportive Services	Maintenance
						# Budgeted Pos.	Resig & Sep.	% Turnover		
TOTAL	**5303.45**	**560.1**	**10.6**	**26.6**	**109.5**	**3,613.23**	**315.1**	**8.7**	**97.9**	**11.0**
AVERAGE	108.2	11.4	10.6	0.5	2.2	73.7	6.4	8.7	2.0	0.2
New England	**385.0**	**38.0**	**9.9**	**2.0**	**9.0**	**294.0**	**19.0**	**6.5**	**8.0**	–
Conn.	200.0	18.0	9.0	–	6.0	163.0	7.0	4.3	5.0	–
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	41.0	3.0	7.3	1.0	–	33.0	2.0	6.1	–	–
N.H.	19.0	5.0	26.3	–	2.0	11.0	2.0	18.2	1.0	–
R.I.	95.0	8.0	8.4	1.0	–	68.0	5.0	7.3	2.0	–
Vt.	30.0	4.0	13.3	–	1.0	19.0	3.0	15.8	–	–
Middle Atlantic	**274.0**	**34.0**	**12.4**	**–**	**7.0**	**176.0**	**13.0**	**7.4**	**13.0**	**1.0**
N.J.	199.0	19.0	9.5	–	3.0	144.0	8.0	5.6	8.0	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	75.0	15.0	20.0	–	4.0	32.0	5.0	15.6	5.0	1.0
East North Central	**910.0**	**99.0**	**10.9**	**6.5**	**10.5**	**584.75**	**61.5**	**10.5**	**17.5**	**3.0**
Ill.	129.0	11.0	8.5	3.0	2.0	79.0	5.0	6.3	1.0	–
Ind.	80.0	7.0	8.8	–	–	67.0	6.0	8.95	1.0	–
Mich.	351.0	30.0	8.5	1.0	–	202.0	16.0	7.9	10.0	3.0
Ohio	159.0	28.0	17.6	1.0	3.0	109.0	22.0	20.1	2.0	–
Wisc.	191.0	23.0	12.0	1.5	5.5	127.75	12.5	9.8	3.5	–
West North Cental	**387.1**	**41.0**	**10.6**	**2.0**	**8.0**	**248.1**	**24.0**	**9.7**	**7.0**	–
Ia.	110.0	20.0	18.2	1.0	4.0	78.0	12.0	15.4	3.0	–
Kans.	74.0	9.0	12.2	1.0	1.0	49.0	6.0	12.2	1.0	–
Minn.	65.0	3.0	4.6	–	1.0	34.0	2.0	5.9	–	–
Mo.	72.0	5.0	6.9	–	1.0	47.0	4.0	8.5	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	33.0	–	–	–	–	18.0	–	–	–	–
S.D.	33.1	4.0	12.1	–	1.0	22.1	–	–	3.0	–
South Atlantic	**1356.5**	**130.5**	**9.6**	**3.0**	**22.0**	**965.0**	**88.5**	**9.2**	**16.0**	**1.0**
Del.	34.0	1.0	2.9	–	–	26.0	1.0	3.8	–	–
D.C.	31.0	5.0	16.1	–	–	29.0	5.0	17.2	–	–
Fla.	258.0	38.0	14.7	1.0	7.0	179.0	21.0	11.7	9.0	–
Ga.	122.0	12.0	9.8	1.0	4.0	63.0	6.0	9.5	1.0	–
Md.	261.0	10.0	3.8	–	1.0	189.0	6.0	3.2	3.0	–
N.C.	157.5	19.5	12.4	–	3.0	107.0	13.5	12.6	3.0	–
S.C.	107.0	15.0	14.0	1.0	1.0	78.0	12.0	15.3	–	1.0
Va.	330.0	22.0	6.6	–	5.0	259.0	17.0	6.6	–	–
W Va.	56.0	8.0	14.3	–	1.0	35.0	7.0	20.0	–	–
East South Central	**415.5**	**29.0**	**7.0**	**2.0**	**8.0**	**267.0**	**15.0**	**5.6**	**4.0**	–
Ala.	140.0	3.0	2.14	–	–	101.0	3.0	2.3	–	–
Ky.	62.5	6.0	9.6	2.0	2.0	41.0	2.0	4.9	–	–
Miss.	51.0	–	–	–	–	32.0	–	–	–	–
Tenn.	162.0	20.0	12.3	–	6.0	93.0	10.0	10.7	4.0	–
West South Central	**473.0**	**70.0**	**14.8**	**2.0**	**20.0**	**317.0**	**31.0**	**9.8**	**14.0**	**3.0**
Ark	77.0	2.0	2.6	–	–	54.0	2.0	3.7	–	–
La.	164.0	35.0	21.3	–	9.0	92.0	12.0	13.0	11.0	3.0
Okla.	51.0	7.0	13.7	–	1.0	39.0	5.0	12.8	1.0	–
Tex.	181.0	26.0	14.4	2.0	10.0	132.0	12.0	9.0	2.0	–
Mountain	**390.4**	**56.1**	**14.4**	**3.1**	**10.0**	**259.23**	**34.0**	**13.1**	**6.0**	**3.0**
Anz.	63.0	8.0	12.7	–	1.0	40.0	4.0	10.0	3.0	–
Colo.	69.0	9.0	13.0	–	4.0	48.0	5.0	10.4	–	–
Ida.	71.9	12.1	16.8	1.1	2.0	46.73	6.0	12.8	–	3.0
Mont.	19.0	2.0	10.5	1.0	–	12.0	–	–	1.0	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	86.0	9.0	10.4	1.0	1.0	56.0	6.0	10.7	1.0	–
Utah	66.5	13.0	19.5	–	1.0	45.5	12.0	26.3	–	–
Wyo.	15.0	3.0	20.0	–	1.0	11.0	1.0	9.1	1.0	–
Pacific	**615.78**	**62.5**	**10.1**	**6.0**	**15.0**	**393.15**	**29.1**	**7.4**	**12.4**	–
Alaska	41.0	15.0	36.6	1.0	5.0	24.0	6.0	25.0	3.0	–
Cal.	402.45	19.1	4.7	1.0	5.0	267.9	7.1	2.6	6.0	–
Hawaii	52.5	8.0	15.2	–	2.0	39.5	4.0	10.1	2.0	–
Ore.	43.83	20.4	46.5	4.0	3.0	29.75	12.0	40.3	1.4	–
Wash.	76.0	–	–	–	–	32.0	–	–	–	–
Territories	**97.0**	–	–	–	–	**109.0**	–	–	–	–
Guam	11.0	–	–	–	–	8.0	–	–	–	–
P.R.	86.0	–	–	–	–	101.0	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–

Lab & Region	I Diagnostic Bact.		II Mycology		V gic, ent, Prod.	XV Research and Develop.		Total Prof. and Tech. Pos. Reported in Workload Categories	Total Changes Reported
New England									
Conn.	18.0	–	1.0	–	–	–	–	163.0	–
Mass.	–	–	–	–	–	–	–	–	–
Me.	7.0	–	I		−1.0	–	−1.0	33.0	−1.0
N.H.	4.2	–	0.2	–	–	–	–	11.0	–
R.I.	6.0	–	0.5	–	–	–	–	68.0	−5.0
Vt.	5.25	+1.0	0.25	−0.25	–	–	–	19.0	–
Middle Atlantic									
N.J.	23.0	+3.0	2.0	–	–	4.0	–	150.0	+1.0
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	8.0	−2.0	I		–	–	–	32.0	–
East North Central									
Ill.	17.0	−4.0	1.0	–	−1.0	–	–	79.0	−16.0
Ind.	12.0	–	2.0	–	–	–	–	67.0	–
Mich.	35.5	−5.0	1.0	–	+1.0	42.0	−7.0	202.0	−21.0
Ohio	45.0	–	I		–	–	–	109.0	−1.0
Wisc.	8.0	−3.0	2.0	–	−0.5	–	–	127.75	+29.25
West North Central									
Ia.	8.55	−0.95	1.45	−0.05	−3.0	0.95	+0.95	78.0	–
Kans.	11.0	–	1.0	–	–	–	–	49.0	−3.0
Minn.	9.0	+0.75	1.0	–	–	–	–	34.0	−3.0
Mo.	8.0	–	0.5	–	−1.0	–	–	47.0	−1.0
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	II		9.0	–	–	3.7	–	33.0	–
S.D.	1.4	–	0.1	–	–	–	–	17.5	+1.5
South Atlantic									
Del.	4.3	–	0.05	–	–	–	–	22.7	–
D.C.	–	–	–	–	–	–	–	29.0	–
Fla.	–	–	–	–	–	–	–	179.0	–
Ga.	23.75	+0.5	1.5	–	–	–	–	63.0	+1.0
Md.	40.0	–	1.0	–	–	–	–	189.0	+2.0
N.C.	8.25	–	1.5	+0.25	–	1.0	–	107.0	+2.0
S.C.	18.7	–	3.0	–	–	–	–	78.0	–
Va.	22.0	−4.0	I		–	159.0	–	259.0	−28.0
W.Va.	II		8.0	−1.0	–	–	–	35.0	–
East South Central									
Ala.	25.0	+1.0	2.0	–	+4.0	1.0	–	101.0	+3.0
Ky.	4.0	–	–	−0.5	–	–	–	41.0	−7.5
Miss.	–	–	–	–	–	–	–	–	–
Tenn.	40.0	–	1.0	–	–	–	–	93.0	–
West South Central									
Ark.	13.0	–	1.0	–	–	–	–	57.0	–
La.	11.0	+2.0	1.0	–	–	3.0	−3.0	92.0	+1.0
Okla.	8.0	–	I		−2.0	–	–	27.0	−5.0
Tex.	12.0	−6.0	3.0	+1.0	+7.0	–	–	132.0	+7.0
Mountain									
Ariz.	4.0	–	2.0	–	–	1.0	–	45.0	−2.0
Colo.	4.0	−2.0	0.5	+0.5	–	–	–	48.0	−2.0
Ida.	14.45	+4.0	0.25	–	+1.0	–	–	46.73	+9.0
Mont.	II	−1.53	2.45	–	–	–	–	12.0	−7.0
Nev.	–	–	–	–	–	–	–	–	–
N.M.	9.4	+1.4	0.7	−2.3	–	–	–	56.0	+0.5
Utah	4.0	–	1.0	–	–	–	–	45.5	−5.5
Wyo.	3.5	−1.0	I		–	–	–	11.0	+1.0
Pacific									
Alaska	13.0	−1.16	0.12	–	–	–	–	24.0	–
Cal.	18.5	+3.0	5.5	−3.0	–	14.5	+4.5	267.9	−10.1
Hawaii	14.5	–	0.5	–	–	–	–	39.5	–
Ore.	–	–	7.75	−7.0	–	–	–	29.75	−14.0
Wash.	8.0	–	1.0	–	–	–	–	32.0	−4.0
Territories									
Guam	3.0	–	–	–	–	–	–	8.0	–
P.R.	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 2-3
STAFFING PATTERN OF PROFESSIONAL AND TECHNICAL PERSONNEL IN THE 15 WORKLOAD REPORTING CATEGORIES AND POSITION CHANGES SINCE LAST REPORTING PERIOD (+ OR −)

Lab & Region	WORKLOAD REPORTING CATEGORIES															Total Prof and Tech. Pos Reported in Workload Categories	Total Changes Reported
	I Diagnostic Bact.	II Mycology	III Parasitology	IV Virology	V Immunology	VI Hematology	VII Clinical Chemistry	VIII Pathology	IX Env Micro.	X Env Chem.	XI Occup. Safety & Health	XII Toxicology	XIII Lab Improve Program	XIV Biologic, Reagent, Media Prod.	XV Research and Develop		
New England																	
Conn.	18.0	1.0 −	4.0 −		15.0 −1.0	2.0 1.0	17.0	−1.0	8.0 −	46.0 +5.0	2.0 −	28.0 +1.0	10.0 3.0	8.0 −	− −	163.0	
Mass.	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	−	
Me	7.0 I	I	I	4.0 −	IV	− −	−	−	10.0 +1.0	IX	10.0 −	XI	2.0	− −1.0	1.0	33.0	1.0
N.H.	4.2	0.2	0.1		1.0	−	1.5		−	−	3.0 −	1.0		−	−	11.0	
R.I.	8.0 −	0.5	1.0	0.5	4.0		4.0		8.0	26.0 5.0	1.0	15.0 −	2.0	−	−	68.0	5.0
Vt	5.25 +1.0	0.25 0.25	1.5 +0.25	0.5	3.4 1.0		−		1.5	2.5 +1.0	2.0	1.0 1.0	0.1 1.0	1.0 −	−	19.0	
Middle Atlantic																	
N.J	23.0 +3.0	2.0 −	1.0 −	19.0 −2.0	9.0 −	− −	10.0 −	− −	7.0	45.0	5.0	10.0 −	15.0 −		4.0 −	150.0	+1.0
N.Y	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Pa.	8.0 2.0	I	I	7.0 −	IV	VII	4.0 2.0	− −	−	−	1.0 +1.0	4.0 1.0	8.0 −1.0	−	−	32.0	
East North Central																	
Ill.	17.0 4.0	1.0	1.0	6.0	5.0 −1.0	− −	6.0 6.0		9.0 2.0	14.0 +1.0		10.0 1.0	8.0 −2.0	2.0 1.0	− −	79.0	16.0
Ind	12.0	2.0 −	2.0	4.0 −	5.0 −	− −	− −	− −	11.0 −	26.0 −	− −	− −	2.0	3.0	−	67.0	
Mich	35.5 −5.0	1.0 −	1.0	17.0 −1.0	12.0	2.5 −	8.0 −1.0	− −	4.5 1.0	10.5 3.0			6.0 −4.0	62.0 +1.0	42.0 7.0	202.0	21.0
Ohio	45.0 − I	I	I	I	I	I	11.0 −		5.0	35.0		4.0 1.0	8.0	1.0		109.0	1.0
Wisc	8.0 3.0	2.0 −	3.0 +3.0	15.0 +2.0	11.0 +1.0	− −	19.0 +2.5	16.0 +1.5	3.0	26.25 +10.25	12.0 +12.0	5.0 +1.0	3.5 0.5	4.0 0.5		127.75	+29.25
West North Central																	
Ia	8.55 0.95	1.45 0.05	0.95 +0.45	9.0 +1.0	4.15 0.85		5.35 +0.85	− −	5.95 +1.95	32.75 +0.25	5.5 −	0.5	2.9 0.60	− 3.0	0.95 +0.95	78.0	
Kans	11.0	1.0	3.0	4.0 −	2.0 1.0		2.0 −		4.0 −	13.0 +1.0	3.0 −2.0	4.0 −2.0	4.0 2.0			49.0	3.0
Minn	9.0 +0.75	1.0	1.0 0.75	4.0 1.0	8.0 1.0	−	4.0 −	1.0 −					3.0 1.0	3.0 −	− −	34.0	3.0
Mo.	8.0	0.5	1.5 +0.5	5.5	7.0		5.0 +3.0	−	6.5 −2.5	5.0 −1.0	−		6.0	2.0 −1.0		47.0	1.0
Nebr	− −	− −	− −	− −	− −	−	− −	−	− −	− −	− −	− −	− −	− −	− −	−	
N.D.	II	9.0	II	1.0 −	4.5	0.5	1.0	−	4.0 −	6.8 −	0.1 −	0.1 −	1.0	1.3	3.7 −	33.0	
S.D.	1.4	0.1	1.0 +0.5	2.0 1.0	1.0	− −	− −	− −	3.0	5.0	− −	3.0 +3.0	0.5 1.0	0.5		17.5	+1.5
South Atlantic																	
Del.	4.3	0.05 −	0.4 −	3.95 −	0.65 −	0.7 −	0.4 −	5.0 −	2.85 −	2.79 −	0.01 −	1.15	0.45 −	− −	− −	22.7	−
D.C.	−	−	7.0	−	−	9.0 −	− −	4.0	1.0	1.0	− −	4.0	1.0	2.0	−	29.0	
Fla	− −	− −	− −	− −	−	−	− −	− −	− −	− −	− −	−	−	−	−	179.0	
Ga	23.75 +0.5	1.5	4.25 −	5.25	11.75 0.5	5.5 −	8.0 +1.0	− −	−	−	−			3.0	−	63.0	+1.0
Md	40.0	1.0	1.0	5.0	28.0 −	8.0 −	19.0 −	14.0	21.0 −	42.0 +2.0	7.0 −	1.0	2.0		−	189.0	+2.0
N.C.	8.25	1.5 +0.25	1.75 −0.25	7.5 −	11.5	4.0 −	10.0 −1.0	21.0 −	7.5	16.0 −	8.0 +3.0	1.0	8.0		1.0	107.0	+2.0
S.C.	18.7	3.0	1.0	5.6 −	10.8 −	15.7 −	VI	− −	9.0	IX	3.0 −	6.2 −	2.0 −	3.0	−	78.0	
Va	22.0 4.0	I	I	21.0 −1.0	IV	− −	6.0 −	−	13.0 −	30.0 −17.0	−	4.0 6.0	4.0		159.0	259.0	28.0
W.Va.	II	8.0 −1.0	II	2.0	3.0 −	− −	5.0 −	4.0	9.0	−	− −	−	3.0	1.0	−	35.0	
East South Central																	
Ala	25.0 +1.0	2.0	3.0 +1.0	5.0	15.0 −	2.0 −1.0	7.0 −	2.0 −	15.0 −2.0	− −	− −	−	2.0	22.0 +4.0	1.0	101.0	+3.0
Ky.	4.0	0.5	0.5 −	2.0 +0.5	6.5 2.0	1.5 −0.5	11.0 −2.0	− −	2.5 −0.5	2.0 +1.0	3.5 −3.0	4.5 +0.5	3.0 1.0			41.0	7.5
Miss	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	−	
Tenn.	40.0	1.0	1.0	4.0	3.0 −	− −	3.0 −	− −	6.0 −	28.0 −	− −		6.0	1.0		93.0	
West South Central																	
Ark	13.0 −	1.0 −	1.0 −	1.0 −	5.0 −	1.0 −	6.0 −	− −	8.0	17.0 −		2.0 −	2.0		− −	57.0	
La	11.0 +2.0	1.0 −	1.0 −	2.0	10.0 −	1.0 −	5.0 −	− −	12.0 +3.0	16.0 −1.0	− −	1.0 −	1.0		3.0 −3.0	92.0	+1.0
Okla.	8.0 I	I	I	4.0	4.0 −	3.0 −	4.0 −	− −	− −3.0	− −			−	4.0 2.0		27.0	5.0
Tex	12.0 −6.0	3.0 +1.0	7.0	14.0 +4.0	16.0 +5.0	2.0 −1.0	15.0 +1.0	− −	11.0 +6.0	35.0 +6.0	2.0 −5.0	2.0 11.0	2.0 −4.0	11.0 +7.0		132.0	+7.0
Mountain																	
Ariz	4.0	2.0	3.0 −	1.0	4.0 −	1.0 −	− −	− −	5.0 −	12.0 3.0	2.0 +1.0	− −	5.0 −	5.0 −	1.0	45.0	2.0
Colo	4.0 2.0	0.5 +0.5	1.0	2.0	2.0 −	− −	8.0 −	− −	5.5 +0.5	18.0 −1.0	− −	5.0 −	1.0	1.0		48.0	2.0
Ida.	14.45 +4.0	0.25 −	0.5 −	3.0 +1.0	− −	−	−	3.0 −	1.0 −	8.0		9.53 +1.0	5.0 +2.0	2.0 +1.0		46.73	+9.0
Mont	II 1.53	2.45 −	II	2.95 −1.01	IV	− −	−	− −	1.4 −1.0	4.45 −3.0	0.5	− −	0.25 0.46			12.0	7.0
Nev	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	−	
N.M.	9.4 +1.4	0.7 −2.3		4.0 −	5.0 −0.25	V	4.0 −	2.6 +0.6	5.0 −0.25	17.8 +2.8	X	6.0 −2.0	1.5 +0.5	− −	− −	56.0	+0.5
Utah	4.0 −	1.0	0.5 −0.5	3.0 −	3.0 −	− −	4.0 −	− −	1.0 −	18.0 3.0	1.0 −	6.0 −	4.0 −2.0	−	−	45.5	5.5
Wyo	3.5 −1.0	I	I		1.0	− −	− −	− −	0.5 −	− −	− −	5.0 +2.0	1.0			11.0	+1.0
Pacific																	
Alaska	13.0 1.16	0.12 −	1.88 +0.08	4.26 −0.1	1.87 +0.27		− −	− −	0.76 −0.04	0.66 −0.08	− −		1.45 +1.03	− −	− −	24.0	
Cal.	18.5 +3.0	5.5 3.0	3.0 −	37.4 0.6	17.0 −1.0	− −	25.0 −	− −	5.0 −	87.0 1.0	36.0 −	− 1.0	19.0 −11.0	− −	14.5 +4.5	267.9	−10.1
Hawaii	14.5 −	0.5	2.0 +1.0	2.0	2.0 −1.0	− −	0.5 −	− −	4.0 −	13.0 −	− −	0.5 −	0.5 −	− −	− −	39.5	
Ore	−	7.75 −7.0	− −	2.0 −3.0	8.0 −2.0	− −	7.0 −	− −	2.0 1.0	− −	− −	− −	3.0 −1.0	− −	− −	29.75	−14.0
Wash.	8.0	1.0 −	1.0 −	2.0 −	1.0 −	− −	3.0 −	− −	2.0 −	7.0 −4.0	− −	− −	7.0 −	− −	− −	32.0	−4.0
Territories																	
Guam	3.0	−	1.0 −	−	1.0 −	2.0 −	1.0 −	− −	− −	− −	− −	− −	− −	− −	− −	8.0	−
P.R.	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	−	−
V.I.	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	− −	−	−

SECTION III
FINANCE

Table 3-1
LABORATORY EXPENDITURES BY CATEGORY

Lab & Region	Total Laboratory Expenditures	EXPENDITURE CATEGORY											
		Personnel			Supplies & Materials		Equipment		General Operating Exp.		Other		
		Salaries	Benefits	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.
Total	**160,704,450**	**93,998,762**	**19,485,052**	**70.6**	**18,568,356**	**11.6**	**8,090,462**	**5.0**	**13,440,466**	**8.4**	**7,121,352**	**4.4**
Average	3,279,683	1,918,342	397,654	–	378,946	–	165,111	–	274,295	–	145,334	–
New England	**10,774,884**	**6,973,301**	**1,878,706**	**82.1**	**958,247**	**8.9**	**415,902**	**3.9**	**393,526**	**3.7**	**155,202**	**1.4**
Conn.	5,595,953	3,581,402	1,224,750	85.9	428,453	7.7	251,382	4.5	34,333	0.6	75,633	1.4
Mass.	–	–	–	–	–	–	–	–	–	–	–	–
Me.	1,124,027	720,634	129,967	75.7	123,905	11.0	13,885	1.2	71,979	6.4	63,657	5.7
N.H.	637,318	364,798	47,492	64.7	39,941	6.3	5,215	0.8	178,141	28.0	1,731	0.3
R.I.	2,773,711	1,846,752	387,819	80.6	287,373	10.4	142,471	5.1	103,096	3.7	6,200	0.2
Vt.	643,875	459,715	88,678	85.2	78,575	12.2	2,949	0.4	5,977	0.9	7,981	1.2
Middle Atlantic	**8,402,853**	**4,891,796**	**1,029,720**	**70.5**	**722,140**	**8.6**	**496,263**	**5.9**	**653,772**	**7.8**	**609,162**	**7.2**
N.J.	5,602,853	3,266,796	568,720	68.5	578,140	10.3	432,263	7.7	161,772	2.9	595,162	10.4
N.Y.	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	2,800,000	1,625,000	461,000	74.5	144,000	5.1	64,000	2.3	492,000	17.6	14,000	0.5
East North Central	**29,990,297**	**18,159,574**	**3,884,801**	**73.5**	**2,833,256**	**9.4**	**1,535,807**	**5.1**	**2,892,325**	**9.6**	**684,534**	**2.3**
Ill.	3,470,300	2,379,700	215,700	74.8	524,480	15.1	119,403	3.4	168,369	4.9	62,648	1.8
Ind.	2,101,442	1,523,187	288,034	86.2	–	–	–	–	288,295	13.7	1,926	0.1
Mich.	12,961,994	7,915,863	2,052,444	76.9	878,026	6.8	309,668	2.4	1,708,180	13.2	97,813	0.7
Ohio	4,748,594	2,431,436	493,653	61.6	334,774	7.0	512,310	10.8	573,435	12.1	402,986	8.5
Wisc.	6,707,967	3,909,388	834,970	70.7	1,095,976	16.3	594,426	8.9	154,046	2.3	119,161	1.8
West North Central	**10,811,880**	**6,458,988**	**1,181,783**	**70.7**	**1,414,457**	**13.1**	**686,441**	**6.3**	**886,037**	**8.2**	**184,174**	**1.7**
Ia.	3,470,530	2,051,779	428,237	71.5	324,697	9.4	162,092	4.7	401,507	11.6	102,218	2.9
Kans.	1,787,317	1,206,821	190,833	78.2	176,199	9.9	73,576	4.1	117,219	6.6	22,669	1.3
Minn.	1,782,477	1,133,529	318,801	81.5	217,280	12.2	14,885	0.8	90,940	5.1	7,042	0.4
Mo.	1,731,103	1,037,395	78,774	64.5	418,701	24.2	59,943	3.5	112,982	6.5	23,308	1.3
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	1,208,387	531,238	91,111	51.5	142,145	11.8	295,606	24.5	138,000	11.4	10,287	0.8
S.D.	832,066	498,226	74,027	68.8	135,435	16.3	80,339	9.7	25,389	3.1	18,650	2.2
South Atlantic	**34,976,824**	**22,136,286**	**3,243,448**	**72.6**	**4,896,103**	**14.0**	**1,531,153**	**4.4**	**2,662,520**	**7.6**	**507,314**	**1.4**
Del.	771,234	501,326	105,415	78.7	77,914	10.1	65,155	8.4	15,903	2.1	5,521	0.7
D.C.	1,155,433	806,548	155,485	83.3	154,000	13.3	39,400	3.4	–	–	–	–
Fla.	6,629,988	3,837,383	730,929	68.9	951,590	14.4	390,692	5.9	519,766	7.8	199,628	3.0
Ga.	3,307,733	2,057,618	527,951	16.0	570,930	17.3	43,950	1.3	11,950	0.4	95,334	2.9
Md.	5,403,816	3,988,056	–	73.8	933,486	17.3	105,163	1.9	364,947	6.8	12,164	0.2
N.C.	3,848,502	2,455,057	472,549	76.1	591,086	15.4	114,816	3.0	108,240	2.8	106,754	2.8
S.C.	3,496,423	1,653,330	290,776	55.6	501,078	14.3	179,785	5.1	824,371	23.6	47,083	1.3
Va.	9,193,327	6,112,934	923,943	76.5	897,909	9.8	519,867	5.7	728,241	7.9	10,433	0.1
W.Va	1,170,368	724,034	36,400	65.0	218,110	18.6	72,325	6.2	89,102	7.6	30,397	2.6
East South Central	**9,595,445**	**5,919,174**	**1,194,514**	**74.1**	**1,283,242**	**13.4**	**341,706**	**3.6**	**683,706**	**7.1**	**173,103**	**1.8**
Ala.	3,868,334	2,393,632	505,056	75.0	438,868	11.3	149,994	3.9	364,641	9.4	16,143	0.4
Ky.	1,947,992	1,163,392	198,402	70.0	354,705	18.2	133,114	6.8	18,123	0.9	80,256	4.1
Miss.	1,258,822	738,763	147,753	70.4	202,643	16.1	58,179	4.6	108,373	8.6	3,111	0.2
Tenn.	2,520,297	1,623,387	343,303	78.0	287,026	11.4	419	–	192,569	7.6	73,593	2.9
West South Central	**14,411,023**	**8,097,907**	**1,585,298**	**67.2**	**2,006,113**	**13.9**	**906,568**	**6.3**	**1,559,896**	**10.8**	**255,241**	**1.8**
Ark.	1,678,553	1,066,212	222,407	76.8	270,300	16.1	53,802	3.2	–	–	65,832	3.9
La.	4,087,873	2,852,015	328,784	77.8	402,891	9.9	155,766	3.8	320,696	7.8	27,721	0.7
Okla.	1,455,097	923,180	220,107	78.6	162,422	11.2	130,000	8.9	14,700	1.0	4,688	0.3
Tex.	7,189,500	3,256,500	814,000	56.6	1,170,500	16.3	567,000	7.9	1,224,500	17.3	157,000	2.2
Mountain	**11,832,332**	**7,012,081**	**1,438,899**	**71.4**	**1,348,478**	**11.4**	**659,284**	**5.6**	**1,209,296**	**10.2**	**164,294**	**1.4**
Ariz.	1,977,519	1,147,926	249,813	70.7	264,194	13.4	89,286	4.5	180,387	9.1	45,913	2.3
Colo.	2,049,018	1,314,776	234,194	75.6	424,726	20.7	64,728	3.2	–	–	10,594	0.5
Ida.	1,818,400	1,104,919	275,699	75.9	122,209	6.7	102,980	5.7	171,836	9.4	40,757	2.2
Mont.	616,855	337,767	66,496	65.5	53,496	8.7	57,723	9.4	96,601	15.7	4,772	0.8
Nev.	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	2,878,700	1,512,300	239,900	60.9	332,200	11.5	291,800	10.1	474,100	16.5	28,400	1.0
Utah	2,065,053	1,304,786	320,914	78.7	112,699	5.5	47,283	2.3	264,279	12.8	15,092	0.7
Wyo.	426,787	289,607	51,883	16.5	38,954	1.9	5,484	0.3	22,093	1.1	18,766	0.9
Pacific	**28,817,230**	**13,572,847**	**3,980,557**	**60.9**	**2,925,894**	**10.2**	**1,490,389**	**5.2**	**2,488,773**	**8.6**	**4,358,770**	**15.1**
Alaska	1,634,500	913,000	375,100	78.8	187,600	11.5	8,000	0.5	125,400	7.7	25,400	1.6
Cal.	21,431,773	9,376,321	2,833,694	13.2	2,044,579	9.5	1,146,439	5.3	1,879,172	8.8	4,151,568	19.4
Hawaii	1,149,084	781,532	137,917	80.0	143,538	12.5	45,457	4.0	35,960	3.1	4,680	0.4
Ore.	2,102,318	995,041	326,467	62.9	224,673	10.7	160,419	7.6	248,741	11.8	146,977	7.0
Wash.	2,499,555	1,506,953	307,379	72.6	325,504	13.0	130,074	5.2	199,500	8.0	30,145	1.2
Territories	**1,091,682**	**776,808**	**67,326**	**77.3**	**180,426**	**16.5**	**26,949**	**2.5**	**10,615**	**1.0**	**29,558**	**2.7**
Guam	266,176	189,546	26,652	81.2	47,758	17.9	–	–	–	–	2,220	0.1
P.R.	825,506	587,262	40,674	76.1	132,668	16.1	26,949	3.3	10,615	1.3	27,338	3.3
V.I.	–	–	–	–	–	–	–	–	–	–	–	–

Table 3-2
SOURCES OF LABORATORY FUNDS

Lab & Region	Total Laboratory Budget	State Funds				Federal Funds		Earned Funds		Other Funds	
		Direct Funds		Indirect Or Reimbursable Funds							
		Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.
Total	**160,704,450**	**124,514,150**	**77.5**	**8,306,376**	**5.2**	**14,710,081**	**9.2**	**10,906,559**	**6.8**	**2,267,284**	**1.4**
Average	3,279,683	2,541,105	–	169,518	–	300,206	–	222,583	–	46,271	–
New England	**10,774,884**	**9,333,504**	**86.6**	**128,850**	**1.2**	**608,707**	**5.6**	**701,996**	**6.5**	**1,827**	–
Conn.	5,595,953	5,287,653	94 5	123,291	2.2	185,009	3.3	–	–	–	–
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	1,124,027	380,207	33.8	–	–	39,997	3.6	701,996	62.5	1,827	0.2
N.H.	637,318	605,185	95.0	3,559	0.5	28,574	4.5	–	–	–	–
R.I.	2,773,711	2,571,807	92.7	–	–	201,904	7.3	–	–	–	–
Vt.	643,875	488,652	75.9	2,000	0.3	153,223	23.8	–	–	–	–
Middle Atlantic	**8,402,853**	**6,465,880**	**76.9**	**616,700**	**7.3**	**382,927**	**4.6**	**937,346**	**11.2**	–	–
N.J.	5,602,853	3,983,880	71.1	616,700	11.0	170,927	3.1	831,346	14.8	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	2,800,000	2,482,000	88.6	–	–	212,000	7.6	106,000	3.8	–	–
East North Central	**29,990,297**	**20,895,084**	**69.7**	**1,975,952**	**6.6**	**3,341,143**	**11.1**	**2,628,958**	**8.8**	**1,149,160**	**3.8**
Ill.	3,470,300	3,150,400	90.8	–	–	319,900	9.2	–	–	–	–
Ind.	2,101,442	1,731,954	82.4	275,334	13.1	94,154	4.5	–	–	–	–
Mich.	12,961,994	11,672,538	90.1	44,177	0.3	868,647	6.7	143,026	1.1	233,606	1.8
Ohio	4,748,594	1,202,939	25.3	1,058,875	22.3	979,103	20.6	592,123	12.5	915,554	19.3
Wisc.	6,707,967	3,137,253	46.8	597,566	8.9	1,079,339	16.1	1,893,809	28.2	–	–
West North Central	**10,811,880**	**7,216,626**	**66.7**	**648,298**	**6.0**	**1,863,613**	**17.2**	**1,014,884**	**9.4**	**68,459**	**0.6**
Ia.	3,470,530	1,837,232	52.9	635,915	18.3	157,333	4.5	840,050	24.2	–	–
Kans.	1,787,317	1,547,132	86.6	–	–	240,185	13.4	–	–	–	–
Minn.	1,782,477	1,438,552	80.7	–	–	315,427	17.7	28,498	1.6	–	–
Mo.	1,731,103	970,093	56.0	–	–	692,551	40.0	–	–	68,459	4.0
Nebr.	–	–	–	–	–	–	–	–	–	–	–
N.D.	1,208,387	772,448	63.9	12,383	1.0	354,844	29.3	68,712	5.7	–	–
S.D.	832,066	651,169	78.3	–	–	103,273	12.4	77,624	9.3	–	–
South Atlantic	**34,976,824**	**30,550,337**	**87.3**	**5,000**	–	**1,942,822**	**5.6**	**1,626,867**	**4.7**	**851,798**	**2.4**
Del.	771,234	505,309	65.5	–	–	265,925	34.5	–	–	–	–
D.C.	1,155,433	988,230	85.6	–	–	167,203	14.5	–	–	–	–
Fla.	6,629,988	5,861,347	88.4	–	–	291,208	4.4	314,812	4.7	162,621	2.5
Ga.	3,307,733	2,973,733	89.9	–	–	151,000	4.6	183,000	0.5	–	–
Md.	5,403,816	4,944,468	91.5	5,000	0.1	277,878	5.1	157,542	2.9	18,928	0.3
N.C.	3,848,502	2,873,943	74.7	–	–	490,736	12.8	483,823	12.6	–	–
S.C.	3,496,423	2,246,034	64.2	–	–	92,450	2.6	487,690	13.9	670,249	19.2
Va.	9,193,327	9,193,327	100.0	–	–	–	–	–	–	–	–
W.Va.	1,170,368	963,946	82.3	–	–	206,422	17.6	–	–	–	–
East South Central	**9,595,445**	**7,610,398**	**79.3**	**409,953**	**4.3**	**838,065**	**8.7**	**737,029**	**7.7**	–	–
Ala.	3,868,334	3,539,649	92.0	155,000	4.0	173,685	4.5	–	–	–	–
Ky.	1,947,992	1,675,795	86.0	–	–	178,801	9.2	93,396	4.8	–	–
Miss.	1,258,822	319,959	25.4	–	–	411,212	32.7	527,651	41.9	–	–
Tenn.	2,520,297	2,074,995	82.3	254,953	10.1	74,367	2.9	115,982	4.6	–	–
West South Central	**14,411,023**	**11,924,519**	**82.7**	**264,200**	**1.8**	**2,024,878**	**14.1**	**1,386**	–	**196,040**	**1.4**
Ark.	1,678,553	1,477,387	88.0	–	–	135,925	8.1	–	–	65,241	3.9
La.	4,087,873	3,566,735	87.2	–	–	388,953	9.5	1,386	–	130,799	3.2
Okla.	1,455,097	1,455,097	100.0	–	–	–	–	–	–	–	–
Tex.	7,189,500	5,425,300	75.5	264,200	3.7	1,500,000	20.9	–	–	–	–
Mountain	**11,832,332**	**8,204,268**	**69.3**	**662,357**	**5.6**	**1,581,366**	**13.4**	**1,384,341**	**11.7**	–	–
Ariz.	1,977,519	1,611,553	81.5	245,191	12.4	120,775	6.1	–	–	–	–
Colo.	2,049,018	731,305	35.7	–	–	733,828	35.8	583,885	28.5	–	–
Ida.	1,818,400	1,369,500	75.3	–	–	220,900	12.1	228,000	12.5	–	–
Mont.	616,855	350,181	56.8	–	–	191,514	31 0	75,160	12.2	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	2,878,700	2,397,100	83.3	147,035	5.1	207,689	7 2	126,876	4.4	–	–
Utah	2,065,053	1,371,028	66.4	270,131	13.1	53,474	2.6	370,420	17.9	–	–
Wyo.	426,787	373,601	18.1	–	–	53,186	2.6	–	–	–	–
Pacific	**28,817,230**	**21,500,263**	**74.6**	**3,595,066**	**12.5**	**1,848,149**	**6.4**	**1,873,752**	**6.5**	–	–
Alaska	1,634,500	1,550,000	94.8	42,100	2.6	42,400	2.6	–	–	–	–
Cal.	21,431,773	15,474,309	72.2	3,552,966	16.6	1,525,720	7.1	878,778	4.1	–	–
Hawaii	1,149,084	1,149,084	100.0	–	–	–	–	–	–	–	–
Ore.	2,102,318	1,375,006	65.4	–	–	127,364	6.1	599,948	28.5	–	–
Wash.	2,499,555	1,951,864	78.1	–	–	152,665	6.1	395,026	15.8	–	–
Territories	**1,091,682**	**813,271**	**74.5**	–	–	**278,411**	**25.5**	–	–	–	–
Guam	266,176	156,771	58.9	–	–	109,405	41.1	–	–	–	–
P.R.	825,506	656,500	79.5	–	–	169,006	20.5	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–

Lab & Region	Total Lab Expenditure	I Diagnostic Bacteriology		II Mycology		XIII Improvement Program		XIV Biol., Reagent, Media Prod.		XV Research & Development		XVI Administrative Support & Other	
		$	%	$	%	$	%	$	%	$	%	$	%
New England													
Conn.	5,595,953	358,850	6.4	26,896	0	58	3.7	55,960	1 0	–	–	1,678,785	30 0
Mass	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	1,124,027	133,980	11 9	3,709	0	24	6.6	–	–	–	–	188,724	16 8
N H.	637,318	II		127,446#	20	–	–	–	–	–	–	365,744	57 4
R.I.	2,773,711	278,223#	10.0	I		51	2.0	–	–	–	–	628,484	22.7
Vt.	643,875	94,000	14 6	7,000	1	00	0 5	28,400	4 4			140,000	21 7
Middle Atlantic													
N J.	5,602,853	842,470	15 0			46	10 2	–	–	–	–	1,925,813	34 3
N Y	–	–	–			–	–	–	–	–	–	–	–
Pa.	2,800,000	III		III		00	18 6	235,000#	8 4	–	–	788,000	28 1
East North Central													
Ill.	3,470,300	943,250#	27.2	I		50	10 0	110,250	3.2	–		296,750	8 6
Ind.	2,101,442	–	–	391,078	18	63	2.3	73,340	3.5	–	–	464,209	22 1
Mich.	12,961,994	VI		VI		99	2.5	3,156,297	24 3	1,515,359	11.7	4,600,330	35.5
Ohio	4,748,594	1,656,655	34.9	–		80	5 6	98,377	2.1	–	–	1,001,793	21 1
Wisc.	6,707,967	480,783#	7.2	109,844	1	81	3 1	128,701	1 9	158,431	2 4	994,172	14 8
West North Central													
Ia.	3,470,530	254,558	7 3	45,452	1	40	1.7	–	–	XVI		1,137,259	32 8
Kans.	1,787,317	473,657#	26 5	I		93	7 1	–	–	–	–	183,009	10.2
Minn.	1,782,477	275,471	15 5	30,608	1	31	11.0	–	–	–	–	612,349	34 4
Mo.	–	–	–	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–
N D.	1,208,387	325,466	26.9	–		93	30 0	33,292	2 8	–		248,599	20 6
S D.	832,066	164,107#	19 7	I		XVI		XVI		XVI		456,745#	54 9
South Atlantic													
Del.	771,234	79,428	10.3	1,321	0	24	1.3	–	–	–	–	234,065	30.3
D C.	1,155,433	II		309,700#	26	00	3 4	41,000	3.5	–	–	165,403	14 3
Fla.	–	–	–	–	–	–	–	–	–	–	–	–	–
Ga	3,307,733	926,165	28.0	99,232	3	–	–	198,464	6.0	8,269	0 2	430,005	13 0
Md.	5,403,816	1,282,387	23 7	19,780	0	90	2 4	–	–				
N C.	3,848,502	510,915#	13.3	I		01	4 6	–	–	IV		717,813	18 7
S.C.	3,496,423	467,971	13 4	45,500	1	14	1 4	64,229	1 8	–		1,572,541	45 0
Va	–	–	–	–	–	–	–	–	–				
W.Va	1,170,368	122,597	10 5	55,766	4	22	7 8	236,201	20.2	–	–	93,675	8 0
East South Central													
Ala	3,868,334	638,143	16 5	68,374	1	XVI		582,026	15.0	I		996,077#	25 8
Ky.	1,947,992	192,057	9 9	–		93	5 4	–	–	–		71,895	3 7
Miss	1,258,822	360,513	28 6	12,886	1	–	–	–	–	–		–	–
Tenn.	2,520,297	462,914	18 4	17,529	0	98	8 7	136,891	5.4	–	–	892,014	35 4
West South Central													
Ark	1,678,553	308,374	18 4	20,712	1	35	3.7	–	–	–	–	225,527	13 4
La	4,087,873	514,694	12 6	16,339	0	68	0 8	–	–	65,432	1.6	953,301	23 3
Okla.	1,455,097	256,771#	17 6	I		–	–	98,123	6.7	–	–	148,416	10 2
Tex.	7,189,500	451,300	6.3	112,800	1	00	1.0	274,200	3.8	–	–	1,595,100	22 2
Mountain													
Ariz	1,977,519	181,698	9 2	150,148	7	07	9 8	–	–			–	–
Colo.	2,049,018	208,000	10 2	–		00	1 3	31,000	1.5		–	205,018	10 0
Ida.	–	–	–	–	–	–	–	–	–	–	–	–	–
Mont	616,855	96,055#	15 6	I		30	3 2	–	–	–	–	143,010	23 2
Nev	–	–	–	–	–	–	–	–	–	–	–	–	–
N M	2,878,700	421,670#	14 6	30,356	1	88	3 1	–	–	–	–	142,110	4 9
Utah	2,065,053	IV		IV		38	9 5	–	–	–	–	352,379	17 1
Wyo	426,787	334,269#	16.2	–		I		–	–	–	–	–	–
Pacific													
Alaska	1,634,500	780,054	47.7	8,172	0	53	6.0	–	–			105,300	6 4
Cal	–	–	–	–	–	–	–	–	–	–	–	–	–
Hawaii	1,149,084	440,058	38 3	13,188	1	45	0.5	–	–	–	–	110,887	9 6
Ore	2,102,318	II		405,485#	19	55	5 7	–	–	–	–	447,980	21 3
Wash.	–	–	–	–	–	–	–	–	–	–	–	–	–
Territories													
Guam	–	–	–	–	–	–	–	–	–	–	–		
P.R.	–	–	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–

#This amount includes one or more other categories which are indicated by the Roman nu

TABLE 3-3
SUMMARY OF TOTAL LABORATORY EXPENDITURE BY WORKLOAD CATEGORY AND PERCENTAGE OF CATEGORY TO TOTAL EXPENDITURE

Lab & Region	Total Lab Expenditure	I Diagnostic Bacteriology		II Mycology		III Parasitology		IV Virology		V Immunology		VI Hematology		VII Clinical Chemistry		VIII Pathology		IX Environmental Microbiology		X Environmental Chemistry		XI Occupational Safety-Health		XII Toxicology		XIII Lab Improvement Program		XIV Biol., Reagent, Media Prod		XV Research & Development		XVI Administrative Support & Other	
		$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%
New England																		97,866	1 7	958,684	0 2	30,116	0 5	1,013,099	18 1	205,158	3.7	55,960	1 0			1,678 785	30 0
Conn	5,595 953	358 850	6 4	26 896	0 5	97,272	1 7	160,086	2 9	361,901	0 1	50,597	0 9	500,683	8 9			-		-		-		-		-		-				188 724	18 8
Mass		-		-		-		-		-		-		78,007	6 9			91,042	8 1	134 209	11 9	XII		265,042#	23 6	73,624	6 6					365,744	57 4
Me	1 124 027	133 980	11 9	3 709	0 3	3,148	0 3	51,698	4 6	100,844	9 0			33,383	5 2			41,071	6 4					46,733	7 3							628 484	22 7
N H	637,318	II		127,446#	20 0	II		10,042	1 6	12,899	2 0			162,144	0 6			263,249	9 5	662,665	23 9	24,634	0 9	510,723	18 4	54 251	2 0					140,000	21 7
R I	2 773,711	278 223#	10 0	-		-		-		189,338	6 8			-				51,000	7 9	68 000	10 6	50,975	7 9	40 400	6 3	3,000	0 5	28,400	4 4				
Vt	643 875	94 000	14 6	7,000	1 1	42,200	6 6	17,200	2 8	101,700	15 8															572,646	10 2					1,925,813	34 3
Middle Atlantic														1,398,556	25 0																		
N J	5 602 853	842 470	15 0	-		-		590,773	10 5	272,595	4 9			-																		788 000	28 1
N Y		-		-		-		-		-		-		-				III				XIV		127,000	4 5	522,000	18 6	235,000#	8 4				
Pa	2,800,000	III		III		748,000#	26 7	III		III		VII		380,000#	13 6																	296,750	8 6
East North Central																		781,150#	22 5	IX				390,400	11 2	348,750	10 0	110,250	3 2			464 209	22 1
Ill	3,470,300	943,250#	27 2	I		I		276 750	8 0	I		-		323,000	9 3			904,040	43 0	-				-		48 963	2 3	73,340	3 5			4,600,330	35 5
Ind	2,101 442	-		391,078	18 6	-		97 717 08	4 6	122,094	5 8	-		-				VI		VI				-		329,999	2 5	3,156,297	24 3	1,515,359	11 7	1,001,793	21 1
Mich	12,961 994	VI		VI		VI		VI		VI		3,360,009#	25 9	VI		VI								856,515	18 0	268,480	5 6	98,377	2 1			994,172	14 8
Ohio	4 748 594	1,656 655	34 9	-		-		-		-		-		96,867	2 0			769,907	16 2					-		-		-					
Wisc	6,707,967	480.783#	7 2	109 844	1 6	I		643,279	9 6	679,083	10 1			769 356	11 5	467 886	7 0	X		1,123,557#	16 7	626,908	9 3	319,186	4 8	206,781	3 1	128,701	1 9	158 431	2 4		
West North Central																															XVI	1,137,259	32 8
Ia	3,470,530	254 558	7 3	45,452	1 3	33,090	1 0	195,515	5 6	104 367	3 0			158,935	4 6			156 796	4 5	1 130 444	32 6	183,084	49 4	10,890	31	60,140	1 7					183,009	10.2
Kans	1 787,317	473 657#	26 5	I		I		176 816#	9 9	IV		-		188,069#	10 5			215,870	12 1	402,932	22 5	20,171	1 1	VII		126,793	7 1					612,349	34 4
Minn	1 782 477	275 471	15 5	30,608	1 7	30,608	1 7	157,931	8 9	286 349	16 1			155,064	8 7	38 766	2 2	-		-		-		-		195,331	11 0						
Mo	-	-		-		-		-		-		-		-		-		-		-		-		-		-		-				248,599	20 6
Nebr	-	-		-		-		-		-		-		107,580	8 9	-		101,352	8 4	356,005	29 5	-		69,913#	8 4	36,093	30 0	33,292	2 8			456,745#	54 9
N D	1 208 387	325 466	26 9	-		-		-		-		-		-		-		141 301#	7 0	IX		-		-		XVI		XVI		XVI			
S D	832,066	164 107#	19 7	I		I		I		I																						234,065	30 3
South Atlantic																																165 403	14 3
Del	771,234	79 428	10 3	1,321	0 2	6,731	0 9	102,509	13 3	20,358	2 6	13,210	1 7	10,114	1 3	121,898	15 8	54,106	7 0	83,893	10 9	230		33,147	4 3	10,224	1 3						
D C	1 155 433	II		309 700#	26 8	II		II		VI		297,600#	25 8	VI		97,000	8 4	85,000	7 4	IX				120,030	10 4	39,700	3 4	41,000	3 5				
Fla		-		-		-		-		-		-		-		-		-		-		24,808	0 7	-		-		198,464	6 0	8,269	0 2	430,005	13 0
Ga	3 307 733	926,165	28 0	99 232	3 0	165 387	5 0	363,850	11 0	496,160	15 0	132,309	4 0	463,084	14 0			310,000	5 7	940,197	17 4	157,542	2 9	48,000	88	132,390	2 4					717,813	18 7
Md	5 403,816	1 282,387	23 7	19 780	0 4	37,591	0 7	181,122	3 4	1,503,631	27 8	271,000	5 0	459,088	8 5	61 088	1 1	X		847,094#	22 0	X		VII		177,001	4 6				IV	1,572,541	45 0
N C	3 848 502	510,915#	13 3	I		I		574,022#	14 9	IV		VII		557 569#	14 5	464 088	12 1	255,321#	7 3	IX		67 497	1 9	118,561	3 4	49,814	1 4	64,229	1 8				
S C	3 496 423	467,971	13 4	45,500	1 3	32 760	0 9	487,767#	13 9	IV		334,462#	9 6	VI		-		-		-		-		-		-		-				93,675	8 0
Va	-	-		-		-		-		-		-		-		-		-		-		-		VII		90,722	7 8	236,201	20 2				
W Va	1,170,368	122,597	10 5	55,766	4 8			44,118	3 8	99,611	8 5	I		188 430#	16 1	90,849	7 8	148,399	12 7													996,077#	25 8
East South Central																																71,895	3 7
Ala	3 868 334	638 143	16 5	68,374	1 8	74 598	1 9	128,628	3 3	450,300	11 6	357 660#	9 2	VI		60,350	1 6	512,178	13 2			XVI				XVI		582,026	15 0	I			
Ky	1 947 992	192 057	9 9	-		26 345	1 4	81,581	4 2	326,721	16 8	66,290	3 4	472,273	24 2	60,082	3 1	110,030	5 6	80 815	4 1	152,531	7 8	202 279	10 4	105,093	5 4					892,014	35 4
Miss	1,258 822	360,513	28 6	12,886	1 0	22 625	1 8	8 441	0 7	255,172	20 3	142,828	11 3	132,479	10 5	-		252,816	20 1	71,062	5 6	-		-		218,798	8 7	136,891	5 4				
Tenn	2,520,297	462,914	18 4	17,529	0 7	55,294	2 2	133,167	5 3	247 914	9 8	-		157 422	6 2			198,354	7 9													225,527	13 4
West South Central																								57 502	3 4	62,135	3 7					953,301	23 3
Ark	1,678 553	308,374	18 4	20 712	1 2	IV		163,399#	9 7	IV		177,199#	10 6	VI				166 844	9 9	496,861	29 6			41,743	1 0	33,368	0 8			65,432	1 6	148 416	10 2
La	4,087,873	514,694	12 6	16,339	0 4	145,357	3 6	89,642	2 2	606,808	14 8	108,949	2 7	158,626	3 9			806,687	19 7	546,927	13 4	-		355,800	24 4	-		98,123	6 7			1,595,100	22 2
Okla	1,455,097	256 771#	17 6	I		I		141,445	9 7	145,540	10 0	138,548	9 5	170,454	11 7			413,700	5 8	1,672,400	23 3	95,500	1 3	95,600	1 3	75,200	1 0	274 200	3 8				
Tex	7,189 500	451,300	6 3	112,800	1 6	263,200	3 7	526,500	7 3	601,700	8 4	95,600	1 3	916,700	12 7																		
Mountain																		288 049	14 6	541 948	27 4	76,846	3 9	-		194,007	9 8					205,018	10 0
Anz	1,977,519	181 698	9 2	150 148	7 6	-		197,802	10.0	347,021	17 5	-		-		375,000	18 3	243,000	11 9	470,000	22 9	-		220,000	10 7	26,000	1 3	31,000	1 5			143,010	23 2
Colo	2 049,018	208,000	10 2	-		167 000	8 1	-		-		104,000	5 1	-		-		-		-		-		-		-		-					
Ida	-	-		-		-		-		-		-		-		-		61,450	10 0	176,900	28 7	19,700#	3 2	XI		19,530	3 2					142,110	4 9
Mont	616,855	96,055#	15 6	I		I		100,210#	16 2	IV		-		-		-		-		-		-		-		-		-				352,379	17 1
Nev	-	-		-		-		-		-		-		-		-		257,631	8 9	883,774#	30 7	X		298,304	10 4	89,788	3 1						
N M	2 878 700	421,670#	14 6	30,356	1 0	I		237 449	8 2	201,027#	7 0	V		153,418	5 3	163,173	5 7	-		628,659#	30 4	X		277,344	13 4	196,838	9 5						
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Wyo	426,787	334 269#	16 2	-		I		I		-		-		-		-		-		-		-		-		-		-				105,300	6 4
Pacific																		51 759	3 2	44 948	2 7	-		-		98,753	6.0	-		-		110,887	9 6
Alaska	1 634 500	780.054	47 7	8,172	0 5	128 036	7 8	290,123	17 7	127,355	7 8	-		-		-		79 856	6 9	269,527	23 4	-		25,222	2 2	5,745	0 5	-		-		447,980	21 3
Cal	-	-		-		-		-		-		-		15,085	1 3	-		221,065	10 5	-		-		-		119 455	5 7	-		-			
Hawaii	1,149 084	440,058	38 3	13,188	1 1	59 694	5 2	20,351	1 8	109 471	9 5	-		411,679	19 6	-		-		-		-		-		-		-		-		-	
Ore	2 102 318	II		405 485#	19 3	-		234 253	11 1	262 401	12 5	-		-		-		-		-		-		-		-		-		-		-	
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#This amount includes one or more other categories which are indicated by the Roman numeral heading this column

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL)

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Alabama	• **Federal** **Medicaid — Pinworms** (Microscopic examination of tape slide preparation for the detection of pinworms)	Micro. III Lab. Tech. II Clerk Typist II	.04 0.3 0.1	Pers. **TOTAL**	5,804 **5,804**
	Medicaid — Intestinal Parasites (Microscopic examination of formalized specimens for the detection of helminths and protozoa)	Micro. III Micro. II Lab. Tech. II Clerk Typist II	.19 0.3 0.1 0.1	Pers. **TOTAL**	11,568 **11,568**
	Medicaid — Sickle cell (Electrophoretic separation of filter paper blood specimen for the detection of abnormal hemoglobin)	Micro. II Micro. I Clerk Typist II	.34 0.4 0.1	Pers. **TOTAL**	12,886 **12,886**
	Medicaid — VORL (Nontreponemal blood test for screening of syphilis)	Micro. III Micro. II Clerk Typist II	.14 .25 .05	Pers. **TOTAL**	7,790 **7,790**
	Medicaid — GC (State-wide screening program for the detection of gonorrhea by cultural methods)	Micro. III Micro. II Clerk Typist II	.05 0.1 .05	Pers. **TOTAL**	3,317 **3,317**
Alaska	• **Federal** **742 — V.D. Control** (VD laboratory support)	Lab. Asst.	—	**TOTAL**	**19,400**
	750-ANHS-TB Control (Laboratory support)	Micro. II	—	**TOTAL**	**23,000**
	• **Local** (Laboratory support)	Lab. Aid	—	**TOTAL**	**42,000**
Arizona	• **Federal** **HIB — Medicare** (Certification of labs for Bureau of Health Facilities Licensure)	Lab. Cert. Consult.	1.0	Pers. Supp. Other **TOTAL**	24,292 57 7,143 **31,492**
	EPA — Safe Drinking Water (Chemical analysis of water samples for Environmental Laboratory Certification Program and for Water Quality Control Program)	Lab. Cert. Consult. Chemist II	1.0 0.6	Pers. Supp. Other **TOTAL**	35,723 31 4,092 **39,846**
	EPA — Water Pollution Grant (Analysis of water samples for State Bureau of Water Quality)	Chemist III	0.4	Pers. Other **TOTAL**	12,365 835 **13,200**
	EPA — Air Pollution Grant (Analysis of air samples for State Air Quality Control Program)	Chemist III	1.0	Pers. Supp. Equip. Other **TOTAL**	27,458 1,018 572 3,265 **32,313**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Arizona (Cont.)	**FDA — Food Inspection Grant** (Analysis of food samples for bacterial/chemical quality for Bureau of Sanitation)	Micro. III Chemist II	<0.1 <0.1	Supp. **TOTAL**	1,186 **1,186**
	• **State** **Arizona Dairy Commissioner** (Interagency contract to analyze specimens for bacterial quality and for aflatoxin and pesticide contamination)	Lab. Tech. II Chemist III Chemist II	4.0 1.0 1.0	Pers. Supp. Equip. Other **TOTAL**	120,253 28,330 27,050 2,254 **177,887**
	Arizona Industrial Commission (Interagency contract to analyze a variety of samples submitted to support state's OSHA program)	Chemist III	1.0	Pers. Supp. Other **TOTAL**	30,213 11,468 3,548 **45,229**
	Governor's Office of Highway Safety (Interagency contract in blood alcohol regulatory program, certifying equipment, analysts, and breath testing machine operators)	Chemist III Typist II	1.0 1.0	Pers. Supp. Other **TOTAL**	19,537 1,021 1,041 **21,599**
	Department of Education (Interagency contract to analyze food samples for Department Summer Food Program)	Micro. III	<0.1	Supp. **TOTAL**	476 **476**
Arkansas	• **Federal** **Fluoride Grant**	—	1.0	Pers. Supp. **TOTAL**	7,200 812 **8,012**
	Blood Lead	—	2.0	Pers. Supp. **TOTAL**	28,897 7,960 **36,857**
	Safe Drinking Water Act (Drinking Water Analysis)	—	5.0	Pers. Supp. Other **TOTAL**	71,899 16,694 2,463 **91,056**
	UAMSC — Library and Pharmacy (Toxicology service)	—	—	Other **TOTAL**	57,502 **57,502**
California	• **Federal** **Environmental Protection Agency** (Evaluate sampling and analytical problems in air pollution monitoring	Res. Spec. III Air Poll. Res. Spec. Off. Asst. II Stud. Asst.	0.5 0.5 0.5 0.3	Pers. Supp. Equip. Other **TOTAL**	66,164 9,208 1,260 24,759 **101,391**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
California (Cont.)	(Validate samplers for inhaled particles)	Res. Spec. III Air Poll. Res. Spec. Stud. Asst.	0.5 0.3 0.2	Pers. 29,927 Supp. 5,812 Equip. 3,630 Other 12,741 **TOTAL 52,110**
	(Water Virology Laboratory Unit. Develop and evaluate procedures for virus concentration and removal from water. Develop laboratory techniques for virus assay of water samples, evaluation of waste-water treatment systems, and health significance of viruses in water environment.)	P.H. Micro. II Gen. Lab. Support	1.8 1.0	Pers. 88,270 Other 28,335 **TOTAL 116,605**
	National Science Foundation (Fundamental and applied studies of particle-surface interactions)	Res. Spec. III Air Poll. Res. Spec. Stud. Asst.	0.2 0.3 0.5	Pers. 33,670 Supp. 2,973 Other 12,582 **TOTAL 49,225**
	(Studies on the Cytopathogen of the Genus Naegleria)	Res. Spec. II Gen. Lab. Supp.	1.0 0.2	Pers. 54,575 Supp. 1,806 Other 18,619 **TOTAL 75,000**
	National Institutes of Health (NIAID) (Molecular and Immunologic Study of Cytomegalovirus)	Res. Spec. II P.H. Micro. II Gen. Lab. Supp.	1.0 1.0 1.2	Pers. 81,885 Supp. 2,287 Other 23,620 **TOTAL 107,792**
	(Characterization and Detection of Viruses and Antibodies)	Res. Spec. II P.H. Micro. II Gen. Lab. Supp.	0.5 0.8 1.45	Pers. 81,885 Supp. 4,776 Equip. 5,000 Other 25,930 **TOTAL 117,591**
	NIH, National Institute of Neurological and Communicative Disorders and Stroke (NINCDS) (Study of Lymphocyte Antibody Traffic in the Central Nervous System)	P.H. Micro. II Gen. Lab. Supp.	1.3 1.2	Pers. 71,707 Supp. 4,870 Other 19,563 **TOTAL 96,140**
	NIH, Procurement Branch/National Cancer Institute (NCI) (NCI Collaborative Studies — cancer virus studies)	Animal Tech. Gen. Lab. Supp.	3.5 2.3	Pers. 112,256 Supp. 3,815 Other 38,616 **TOTAL 154,687**
	NIH, National Heart, Lung and Blood Institute (Coxsackieviruses in Chronic Disease: Role of Antigenic Variation)	Res. Spec. II P.H. Micro. I Gen. Lab. Supp.	0.5 0.5 1.45	Pers. 67,055 Supp. 4,268 Equip. 1,000 Other 14,840 **TOTAL 87,163**
	U.S. Army Medical Research and Development Command (Development of Psoralen Photoinactivated Alphavirus and Arenavirus Vaccines)	Res. Spec. III P.H. Micro. II Gen. Lab. Supp.	1.0 0.5 .25	Pers. 68,638 Supp. 3,754 Other 25,011 **TOTAL 97,403**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
California (Cont.)	• **State** **California Air Resources Board** (Monitor Mutagens and Carcinogens in Community Air)	P.H. Chem. II Stud. Asst.	1.0 .25	Pers. 38,717 Supp. 4,475 Equip. 2,000 Other 14,808 **TOTAL 60,000**
	(Visibility reduction as related to aerosol constituents)	Res. Spec. III Air Poll. Res. Spec. P.H. Chem. II	0.5 0.5 0.7	Pers. 54,820 Supp. 9,750 Equip. 5,800 Other 18,780 **TOTAL 89,150**
	(Assessment of gaseous and particulate dry acid deposition in California)	Res. Spec. III Air Poll. Res. Spec. Off. Asst. II Stud. Asst.	0.3 0.4 0.5 0.1	Pers. 42,504 Supp. 9,062 Equip. 12,022 Other 16,169 **TOTAL 79,757**
Connecticut	• **Federal** **Medicare** (Laboratory Improvement)	Sup. Med. Examiner Med. Examiners	.65 1.35	Pers. 57,477 Supp. 500 Other 4,524 **TOTAL 62,501**
	Maternal and Child Health Genetic Diseases Grant (Genetic Disease Screening)	PHLA I Med. Tech. Chemist	1.0 1.0 1.0	Pers. 40,254 **TOTAL 40,254**
	Preventable Diseases (VD Control)	Prin. Micro.	0.5	Pers. 11,977 **TOTAL 11,977**
	Safe Drinking Water Act (Laboratory Standards)	Lab. Helper	1.0	Pers. 10,410 **TOTAL 10,410**
	• **State** **Department of Environmental Protection** (Water quality assurance laboratory tests)	Pr. Env. Chem. Sr. Env. Chem. Chemist Chem. Trainee	1.0 2.0 1.0 1.0	Pers. 85,713 Supp. 14,000 Equip. 50,000 **TOTAL 149,713**
District of Columbia	• **Federal** **Lead Poison Prevention** (Chemistry assays on human specimens)	Chemist Technician	0.8 1.5	Pers. 33,660 Supp. 11,000 **TOTAL 44,660**
	MIC/C & Y (Various clinical tests on human specimens)	Chemist Technologist Technician	1.0 1.0 2.0	Pers. 66,721 **TOTAL 66,721**
	GC Testing Program (Bacteriological testing on male/female specimens)	Technician	1.0	Pers. 14,811 Supp. 41,000 **TOTAL 55,811**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
Florida	• **Local** **City of St. Petersburg Florida Research Project** (Research in waste water treatment)	Micro. IV Lab. Tech. II Lab. Helper Micro. II	1.0 1.0 1.0 1.0	Pers. 36,820 Supp. 7,185 Other 850 **TOTAL 44,855**
	Central Florida Research (Naegleria study in Central Florida lakes)	Bio. Sup. I Biologist Lab. Tech. Micro. II	1.0 1.0 1.0 1.0	Pers. 75,002 Supp. 10,933 Other 4,734 **TOTAL 90,669**
Georgia	• **Federal** **Sexually Transmitted Disease Unit** (Gonorrhea culture screening)	Lab. Sci. Sr. Lab. Tech. Sr. Clerical	1.0 3.0 2.0	Pers. 106,400 Supp. 16,600 **TOTAL 123,000**
	Adult Health Unit (Hypertension screening)	Lab. Sci.	1.0	Pers. 17,200 Supp. 10,800 **TOTAL 28,000**
Idaho	• **Federal** **MCH Block Grant — Genetics Program** (Laboratory support for genetic counseling clinics)	Micro.	1.4	Pers. 39,150 Supp. 1,000 **TOTAL 40,150**
	314d Health Incentive (Supplies for genetic laboratory received through MCH program)	—	—	Supp. 945 **TOTAL 945**
	Metabolic Screening — Genetics Program (Federal funds utilized to pay Oregon laboratory for performance of screening tests for metabolic disorders)	Micro.	0.6	Pers. 7,500 **TOTAL 7,500**
	Dept. of Transportation — NHTSA (Breath testing — forensic alcohol)	Crimin.	3.9	Pers. 33,427 Supp. 6,316 Other 3,780 **TOTAL 43,523**
	CDC, Laboratory Improvement (Telelecture training grant)	Lab. Surveyor	3.0	Pers. 10,693 Supp. 6,307 **TOTAL 17,000**
	Medicare Certification — Lab Improvement Section (Medicare Laboratory Inspection)	Lab. Surveyor	0.2	Pers. 15,808 Supp. 2,000 **TOTAL 17,808**
	Water Systems Supv. (Approval of private labs for performance of tests on public water supplies)	Chems, Micro.	0.8	Pers. 20,180 Supp. 3,143 Equip. 78 **TOTAL 23,401**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
Idaho (Cont.)	**EPA Water Pollution Control** (Support of water pollution control programs)	Chem.	3.3	Pers. 58,000 Supp. 12,227 **TOTAL 70,227**
Illinois	• **Federal** **Sexually Transmitted Diseases** (Statewide monitoring of sexually transmitted diseases)	Lab. Tech. I	1.0	Pers. 44,600 Supp. 32,200 **TOTAL 76,800**
	Pesticides (Use residues for pesticides analyses under FIFRA)	Lab. Tech. I Chem. I	1.0 1.0	Pers. 34,600 **TOTAL 34,600**
	Safe Drinking Water (Non-community water supply analysis for chemical/microbiological contamination)	Micro. I Lab. Tech. I Chem. I	1.0 1.0 1.0	Pers. 52,400 **TOTAL 52,400**
	Pediatric Lead (Lab services for support of blood lead program)	Micro. I	1.0	Pers. 16,600 **TOTAL 16,600**
	Influenza (Statewide surveillance of influenza)	Micro. I	1.0	Pers. 2,900 **TOTAL 2,900**
	Environmental Toxic Substances	—	—	Supp. 4,900 Equip. 31,000 Other 12,500 **TOTAL 48,400**
	Hypothyroidism (TSH)	—	—	Supp. 29,844 Equip. 34,451 Other 2,482 **TOTAL 66,777**
	Block Grant	—	—	Pers. 5,200 **TOTAL 5,200**
	314-d	—	—	Supp. 7,100 **TOTAL 7,100**
Iowa	• **Federal** **SDWA Water Supply** (SDWA data transmitted and consultation services for U.S. EPA)	—	3.45	Pers. 62,616 Supp. 10,897 Equip. 2,141 Other 72,432 **TOTAL 148,086**
	U.S. Army (Research on stability of m-Amyl Ketone)	—	.19	Pers. 2,823 Supp. 1,493 Other 1,640 **TOTAL 5,956**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Iowa (Cont.)	**U.S. Department of Agriculture** (Water quality monitoring of Yellow River)	—	—	Supp. Equip. Other **TOTAL**	340 10 2,941 **3,291**
	• **State** **Iowa OEQ** (Provide laboratory and field services for water quality monitoring)	—	4.21	Pers. Supp. Equip. Other **TOTAL**	103,552 10,833 19,993 34,096 **168,474**
	Iowa OEQ (Provide laboratory and field services for air quality monitoring)	—	5.25	Pers. Supp. Equip. Other **TOTAL**	107,513 21,643 17,093 68,879 **215,128**
	Iowa Conservation Commission (Provide laboratory and field services for water quality monitoring of Lake Manawa and Green Valley Lake)	—	.17	Pers. Supp. Equip. Other **TOTAL**	1,589 188 42 974 **2,793**
	Industrial Hygiene (Provision of Laboratory Services for Iowa Bureau of Labor)	—	4.3	Pers. Supp. Equip. Other **TOTAL**	86,268 9,004 3,830 20,172 **119,274**
	Medicare (Iowa State Dept. of Health) (Surveys of hospital laboratories to insure compliance with Medicare standards)	—	1.12	Pers. Supp. Other **TOTAL**	32,997 230 10,842 **44,069**
	Gonorrhea Screening (ISDH) (Provisions of culture services to detect asymptomatic patients)	—	.94	Pers. Other **TOTAL**	19,058 7,242 **26,300**
	Genetic Screening (ISDH) (Serve as central state laboratory for screening of neonatal genetic diseases)	—	1.74	Pers. Supp. Equip. Other **TOTAL**	32,628 12,295 618 14,336 **59,877**
	• **Private** **Environmental Chemistry** (Provision of field and laboratory services to private industries)	—	3.73	Pers. Supp. Equip. Other **TOTAL**	98,468 61,868 10,399 47,073 **217,808**
Kansas	• **Federal** **Air Quality Program Fund** (EPA laboratory support for sulfur dioxide and suspended particulate monitoring including suspended particulate analysis from 56 air monitoring sites in state and continuous monitoring calibrations support for 5 sites in Kansas)	Chem. II	1.0	Pers. Supp. **TOTAL**	21,302 1,357 **22,659**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Kansas (Cont.)	**314-d Health Incentive Grant** (Public Health Laboratory Support)	Micro. II PHLT I Chem. I	1.0 0.5 1.0	Pers. TOTAL	53,477 53,477
	Medicare Funds (Surveys of hospital laboratories to insure compliance with Medicare standards)	Lab. Cert. Supv. Micro. II	0.2 0.3	Pers. Supp. TOTAL	7,847 1,278 9,125
	EPA Water Pollution Fund (EPA laboratory support for National Pollution Discharge Elimination System PL92-500)	Chem. I Chem. II Micro. I PHLT	1.0 0.5 1.0 .75	Pers. Supp. TOTAL	43,744 1,141 44,885
	Water Supply Fund (EPA laboratory support for Safe Drinking Water Act (PL 93-523) requirements in form of equipment grant from federal funds)	Chem. II Chem. III Micro. I PHLT II	1.0 1.5 1.0 1.0	Pers. Supp. TOTAL	48,268 29,771 78,039
	Resource Conservation and Recovery Fund (Laboratory support for solid and hazardous waste)	—	—	Supp. TOTAL	32,000 32,000
Kentucky	• **Federal** **Division of Maternal and Child Health** (PKU, galactosemia and T_4 screening, and Rh testing)	Micro. Clerical Lab. Aide	5.0 1.0 1.0	Pers. supp. TOTAL	97,181 62,086 159,267
	T & A Funds from Department of Labor (Analysis of occupational health samples)	Chem.	4.0	Pers. Supp. Other TOTAL	78,750 21,375 12,375 112,500
	Proficiency Testing	Micro. Lab. Dir. Adm Lab. Aide	0.9 .05 0.2 1.0	Pers. Other TOTAL	6,882 259 7,141
Louisana	• **Private** **I.A.T. from L.S.U. Sea Grant College**	—	—	Other TOTAL	2,000 2,000
Maine	• **Federal** **Medicare** (Laboratory surveillance for hospital licensure and independent lab certification)	—	1.5	Pers. Other TOTAL	28,000 1,400 29,400

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Maine (Cont.)	• State Harness Racing Commission (Horse race toxicology)	—	0.8	Pers. Other TOTAL	15,000 13,000 28,000
Maryland	• Federal Crippled Childrens — Title V (Testing for inborn errors of metabolism in newborns)			Supp. TOTAL	75,534 75,534
	Veneral Disease Control (Screening program for gonorrhea and syphilis)	—	—	Supp. TOTAL	84,994 84,994
	Lead Paint (X-Ray detection of lead through layers of paint)	—	—	Supp. TOTAL	2,603 2,603
	Air Pollution Control Act (Monitoring of air quality laboratory throughout the State of Maryland, in search of pollutants)	Lab. Asst. Lab. Scientist	1.0 1.0	Supp. Other TOTAL	9,000 9,671 18,671
	Certification, Training, and Field Services SSA — Title XVIII (Licensure and inspection of clinical laboratories in Maryland for State and Medicare requirements)	Physician Lab. Scientist	0.5 0.5	Pers. Other TOTAL	35,000 1,313 36,313
	Blood Lead Screening Program (Laboratory testing of blood samples for traces of Lead)	Lab. Asst. Clerk Typist	1.0 1.0	Pers. Other TOTAL	22,137 375 22,512
	Gonorrhea Screening and Reporting Program (Laboratory testing of specimens and supplying necessary data for epidemiological follow-up)	Micro. Lab. Asst. Clerk Typist	3.0 1.0 2.0	Pers. TOTAL	77,000 77,000
	Pregnancy Testing (Drawing of blood and analyzing specimens for positive pregnancy tests in Cheverly Branch Laboratory)	Lab. Asst.	1.0	Pers. Other TOTAL	8,529 1,535 10,064
	Gonorrhea Testing (Testing of Specimens for gonorrhea in Cheverly Branch Laboratory)	Lab. Scientist	1.0	Pers. Other TOTAL	11,667 2,330 13,997
	Immunization Programs (Screening specimens for rubella and rubeola)	—	—	Equip. TOTAL	5,000 5,000
	Safe Drinking Water (Testing of public drinking water for contamination)	Lab. Asst.	1.0	Pers. Supp. TOTAL	10,306 13,219 23,525

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Maryland (Cont.)	**Resource Conservation and Recovery Act** (Testing of suspected toxic and hazardous waste samples)	Lab. Scientist	1.0	Pers. **TOTAL**	13,717 **13,717**
	PCB/Asbestos Control Program (Testing of suspected hazardous waste samples for PCB and/or asbestos)	Lab. Asst.	0.5	Pers. **TOTAL**	1,779 **1,779**
	• **State** **Neonatal Screening Contract** (Inborn errors of metabolism testing for Maryland residents who live in Del.)	—	—	Supp. **TOTAL**	18,928 **18,928**
	• **State/Federal** **Occupational Safety and Health Act** (Laboratory testing of samples submitted by MOSHA Program)	Lab. Scientist Lab. Asst.	4.0 3.0	Pers. Supp. Other **TOTAL**	103,335 10,000 44,207 **157,542**
Michigan	• **Federal** **Laboratory Training Contract** (Development, administration, and evaluation of the effectiveness of a lab training program for clinical and public health laboratories)	—	—	Pers. Supp. Other **TOTAL**	2,155 33 31 **2,219**
	PBB Contract (Long term health study of persons exposed to PBB)	Secretary VI P.H. Field Rep. Stat. Stat. Stat. Tech.	1.0 3.0 1.0 0.9 0.9	Pers. Supp Equip. Other **TOTAL**	195,902 23,070 854 11,501 **231,327**
	Title XVIII Medicare (Provide inspection and recommendation for certification of Medicare labs)	Clerk-typist Lab. Imp Spec.	1.0 3.1	Pers. Supp. Equip. Other **TOTAL**	99,189 190 708 5,714 **105,801**
	PCB Contract (Evaluation of humans exposed to water borne chemicals in the Great Lakes)	Clerk-typist P.H. Field Rep. Lab. Asst. Cal. Clerk Lab. Scientist Stat. VI Lab. Tech. IV Lab. Tech. III	1.0 1.8 2.0 1.0 1.0 1.0 1.0 1.0	Pers. Supp. Equip. Other **TOTAL**	241,795 19,205 2,045 9,753 **272,798**
	Chemical Risk (Develop a formal risk assessment process to be utilized in decision-making on acceptable release and exposure levels for chemicals in the environment and/or work place)	Clinical Scientist Steno. Clerk Stat. Clerk Gen. Clerk	0.5 0.5 0.5 1.5	Pers. Supp. Equip. Other **TOTAL**	81,869 666 2,988 1,552 **87,075**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
Michigan (Cont.)	**Brucellosis Contract** (Development of effective brucellosis vaccine)	Lab. Tech. IV Lab. Asst. III	1.0 0.9	Pers. 60,656 Supp. 3,789 Other 459 **TOTAL 64,904**
	Legionella Contract (Production and laboratory evaluation of **Legionella pneumophila** skin test antigen)	Lab. Asst. III Micro. VII	1.1 1.0	Pers. 66,061 Supp. 11,234 Equip. 2,671 Other 329 **TOTAL 80,295**
	Venereal Disease Contract (Enhanced case-finding, education, and treatment of V.D.)	Lab. Tech. IV Micro. VI	0.3 0.6	Pers. 24,255 **TOTAL 24,255**
	• **State** **Mental Health Hepatitis Agreement** (Provide Hepatitis B antigen and Hepatitis B antibody screening for clients of State Dept. of Mental Health)	Lab. Tech. V	0.9	Pers. 29,492 Supp. 13,230 Equip. 1,455 **TOTAL 44,177**
	• **Local** **Kent County Agreement** (Provide certain local laboratory services for county)	Micro VII Micro. Lab. Tech.	1.0 0.9 0.9	Pers. 91,711 Supp. 1,231 **TOTAL 92,942**
	• **Other** **Red Cross Agreement** (Research to develop or improve blood fractions)	Lab. Scientist Lab. Asst.	2.0 0.8	Pers. 80,256 Supp. 23,944 Equip. 133 Other 754 **TOTAL 105,087**
	Interferon Contract (Production of clinically useful Interferon)	Lab. Asst.	0.9	Pers. 21,891 Supp. 13,579 Equip. 80 **TOTAL 35,550**
Minnesota	• **State** **University of Minnesota** (T.B. examinations)	Micro.	1.0	Pers. 19,606 Supp. 1,247 **TOTAL 20,853**
Missouri	• **Federal** **FDA** (Performance of laboratory tests on food samples)		0.3	—
	• **State** **State Milk Board** (Lab inspection, approval, and testing)	—	0.5	—
	Department of Natural Resources (Public water supply testing and laboratory inspection; bacteriological and chemical testing)	Micro. Micro. III Micro II Med. Lab. Tech. Chem. IV Chem. III Chem. II Typists	8.0 (tot.)	—

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs
Missouri (Cont.)	**Division of Highway Safety** (Breath alcohol maintenance)	Chem. IV Chem. III Chem. II Clerk Typist	4.0 (tot.)	—
New Hampshire	• **Federal** Gonorrhea (Gonorrhea laboratory)	Lab. Scientist	0.1	Pers. 13,574 Supp. 15,000 **TOTAL 28,574**
	• **State** **Fish and Game Agency** (Shellfish monitoring for PSP)	Lab. Scientist	0.1	Supp. 3,559 **TOTAL 3,559**
New Jersey	• **Federal** **Health Incentive**	—	—	Equip. 23,624 **TOTAL 23,624**
	Maternal and Child Health	—	—	Pers. 17,833 **TOTAL 17,833**
	V.D. Case Finding	—	—	Pers. 107,331 **TOTAL 107,331**
	Immunization Project	—	—	Pers. 22,139 **TOTAL 22,139**
	• **State** **Department of Environmental Protection**	—	—	Pers. 616,700 **TOTAL 616,700**
New Mexico	• **Federal** **Federal Agencies**	—	—	**TOTAL 11,600**
	• **State** **Law Enforcement Agencies** (Breath and blood analyses)	—	—	**TOTAL 18,800**
	Administrative Office of Courts (Expert witness testimony training, and certification relating to direct breath testing)	—	—	**TOTAL 25,200**
	SDWA thru State EID (Physical, chemical, bacteriological, water analysis)	—	—	**TOTAL 62,500**
	State Department Agriculture (Analyses of animal specimens submitted by Veterinary Diagnostic Services)	—	—	**TOTAL 26,000**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
New Mexico (Cont.)	**State and Planned Parenthood Clinics** (Cytopathological analyses)	—	—	TOTAL	42,600
	Family Planning Council (V.D. analyses)	—	—	TOTAL	29,200
	Other State Agencies Outside HED (Miscellaneous analyses)	—	—	TOTAL	24,200
	Public Water Systems (Bacteriological Water analyses)	—	—	TOTAL	63,000
	State OSHA (Asbestos, workplace analyses)	—	—	TOTAL	15,400
	State Health Agency (HSO) (Laboratory Certification)	—	—	TOTAL	5,000
North Carolina	• **Federal** **OSHA Program** (Analytical laboratory support to field engineers investigating OSHA complaints)	Anal. Chem. I Lab. Tech.	1.0 1.0	Pers. Supp. Equip. Other TOTAL	35,821 5,846 4,000 4,519 50,186
	Highway Safety Program (Support the preparation and distribution of ethyl alcohol standard solution for Breathalyzer calibration)	Anal. Chem. II	.05	Supp. Other TOTAL	250 784 1,034
	Rocky Mountain Spotted Fever (Development of serological test for RMSF Program)	P.H. Micro. I	1.0	Pers. Supp. Other TOTAL	17,839 607 4,263 22,709
	CDC Fluoridation Program (Provide water analyses for fluoride concentration to school water fluoridation program in Dental Health Section)	Lab. Tech.	1.0	Pers. Other TOTAL	13,902 3,382 17,284
	Solid and Hazardous Waste (Provide chemical analyses of landfill drainage waters)	Anal. Chem. I	1.0	Pers. Supp. Equip. Other TOTAL	5,775 5,021 12,728 13,820 37,344

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
North Carolina (Cont.)	**Safe Drinking Water Act** (Provide coliform, chemicals, and radiological analyses for public water systems; certification of water laboratories)	Stock Clerk I Lab. Clerk Med. Lab. Tech. III Med. Lab. Tech. I Clerk-Typist III	1.0 2.0 1.0 1.0 1.0	Pers. Supp. Equip. Other **TOTAL**	101,742 613 911 34,348 **137,614**
	• **Federal/State** **VD Control Project** (Gonorrhea Lab Advisor: Provide training to participating local health departments)	Lab. Impr. Cons. Med. Lab. Tech.	0.5 1.0	Pers. **TOTAL**	25,016 **25,016**
	• **State** **Hypothyroid Screening** (Diagnosis of neonatal hypothyroidism)	Med. Lab. Tech. Clerk Typist III	3.0 1.0	Pers. Supp. Other **TOTAL**	41,830 72,270 11,320 **125,420**
	Sickle Cell Screening (Provide screening and diagnosis of hemoglobinopathies)	P.H. Micro. II P.H. Micro I Clerk Typist IV	1.0 1.0 1.0	Pers. Equip. Other **TOTAL**	56,703 5,332 420 **62,455**
	Perinatal Screening (Provide project patients blood typing/grouping and antibody screening)	Med. Lab. Tech. II	1.0	Supp. Other **TOTAL**	11,963 26 **11,989**
North Dakota	• **State** **Dairy Department — Grade A Milk Program**	Micro. II Tech. Tech.	0.5 1.0 0.3	Pers. Supp. **TOTAL**	10,000 5,000 **15,000**
Ohio	• **Federal** **Environmental Protection Agency**	Chem. Lab. Supv. Chem. Lab. Supv. I Chem. III Chem. II Chem. I Micro. Supv. Micro. III Lab. Tech. Tech. I Lab. Asst. Secr. I Typist II	1.0 2.25 4.5 7.0 6.0 1.0 1.0 2.0 1.0 1.0 1.0 2.0	Pers. Supp. Equip. Other **TOTAL**	513,120 123,356 45,967 22,301 **704,744**
	Natural Resources	Chem. II	0.7	Pers. Supp. Other **TOTAL**	16,055 1,415 990 **18,460**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Ohio (Cont.)	**Industrial Commission**	—		Supp. **TOTAL**	10,265 **10,265**
	Reclamation Industrial Relations	Chem. II	0.4	Pers. **TOTAL**	8,900 **8,900**
Pennsylvania	• **Federal** **Department of Transportation Highway Safety Program** (Examination of human specimens for alcohol content to furnish data to county coroners)	Chem. II	1.0	Pers. Supp. Equip. Other **TOTAL**	31,695 31,000 30,000 4,000 **96,695**
	Department of Health Epidemiology Program	Chem. II	0.1	Pers. **TOTAL**	3,170 **3,170**
	Department of Health Drug and Alcohol Abuse Prevention Program (Supportive courtroom testimony involving persons related to fatal motor vehicle accidents)	Steno-Clerk	.25	Pers. **TOTAL**	4,231 **4,231**
	Department of Health Drug Abuse Prevention Program (Examinations of human specimens for drug content to furnish data to county coroners and source agencies)	Chem. II	2.0	Pers. Supp. Equip. **TOTAL**	63,390 17,000 83,000 **163,390**
Rhode Island	• **Federal** **Environmental Protection Agency** (Air pollution testing)	Chem. Lab. Aide	6.0 1.0	Pers. Supp. Equip. **TOTAL**	164,999 7,977 15,680 **188,656**
	Environmental Protection Agency (Water pollution testing)	Clerk	1.0	Pers. Supp. **TOTAL**	11,772 1,476 **13,248**
South Carolina	• **Federal** **U.S. Forestry Service** (Testing pesticide residue)	Chem.	1.0	Pers. Supp. Other **TOTAL**	10,950 7,301 6,596 **24,847**
	U.S. Department of Labor (Testing occupational health, and related hazards)	Chem.	3.0	Pers. Supp. Equip. Other **TOTAL**	53,125 10,637 946 2,789 **67,497**
	Department of Health and Human Services (Lab training)			Supp. **TOTAL**	106 **106**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
South Dakota	• **Federal** **Department of Water and Natural Resources** (Environmental chemistry and microbiology)	Chem. II Lab. Tech. Lab. Director	2.5 0.5 0.2	Pers. Supp. Equip. Other **TOTAL**	61,077 15,846 731 2,346 **80,000**
	Department of Agriculture — FIFRA (Pesticide analysis)	Chem. II	1.0	Pers. Supp. Equip. Other **TOTAL**	18,278 2,436 230 1,575 **22,519**
	Department of Public Safety (Blood alcohol — Breathalyzer and drugs)	Chem. I	0.7	Pers. Supp. Other **TOTAL**	12,607 4,074 2,932 **19,613**
	• **Local** **Fee Recovery** (Environmental Chemistry and Microbiology)	Chem. II Micro. II Lab. Tech. Lab. Director	0.1 1.0 0.5 0.2	Pers. Supp. Other **TOTAL**	59,263 15,375 2,986 **77,624**
Tennessee	• **State** **Hypothyroidism Program**	Lab. Tech.	.87	Pers. **TOTAL**	9,339 **9,339**
Texas	• **Federal** **Safe Orinking Water Grant** (Chemical and bacteriological analysis of drinking water)	Chem. Micro. Technician Clerical	8.0 1.0 10.0 1.0	Pers. Supp. Equip. Other **TOTAL**	345,900 99,900 63,200 112,000 **621,000**
	Cooperative Meat Inspection Program	Chem. Support	1.0 1.0	Pers. Other **TOTAL**	38,800 11,700 **50,500**
	Solid Waste Program	Chem.	1.0	Pers. Supp. Equip. Other **TOTAL**	2,400 10,900 5,200 700 **19,200**
	• **State** **Texas Department of Water Resources**	Micro. Chem. Technician Support Clerical	1.0 7.0 2.0 3.0 1.0	Pers. Supp. Other **TOTAL**	237,600 38,900 71,500 **348,000**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Texas (Cont.)	EPSOT	Chem. Med. Tech. Technician Clerical Support	3.0 2.0 2.0 2.0 1.0	Pers. Supp. Equip. Other TOTAL	213,100 83,600 15,000 69,400 381,100
Utah	• Federal COC Laboratory Training Contract #2 (Serves Lab Improvement Program - laboratory training)	— —	— —	Pers. Supp. TOTAL	10,984 355 11,339
	• State Department of Public Safety-Crime Lab (Forensic Toxicology)	—	—	Pers. Supp. TOTAL	100,500 32,500 133,000
	Department of Social Services — Division of Corrections (Urine drug and alcohol screens)	—	—	Pers. Supp. TOTAL	4,144 1,036 5,180
	Division of Community Health Services (Screening of IndoChina refugees for T.B.)	—	—	Pers. Supp. TOTAL	4,039 1,010 5,049
	Division of Environmental Health (Chlorophyll study — analyze water samples)	—	—	Pers. Supp. TOTAL	1,612 403 2,015
	(Clean Lakes Inv. — analyze water samples)	—	—	Pers. Supp. TOTAL	17,928 4,482 22,410
	(Six County — analyze water samples)	—	—	Pers. Supp. TOTAL	2,512 628 3,140
	(Lab. Pollution NPDS — analyze water samples)	—	—	Pers. Supp. TOTAL	16,800 4,200 21,000
	(Uintah 208 — analyze water samples)	—	—	Pers. TOTAL	10,964 10,964
	(Lab. Hazardous Waste — analyze hazardous waste samples)	—	—	Pers. Supp. Equip. TOTAL	56,474 7 2,770 59,251
	(Lab. Public Water Supvs. — analyze water samples)	—	—	Pers. TOTAL	9,155 9,155

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Utah (Cont.)	(Lab. Public Water Radiation — analyze water samples)	—	—	Pers. Supp. TOTAL	13,713 3,701 17,414
	(Clean Lakes — analyze water samples)	—	—	Pers. TOTAL	23,041 23,041
	(Deer Creek — analyze water samples)	—	—	Pers. TOTAL	17,579 17,579
	Industrial Commission Occupational Health (Analyze occupational health samples)	—	—	Pers. Supp. TOTAL	20,000 5,000 25,000
	• **Local** **Salt Lake County Health Dept.** (Screen for ova and parasites)	—	—	Pers. Supp. TOTAL	8,882 2,221 11,103
Vermont	• **Federal** **314-d**	—	—	Pers. TOTAL	6,955 6,955
	EPA — SWOA (Water testing)	—	—	Pers. Supp. TOTAL	92,000 22,535 114,535
	OSHA — 23q (VOSHA testing)	—	—	Pers. Supp. TOTAL	13,500 8,842 22,342
	Venereal Disease (Gonococcus testing)	—	—	Pers. TOTAL	9,391 9,391
Wisconsin	• **Federal** **Inland Lake Renewal Milwaukee** (Environmental water analysis)	Various	0.8	Pers. TOTAL	11,858 11,858
	Wasteload Allocation (Environmental water analysis)	Various	0.1	Pers. Equip. TOTAL	2,372 12,612 14,984
	Occupational Safety and Health (Occupational health sample analysis — voluntary)	Various	16.5	Pers. Supp. Equip. TOTAL	370,000 222,300 40,000 632,300
	Coastal Zone Management (Environmental water analysis)	Various	0.5	Pers. Supp. Equip. TOTAL	10,304 7,808 1,295 19,407

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Wisconsin (Cont.)	**O.W. Nitrates FY'81** (Environmental water analysis)	Various	0.2	Pers. Supp. Equip. **TOTAL**	3,843 1,318 15,567 **20,728**
	Nat'l Urban Runoff NC EXT. (Environmental water analysis)	Various	1.5	Pers. Supp. Equip. **TOTAL**	28,987 3,309 16,320 **48,616**
	SOWA Community FY'81 (Environmental water analysis)	Various	0.5	Pers. **TOTAL**	9,618 **9,618**
	Anal. O.W. Asbestos Pipe (Environmental water analysis)	Various	0.1	Pers. **TOTAL**	884 **884**
	Oak Ridge National Labs (Drinking water and health study)	Various	4.0	Pers. Supp. **TOTAL**	70,871 6,373 **77,244**
	MCH Lead Poisoning Prev. (Proficiency Testing Program)	Various	1.5	Pers. Supp. **TOTAL**	30,000 20,000 **50,000**
	Controlled Substance Analysis (Methods research on drug analysis in drivers)	Various	2.5	Pers. Supp. Equip. **TOTAL**	45,000 35,000 3,500 **83,500**
	MCH V Cytogenetics Laboratory (Cytogenetic studies)	Various	4.0	Pers. Supp. **TOTAL**	47,500 12,000 **59,500**
	MCH Title V AFP Screen (Screening of maternal serum for alpha fetoprotein)	Various	4.0	Pers. **TOTAL**	50,700 **50,700**
	• **State** **Washington County** (Environmental water analysis)	Various	0.1	Pers. Supp. Equip. **TOTAL**	472 390 6,750 **7,612**
	Elk Creek (Environmental water analysis)	Various	0.2	Pers. Supp. **TOTAL**	3,695 119 **3,814**
	Menominee River (Environmental water analysis)	Various	—	Pers. Equip. **TOTAL**	648 15,764 **16,412**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Wisconsin (Cont.)	**Non-point Monitoring** (Environmental water analysis)	Various	—	Supp. Equip. **TOTAL**	283 10,000 **10,283**
	Bur. Research Water Analysis (Environmental water analysis)	Various	0.2	Pers. Supp. Equip. **TOTAL**	3,150 138 21,650 **24,938**
	Inland Lakes Renewal-LKS (Environmental water analysis)	Various	0.1	Pers. Supp. Equip. **TOTAL**	1,855 3,628 23,515 **28,998**
	Solid and Hazardous Waste — Organic (Environmental organic analysis)	Various	—	Equip. **TOTAL**	42,000 **42,000**
	Brewery Creek (Environmental water analysis)	Various	—	Supp. Equip. **TOTAL**	460 1,576 **2,036**
	Oconto River (Environmental water analysis)	Various	—	Supp. **TOTAL**	730 **730**
	Galena River Watershed (Environmental water analysis)	Various	1.0	Pers. **TOTAL**	17,954 **17,954**
	Lake Mich. Tributaries (Environmental water analysis)	Various	—	Supp. Equip. **TOTAL**	46 530 **576**
	D.W. Analysis Asbestos Pipe (Environmental water analysis)	Various	0.1	Pers. **TOTAL**	600 **600**
	Phos. and High Flow (Environmental water analysis)	Various	0.5	Pers. **TOTAL**	8,746 **8,746**
	Analysis High Volume Filters (Environmental air analysis)	Various	1.0	Pers. Supp. **TOTAL**	16,375 774 **17,149**
	Non-Comm. D.W. Nitr. SOWA (Environmental water analysis)	Various	0.5	Pers. Supp. **TOTAL**	7,161 378 **7,539**
	Acid Deposition U.S.G.S. (Environmental water analysis)	Various	—	Supp. **TOTAL**	310 **310**

Table 3-4
GRANTS, CONTRACTS, OR SPECIAL SERVICE AGREEMENTS WITH OTHER DEPARTMENTS OR AGENCIES (PRIVATE, FEDERAL, STATE, OR LOCAL) — Continued

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs	
Wisconsin (Cont.)	**Acid Deposition — Research** (Environmental water analysis)	Various		Supp. **TOTAL**	21 **21**
	SOWA Analysis - Comm. Samples (Environmental water analysis)	Various	1.0	Pers. Supp. **TOTAL**	14,735 192 **14,927**
	National Urban Runoff FY'82 (Environmental water analysis)	Various	0.5	Pers. Supp. **TOTAL**	9,092 79 **9,171**
	Coastal Zone Management (Fish and effluent study)	Various	1.0	Pers. Supp. **TOTAL**	14,908 86 **14,994**
	Organic Compounds — Priority Pol. (Environmental organics analysis)	Various	1.5	Pers. **TOTAL**	25,394 **25,394**
	Chlor Organics Upper Wisconsin (Environmental organics analysis)	Various	0.5	Pers. Supp. **TOTAL**	8,806 36 **8,842**
	Solid-Hazardous Waste (Environmental organic analysis)	Various	2.0	Pers. Supp. Equip. **TOTAL**	40,496 6,613 11,475 **58,584**
	Formaldehyde Analysis (Mobile home formaldehyde testing)	Various	0.5	Pers. **TOTAL**	8,317 **8,317**
	Office for Highway Safety (Alcohol testing and testimony)	Various	1.0	Pers. Equip. **TOTAL**	20,000 30,000 **50,000**
	Radiation Monitoring (Radiation analysis)	Various	2.0	Pers. Supp. **TOTAL**	40,000 10,000 **50,000**
	Phosphorus Ban (Environmental water analysis)	Various	—	Supp. **TOTAL**	654 **654**
	• **Local** **Lafayette County Survey** (Environmental water analysis)	Various	—	Supp. **TOTAL**	206 **206**
Wyoming	• **Federal** **Highway Safety** (Alcohol analysis)	Chem. II Typist I	1.0 1.0	Pers. Supp. Equip. Other **TOTAL**	30,321 3,554 32 19,279 **53,186**

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Alabama	Pinworms	4.20	Test	56,964	Recycled to support services provided.
	Intestinal Parasites	8.75	Test		
	Sickle Cell	1.45	Test		
	Rubella	10.00	Test		
	VDRL	1.65	Test		
	GC	1.40	Test		
Arkansas	Premarital Blood Tests	1.00	Certificate	13,439	Used to retire bonds on building.
Colorado	Newborn Screening (6 tests)	5.00	Screen	584,000	All to Laboratory Division for operational expenses.
	Premarital Blood Tests (Rubella and Rh)	5.00	Specimen		
	Drinking Water Potability (Community)	3.00	Sample		
	Same (Federal and private)	5.00	Sample		
	Streptococcus Cultures	3.00	Specimen		
	Second PKU Test	2.00	Specimen		
	Drinking Water Chemistry:				
	Safe Water Inorganics	70.00	Sample		
	Trihalomethanes	160.00	Sample		
	Pesticides/Herbicides	90.00	Sample		
	Drugs of abuse	4.70	Specimen		
	Certification of Drinking Water Labs	150.00	Inspection		
Connecticut	Environmental Chemistry (Private Water companies)	3.99	R.V.	337,687	State General Fund.
	Strep Mailers	1.50	Mailer & Culture		
	Strep. Office Kits	.60	Kit		
	VDRL Antigen and Saline	5.00	Set		
	Premarital Syphilis	2.00	Test		
	Premarital Rubella	4.00	Test		
	Syphilis — VDRL	2.00	Test		
	Gonorrhea Cultures	2.00	Test		
	Pinworms	2.00	Test		
	Strep. Conjugate	20.00	Each		
	PKU, Galactosemia, Hypothyroidism	3.00	Set		
	Biochemistry (Industrial Toxicology)	3.99	R.V.		
	Hepatitis	5.00	Test		
Florida	Safe Drinking Water Analyses	184.00	32 Parameters	30,015	Returned to laboratory budget.
Georgia	Bacterial Culture	8.00	Specimen	185,000	Funds are deposited quarterly to State General Funds account to reimburse State for monies allocated Laboratory budget at fiscal year beginning.
	Brucellosis Serology	8.00	Specimen		
	Chlamydia Serology	8.00	Specimen		
	Chlamydia Isolation	8.00	Specimen		
	Fungus Culture	8.00	Specimen		
	Fungus Serology Battery	8.00	Specimen		
	Herpes Simplex Isolation	8.00	Specimen		
	Mycobacteria Cultures for ID	8.00	Specimen		
	Mycoplasma Pneumonia Serology	8.00	Specimen		
	PVA preserved fecal specimens	8.00	Specimen		
	Pertussis, smears for FA	8.00	Specimen		
	Rocky Mountain Spotted Fever and Murine Typhus Serology	8.00	Specimen		
	Shigella Typing	8.00	Specimen		
	Streptococcus Group A, Throat Culture	4.00	Specimen		
	Syphilis Serology, Reagin (except premarital)	1.00	Specimen		
	Syphilis Serology, FTA	4.00	Specimen		
	Toxoplasmosis Serology	8.00	Specimen		
	Tularemia Serology	8.00	Specimen		
	Virus, Isolation	8.00	Specimen		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Georgia (Cont.)	Virus, IF, Herpes, Varicella	8.00	Specimen		
	Virus Serology (1-4 agents)	8.00	Specimen		
	Quality Control Cultures, Bacterial or Fungal	8.00	Specimen		
	Acid fast smears for QC	8.00	Dozen		
	PVA fecal smears for QC	8.00	Dozen		
Idaho	Bacteriological Water Quality Tests (Total Coliform, Fecal Coliform, Fecal Strep.)	8.50	Each	–	Put into State General Fund and given back in form of receipts to appropriation.
	Most Probable Number Tests	10.00	Each		
	Total Aerobic Plate Count	6.00	Each		
	Miscellaneous Chemistry Tests				
	Alkalinity	7.00	Test		
	Alpha and Beta activity	16.00	Test		
	Ammonia	13.00	Test		
	Ash Free Dry Weight	18.00	Test		
	Bicarbonate Alkalinity	7.00	Test		
	BOD	17.00	Test		
	Boron	10.00	Test		
	Calcium	8.00	Test		
	Carbonate Alkalinity	7.00	Test		
	Chloride	9.50	Test		
	Chlorophyll A, B, and Pheophytin	24.00	Test		
	COD	16.00	Test		
	Color	5.00	Test		
	Cyanide	31.50	Test		
	Dissolved Oxygens	12.00	Test		
	Fluoride (Electrode)	8.50	Test		
	Fluoride (Distillation)	16.50	Test		
	Formaldehyde	10.00	Test		
	Hardness	7.00	Test		
	Hydrogen Sulfide	11.50	Test		
	Nitrogen				
	Ammonia	6.00	Test		
	Kjeldahl (block digest)	13.50	Test		
	Nitrate	12.00	Test		
	Nitrite	6.00	Test		
	Odor	11.50	Test		
	Oil and Grease	20.00	Test		
	Phenols	23.50	Test		
	pH	3.00	Test		
	Phosphorus				
	Inorganic	11.50	Test		
	Ortho-phosphate	8.50	Test		
	Total	11.50	Test		
	Residue				
	Settleable	6.50	Test		
	Suspended	7.00	Test		
	Total	8.00	Test		
	Total Dissolved	8.00	Test		
	Volatile Solids	9.00	Test		
	Vol. Susp. Solids	10.00	Test		
	Silica	12.00	Test		
	Specific Conductance	5.00	Test		
	Sulfate	10.00	Test		
	Surfactants	20.00	Test		
	Turbidity	5.00	Test		
	Tannin and Lignin	25.00	Test		
	TOC	30.00	Test		
	Volatile Petroleum Prod.	60.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Idaho (Cont.)	Elemental Analysis performed by atomic absorption, spectrophotometry				
	Aluminum and Chromium	9.00	Test		
	Barium	9.50	Test		
	Beryllium	4.00	Test		
	Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Sodium, Zinc,	8.00	Test		
	Molybdenum	11.50	Test		
	Vanadium	14.00	Test		
	Furnace Technique				
	Antimony, Cadmium, Chromium, Lead, Silver	11.00	Test		
	Arsenic	14.50	Test		
	Selenium	16.00	Test		
	Cold Vapor Technique				
	Mercury	16.00	Test		
	Mercury and other heavy metals (tissue, urine, blood, food)	25.00	Test		
	Lead				
	Tissue, Urine, Blood, Foods	17.00	Test		
	Pottery	8.00	Test		
	Milk Tests				
	Standard Plate Count	6.00	Test		
	Coliform	6.00	Test		
	Inhibitory Substances	6.00	Test		
	Added Water	4.00	Test		
	Wisconsin Mastitis Test	3.00	Test		
	DMSCC	6.00	Test		
	Brucellosis	3.00	Test		
	Misc. Tests				
	Salmonella in Food	15.00	Test		
	Coliform in Food	10.00	Test		
	Medical Tests				
	Throat Culture (Strep)	7.00	Test		
	Syphilis Serology	7.00	Test		
	Rubella Serology	9.00	Test		
	Rabies	25.00	Test		
	Vaginal Culture (Candida)	5.00	Test		
	E.P.S.D.T.				
	Urine Culture	10.00	Test		
	Hematocrit	3.00	Test		
	Microstix	1.00	Test		
	Urine Screen (Mononucleosis)	1.00	Test		
	Cytogenetic Test				
	Chromosome Analysis				
	Full study-peripheral	125.00	Test		
	High resolution elongated	150.00	Test		
	Bone Marrow	150.00	Test		
	Amniotic Fluid	250.00	Test		
	Tissue Biopsy	250.00	Test		
	Forensic Tests				
	Solid Dose Drug	20.00	Test		
	Leaf Material (Marijuana)	10.00	Test		
	Urine Toxicology	25.00	Test		
	Confirmation	15.00	Test		
	Blood Alcohol (with tox.)	10.00	Test		
	Quantitation	10.00	Test		
	Blood and Breath Alcohol	15.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Idaho (Cont.)	Organic Analyses				
	Water (Organochlorine)	80.00	Test		
	Water (EPA)	110.00	Test		
	Milk (Mills Method for organochlorine)	110.00	Test		
	Tissue (Mills Method for organochlorine)	110.00	Test		
	Blood (Organochlorine)	165.00	Test		
	Urine (Single Metabolite)	110.00	Test		
	Soil (Organochlorine)	110.00	Test		
	Vegetation (Organochlorine)	110.00	Test		
	Oils (PCB's)	5.00	Test		
Indiana	Private Water Bact./Chem.	5.00 + Postage	Test	–	Money is forwarded to the State Treasury General Fund, except for postage and handling fees (up to $4.00) for sending out private water bacteriology sample bottles. These fees remain in a State Board of Health revolving fund.
	Public Water Bacteriology	25.00	Year		
	Premarital Syphilis Serology	2.50	Specimen		
Iowa	MPN Potable Water	4.00	Sample	479,775	Estimate of receipts is built into general operating budget.
	Nitrate	8.00	Sample		
	BOD Effluent	14.00	Sample		
	Trace Metals	10.00–18.00	Sample		
	Radiation	20.00–90.00	Sample		
	Pesticides	48.00–104.00	Sample		
	Genetic Disease (4)	12.00	Sample		
	RCRA Parameters	290.00	Sample		
Kansas	Potable Water — Total Coliform	3.00	Sample	201,815	Placed in State General Fund.
	Indoor Swim Pools — Total Coliform	3.85	Sample		
	Outdoor Swim Pools — Total Coliform	8.33	Sample		
	Asbestos Identification	25.00	Sample		
	Drinking Water Pesticides	175.00	Sample		
	Drinking Water Trihalomethanes	30.00	Sample		
	Environmental Certification:	–	–		
	Microbiology	100.00	Laboratory		
	Chemistry and Hazardous Waste	20.00	Parameter		
	Water Chemistry consisting of: Calcium, Magnesium, Sodium, Potassium, Total Hardness, Carbonate Hardness, Non-Carbonate Hardness, Total Alkalinity, Bicarbonate Alkalinity, Carbonate, Bicarbonate, Chloride, Sulfate, Nitrate, Fluoride, pH, Turbidity, Specific Conductance, Total Dissolved Solids, Phosphate, Silica, Iron, Manganese	45.00	Test		
	Heavy Metals consisting of: Iron, Manganese, Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Mercury, Selenium, Silver, Zinc	40.00	Test		
	Chemical Analysis: Calcium, Magnesium, Sodium, Total Alkalinity, Chloride, Sulfate, Nitrate, Fluoride, Iron, Manganese, Total Hardness	30.00	Test		
	Total Hardness of Calcium & Magnesium	7.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Kansas (Cont.)	Complete Solids: Total Solids, Total Fixed Solids, Total Volatile Solids, Total Suspended Solids, Fixed Suspended Solids, Volatile Suspended Solids, Total Dissolved Solids, Fixed Dissolved Solids, Volatile Dissolved Solids	25.00	Test		
	Individual analysis:				
	Total Suspended Solids	5.50	Test		
	Alkalinity and Chloride	5.50	Test		
	Iron	6.50	Test		
	Manganese	6.50	Test		
	Sodium	5.50	Test		
	Sulfate	6.00	Test		
	Total Phosphate	5.00	Test		
	Ortho Phosphate	5.00	Test		
	Nitrate	4.50	Test		
	Fluoride	4.50	Test		
	5-Day BOD	15.00	Test		
	Chemical Oxygen Demand	7.50	Test		
	Phenol	30.00	Test		
	pH	4.00	Test		
	Ammonia Nitrogen	5.00	Test		
	Mercury	10.00	Test		
	Arsenic, Lead, Selenium	7.50	Test		
	Other Heavy Metals	6.50	Test		
	Coliform Determination	7.00	Test		
Maine	Microbiology	–	–	701,996	Dedicated Revenue for support of Laboratory operation.
	Water testing	–	–		
	Drugs — Toxicology	20.00	Hour		
	Blood alcohol	20.00	Sample		
	Racing Chemistry	675.00	Week		
	Mass Spectrometry	30.00	Hour		
	Pesticide Screen (EPA)	150.00	Sample		
Maryland	Testing for the following: PKU, MSUD, BCK, Methionine, Galactosemia, I_3 and I_4.	3.00	Specimen	300,000	Of $25,000 received from State of Delaware, 60% goes to Laboratories and 40% goes to General Fund of Maryland. Of the 275,000 collected for clinical lab services, 100% reverted to General Fund of Maryland.
	Clinical Laboratory Work:				
	Urinalysis				
	Urinalysis, routine, complete Urinalysis,	6.20	Test		
	routine, chemical qualitative (albumin, acetone, pH, glucose, occult blood, specific gravity)	3.50	Test		
	Urinalysis, routine, microscopic	2.75	Test		
	Chemistry				
	Albumin blood	6.50	Test		
	Bilirubin, total & direct blood	7.50	Test		
	Blood, feces occult, screening	6.00	Test		
	Calcium, total blood	8.50	Test		
	Chlorides, blood	6.50	Test		
	Cholesterol, total blood	6.50	Test		
	Creatinine, blood	6.00	Test		
	Creatinine, urine	6.00	Test		
	Cycloserine, blood	15.00	Test		
	FEP, blood	8.00	Test		
	Fluoride, urine	15.25	Test		
	Glucose, blood	4.50	Test		
	Glucose tolerance test 2-hr	7.00	Test		
	Glucose tolerance test 3-hr	10.00	Test		
	Glucose tolerance test 6-hr	13.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Maryland (Cont.)	Gonadotropin, chronic, pregnancy test, immunologic technic, qualitative, blood or urine	8.50	Test		
	Iron, total blood	7.25	Test		
	Iron, total & iron binding capacity	9.50	Test		
	Lactic dehydrogenase	6.00	Test		
	Lead, blood	12.00	Test		
	Lithium, blood	10.00	Test		
	Phosphatase, alkaline	6.50	Test		
	Phosphorus inorganic	5.00	Test		
	Potassium	5.25	Test		
	Pregnancy test	8.50	Test		
	Protein, total, serum, spinal fluid or urine	5.25	Test		
	Protein total, and ratio	7.25	Test		
	Sodium, blood	5.25	Test		
	Sugar (glucose)	4.50	Test		
	Transaminase, glutamic oxalacetic	9.75	Test		
	Transaminase, glutamic Pyruvic	8.75	Test		
	Triglycerides, blood	10.50	Test		
	Urea nitrogen, blood	4.50	Test		
	Urea Nitrogen, urine	5.50	Test		
	Uric acid, blood	4.50	Test		
	Uric acid, urine	4.50	Test		
	Cancer Cytology				
	Cervical genital smear	7.00	Test		
	Sputum & other body fluids	12.00	Test		
	Hematology				
	Blood count (WBC, Hb, Ht)	6.75	Test		
	Erythrocyte count	3.00	Test		
	White Blood count	3.00	Test		
	Differential count	4.25	Test		
	Hemoglobin colorimetric	3.00	Test		
	Hematocrit	3.00	Test		
	Hemogram, Indices	5.25	Test		
	Eosinophile count	5.00	Test		
	Platelet	5.25	Test		
	Reticulocyte count	5.25	Test		
	Sedimentation Rate	2.25	Test		
	Immunology				
	Antibody screening test	10.00	Test		
	Antibody titer	10.00	Test		
	Antibody identification	18.75	Test		
	Blood ABO grouping	3.25	Test		
	Blood, Rh typing Rho	4.40	Test		
	ABO grouping & Rh typing	7.25	Test		
	Prenatal work-up	11.25	Test		
	L-E factor, latex slide test	6.50	Test		
	Rheumatoid factor, latex	5.20	Test		
	Thyroglobulin autoantibodies	8.25	Test		
	L-E cells, fluorescent antibody	8.75	Test		
	Anti-Nuclear Antibody	12.50	Test		
	Dilantin (Phenytoin)	24.00	Test		
	Digoxin	24.00	Test		
	Gamma Glutamyl Transpeptidase	14.75	Test		
	Phenobarbitol	24.00	Test		
	Tegretol (Carbamazepine)	24.00	Test		
	Theophylline	24.00	Test		
	T_3 Uptake	12.00	Test		
	Thyroxine	13.50	Test		
	Thyroxine Index, Free	18.75	Test		
	Thyroid Stimulatine Hormone	32.50	Test		
	Valproate Sodium	26.00	Test		
	Valium	29.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Minnesota	Handling Fee	5.00	Specimen	498,500	General Fund.
Mississippi	Medicare/Medicaid Patients	Medicaid Rate	Specimen	459,667	Re-budgeted in Laboratory.
	Group A Strep Supplies	2.00	Kit		
	Sickle Cell Test	1.50	Specimen		
	"Prepaid" RPR Slips	1.00	Data Slip		
	TB Cultures	3600.00	Year		
	Bact. Exam of Water Samples	2.50	Sample		
	Inorganic Analyses of Water Samples	200.00	Set		
	Family Planning Patients only:				
	RPR	0.59	Specimen		
	GC	0.81	Specimen		
	Coulter	1.03	Specimen		
	Rubella	3.72	Specimen		
Montana	Bacterial Water Analysis	6.00	Sample	61,000	Funds from the analysis of water supplies are returned to the laboratory budget through an earmarked revenue account.
	Fecal Coliform	10.00	Sample		
	MPN Coliform	10.00	Sample		
	Nitrate - water	2.00	Sample		
	Full Chem. - public water	45.00	Sample		
	Drinking Water Analyses				
	Acidity	24.00	Test		
	Alkalinity, Arsenic, Selenium	10.50	Test		
	Aluminum, Barium	8.50	Test		
	Ammonia	10.05	Test		
	Calcium, Magnesium	4.10	Test		
	Beryllium, Antimony, Cobalt	44.70	Test		
	Boron	17.50	Test		
	Cadmium, Chromium, Copper, Iron, Lead, Manganese	3.90	Test		
	Chloride	11.40	Test		
	Chromium Hexavalent	74.40	Test		
	Chemical Oxygen Demand	45.30	Test		
	Color	46.05	Test		
	Cyanide	212.20	Test		
	Fluoride	13.65	Test		
	Hardness	8.20	Test		
	Lithium, Molybdenum, Nickel	44.70	Test		
	Nitrate	10.00	Test		
	Nitrogen Kjeldahl	23.25	Test		
	Oil and Grease	31.60	Test		
	Ortho-Phosphorus	7.10	Test		
	pH	1.40	Test		
	Phenols	80.65	Test		
	Total-Phosphorus	11.80	Test		
	Potassium, Sodium	4.10	Test		
	Silica, Strontium, Tin	44.70	Test		
	Silver	5.25	Test		
	Specific Conductance	1.90	Test		
	Sulfate	10.95	Test		
	Sulfide	84.65	Test		
	Total Suspended Solids	14.80	Test		
	Turbidity	4.70	Test		
	Vanadium	44.70	Test		
	Zinc	3.90	Test		
	Mercury	7.95	Test		
	Pesticides (Lindane, Endrin, Toxaphene, Methoxychlor)	75.20	Sample		
		Additionals 11.40			
	Herbicides (2, 4-0, silvex)	109.00	Sample		
	Total Trihalomethanes	273.60	Sample		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
New Jersey	RPR	3.00	Specimen	192,774	Divisional Revolving Fund.
	Rubella	4.00	Specimen		
	Potable Water/Bacteriology	9.00	Sample		
	MHA-TP	3.00	Specimen		
	Toxoplasmosis	6.00	Specimen		
	Blood Lead	6.00	Specimen		
New Mexico	Various types of analyses	3.30	RVU	346,000	Deposited to credit of Scientific Laboratory Division as budget revenue.
North Carolina	Coliform Test - Water	5.00	Test	483,823	State appropriation to laboratory is reduced by the amount of estimated receipts and in effect, becomes part of the annual operating budget. Receipts from N.C. Drinking Water Act are used to fund positions and purchase supplies, postage, equipment, etc. necessary to perform analytical services.
	Inorganic Chemicals	100.00	Sample		
	Organic Chemicals	120.00	Sample		
	Radiological Analyses	50.00	Sample		
	Sales of specimen collection outfits and biological products	varies	–		
North Dakota	Culture	5.00	Specimen	303,493	General Fund, contract fees into Health Dept. budget, interdepartmental fees into Lab budget.
	Culture and Sensitivity	7.00	Specimen		
	Stool Parasitology	5.00	Specimen		
	Syphilis Serology	2.00	Specimen		
	Virus Serology - Sample Antigen	7.00	Spec. pair		
	Virus Serology - Multiple Antigen	14.00	Spec. pair		
	Legionnaires'	10.00	Spec. pair		
	Sterility	3.00	Specimen		
	Throat Culture	2.00	Specimen		
	Microbiological (eff. 7/1/83):				
	Anaerobic Culture	9.00	Test		
	Blood, enteric, spinal fluid, urine	7.00	Test		
	Culture and susceptibility	9.00	Test		
	Parasite examination	7.00	Test		
	Lancefield Streptococcus	5.00	Test		
	Legionnaires' disease	15.00	Test		
	Serology (eff. 7/1/83):				
	Antistreptolysin (ASO)	4.00	Test		
	Bacterial Agglutination	3.00	Test		
	Blood grouping	2.00	Test		
	Ox-cell hemolysin	6.00	Test		
	Rubella screen	2.00	Test		
	Syphilis serology	3.00	Test		
	Tularemia	3.00	Test		
	Viral Test (eff. 7/1/83):				
	Complex	14.00	Test		
	Rabies	20.00	Test		
	Simple	7.00	Test		
	Rickettsial tests (eff. 7/1/83):				
	Proteus, OX-K, OX-2 and OX-19	4.00	Test		
	Rocky Mountain Spotted Fever	7.00	Test		
	Bacteriological Tests: (eff. 7/1/83):				
	Water - private supply	4.00	Test		
	Water - public	4.00	Test		
	Dairy Products: (eff. 7/1/83):				
	Abnormal milk test	1.00	Test		
	Coliform count	1.00	Test		
	Inhibitory substance	2.00	Test		
	Manufacturing grade milk	3.50	Test		
	Pasteurized milk sample, grade A	6.50	Test		
	Phosphatase test	2.00	Test		
	Raw milk, grade A, standard test	4.50	Test		
	Standard plate count	1.50	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
North Dakota (Cont.)	Handling fee for sending specimens to other laboratories	2.00	Specimen		
	Mineral Analyses:				
	Partial Analyses (Calcium, Conductivity, Iron, Magnesium, Nitrate, Sodium, Total Dissolved Solids, Total Hardness)	10.00	Test		
	Complete Analysis (Bicarbonate, Calcium, Carbonate, Chloride, Conductivity, Copper, Fluoride, Iron, Manganese, Magnesium, Nitrate, pH, Potassium, Sodium, Sulfate, Total alkalinity, Total dissolved solids, Total hardness, Zinc)	25.00	Test		
	Inorganic Analysis (Arsenic, Barium, Cadmium, Chromium, Fluoride, Lead, Mercury, Nitrate, Selenium, Silver)	100.00	Test		
	Organic Analysis:				
	Pesticides and herbicides	100.00	Test		
	Trihalomethanes	80.00	Test		
	Radiation Chemistry:				
	Gross alpha	15.00	Test		
	Radium separations	10.00	Test		
	Biochemical oxygen demand anal.	20.00	Test		
	Water for preparation of dialysate (Aluminum, Arsenic, Barium, Cadmium, Chromium, Copper, Cyanide, Iron, Lead, Mercury, Selenium, Silver)	60.00	Test		
Ohio	Microbiology	5.00	Sample	850,000	Personnel, supplies, maintenance, equipment, etc.
Oregon	New Screen	3.75	Specimen	600,000	offsets laboratory cost of operation.
	Congenital toxoplasmosis	0.80	Specimen		
	Virus Isolation	25.00	Specimen		
	Viral Serology	15.00	Specimen		
	Reference Culture	30.00	Specimen		
	Mycology Serology	15.00	Specimen		
	Mycology Culture	15.00	Specimen		
Pennsylvania	Licensing - Certification	50.00	–	96,000	–
South Carolina	Amebiasis Serology	6.00	Specimen	487,690	Budget for personnel and operating expenditures.
	Anticonvulsants	10.00	Specimen		
	Blood Alcohol	10.00	Specimen		
	Blood Lead	7.00	Specimen		
	Drug Abuse Screen	12.00	Specimen		
	Drug Abuse (quantitative)	25.00	Specimen		
	Enteric Culture	30.00	Specimen		
	Fluorescent Treponemal Antibody	10.00	Specimen		
	Fungal Susceptibility	30.00	Specimen		
	Gonorrhea Culture	2.00	Specimen		
	Hemoglobin Electrophoresis	4.00	Specimen		
	Hepatitis Serology	10.00	Specimen		
	Infectious Mononucleosis	10.00	Specimen		
	Phenylketonuria/hypothyroid	5.00	Specimen		
	Rh typing	5.00	Specimen		
	Rubella	5.00	Specimen		
	Syphilis Serology	2.00	Specimen		
	Throat Culture	7.00	Specimen		
	Ticks (RMSF)	15.00	Specimen		
	Toxoplasmosis	14.00	Specimen		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
South Dakota	Environmental Chemistry Environmental Microbiology	– –	WTU WTU	182,371	80,000 spent as Federal Funds; 77,624 deposited to a Revolving Fund; 24,747 to the General Fund.
Utah	Newborn Metabolic Screening (PKU, galactosemia, T_4, TSH)	8.00	Test	369,793	Used to offset cost of services provided.
	Environmental Chemistry:				
	Inorganics				
	Drinking Water	100.00	Test		
	Surface Water (Ammonia, arsenic, barium, boron, cadmium, calcium, chromium, copper, total and soluble iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, zinc, turbidity, specific conductivity, bicarbonate, carbon dioxide, carbonate, chloride, carbonate solids, total alkalinity, total hardness, chemical balance, sulfate, silica, hyroxide, nitrate, nitrite, phosphorus, orthophosphates, total dissolved solids, fluoride)	125.00	Test		
	Partial chemistry (Sodium, potassium, calcium, magnesium, carbonate, sulfate, chloride, hydroxide, bicarbonate, carbon dioxide, total alkalinity, total hardness, turbidity, specific conductance, total dissolved solids, total suspended solids, carbonate solids, chemical balance)	45.00	Test		
	Heavy Metals - Water/Lakes (arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, zinc)	40.00	Test		
	Heavy metals - Saline Samples/Sediment or Sludge	100.00	Test		
	Heavy Metals - Tissues	160.00	Test		
	Nutrients				
	Type 1 - Nitrate-sulfate	10.00	Test		
	Type 2 - Ammonia, nitrite, nitrate, total Kjeldahl nitrogen, chemical oxygen demand, total phosphorous, total organic carbon	25.00	Test		
	Type 3 - Ammonia, nitrite, nitrate, total Kjeldahl nitrogen, total phosphorus, orthophosphate	20.00	Test		
	Type 4 - Ammonia, nitrate, nitrite, total Kjeldahl, nitrogen, total phosphorus				
	Type 5 - Ammonia, nitrate, nitrite, orthophosphate	14.00	Test		
	Biochemical Oxygen Demand				
	Type 1 - total suspended solids	5.00	Test		
	Type 2 - BOD_5, pH, total suspended solids, chlorine residual	15.00	Test		
	Type 3 - Total BOD_5, Soluble BOD_5, pH, total suspended solids, chlorine residual	25.00	Test		
	Miscellaneous				
	Oil and Grease	14.00	Test		
	Cyanide	25.00	Test		
	Phenols	25.00	Test		
	Sulfides	15.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Utah (Cont.)	Organics				
	Pesticides				
	Type 1 - Endrin, Lindane, Methoxychlor: 2, 4, 5-TP, Silver, Toxaphene, Trihalomethanes	65.00	Test		
	Type 2 - Trihalomethanes	25.00	Test		
	Type 3 - Chlorinated Hydrocarbons, Organophosphate, Chlorophenoxy and Triazine Herbicides, Carbonates, PCB Screens	125.00	Test		
	Type 4 - Group screens as requested:				
	Initial Screen	45.00	Test		
	Each additional screen (Chlorinated Hydrocarbons, organophosphates, Chlorophenoxy Herbicides, Triazine Herbicides, Carbamates, PCB's)	20.00	Test		
	Miscellaneous:				
	Blood Lead	15.00	Test		
	Cholinesterase in plasma	20.00	Test		
	EP Toxicity Test:				
	Water Samples	200.00	Test		
	Oil, Sludge, or Soil	225.00	Test		
	Radiochemistry:				
	Gross alpha or beta	25.00	Test		
	Gross alpha and beta	35.00	Test		
	226 Radium (Deemanation)	65.00	Test		
	226 Radium (direct count) and 228 Radium (Barium ppt.)	125.00	Test		
	228 Radium (ppt./separation)	100.00	Test		
	89 Strontium	225.00	Test		
	90 Strontium	50.00	Test		
	Tritium	15.00	Test		
	Uranium	25.00	Test		
	Forensic Chemistry:				
	Blood alcohol	30.00	Test		
	Blood drug screen	75.00	Test		
	Drug preparations	30.00	Test		
	Expert testimony	25.00	Test		
	Marijuana identification	30.00	Test		
	Research and consultation	25.00	Hour		
	Urine drug screen	35.00	Test		
	Microbiology:				
	Enteric pathogens	6.00	Test		
	Heterophile	6.00	Test		
	Parasites	12.00	Test		
	Rubella antibody test	9.00	Test		
	Swimming pools (MF + SPC)	9.00	Test		
	Syphilis serology (RPR)	3.00	Test		
	TORCH	36.00	Test		
	Toxoplasma Antibody	15.00	Test		
	Water bacteriology	5.00	Test		
Washington	Metabolics	4.50	Test	400,000	Support laboratory operations.
	Water Bacteriology	6.00	Test		
	Radiation Drinking Water	50.00	Test		
	Premarital	5.00	Test		
	Water Chemistries	5.00 – 150.00	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Wisconsin	Asbestos:				
	Air Filter and Solid Material	25.00	Test	1,893,809	Used to offset costs of performing the tests.
	Asbestos in Water	95.00	Test		
	Bacteriology:				
	Aerobic Bacteria (Culture, Primary, Isolation & I.D. and Kirby - Bauer Anti-microbial Susceptibility Testing)	3.50	Test		
	Anaerobic Bacteria (Culture, Primary, Referred)	3.50	Test		
	Antimicrobial Assay (Enzyme immunoassay — gentamicin, tobramycin)	7.00	Test		
	Bioassay - all other antibiotics	7.00	Test		
	Antimicrobial susceptibility (Kirby - Bauer Disk diffusion, Broth Disc Methods, minimum Inhibitory Concentration and Minimum Bactericidal concentration, Serum Bactericidal Titer)	3.50	Each		
	Synergy Studies	14.00	Test		
	Beta Lactamase	3.50	Test		
	Blood for Culture	3.50	Test		
	Botulism:				
	Culture & Toxin Detection	10.50	Test		
	Toxin Detection only	7.00	Test		
	Clostridium difficile (Culture & Toxin Assay)	10.50	Test		
	Food poisoning, Bacterial	3.50	Test		
	Gonococcus, culture on Male Urethral Smears	3.50	Test		
	Legionella (Culture & Direct FA, respiratory specimens,	3.50	Test		
	Indirect FA, acute & convalescent sera)	3.50	Pair		
	Meningitis Antigens, Bacterial	10.50	Test		
	Mycobacteria	7.00	Test		
	Stock Cultures	3.50	Test		
	Tuberculosis	7.00	Test		
	Vincent's Organisms	3.50	Test		
	Albumin, Alkaline Phosphotase, ALT, Amylase, AST,	3.50	Test		
	Bilirubin	3.50	Test		
	Bilirubin (Total & Direct)	7.00	Test		
	BUN, Calcium	3.50	Test		
	Catecholamines	40.00	Test		
	Chloride, Cholesterol (HDL), Creatinine	3.50	Test		
	Creatinine, Clearance	7.00	Test		
	Cystine	3.50	Test		
	Digoxin, Folic Acid	7.00	Test		
	Formaldehyde (Air Sample)	35.00	Test		
	Gamma Glutamyl Transpeptidase	3.50	Test		
	Glucose	3.50	Test		
	5-Hydroxy -3 indoleacetic	7.00	Test		
	17-Hydroxycorticosteroids	7.00	Test		
	Hydroxyproline	25.00	Test		
	Iron, Serum, Total	3.50	Test		
	17-Ketosteroids	7.00	Test		
	17-Ketogenic Steroids	7.00	Test		
	Lactate Dehydrogenase	3.50	Test		
	Lipid Profile (Lipoproteins)	7.00	Test		
	Lithium	3.50	Test		
	Magnesium	3.50	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Wisconsin (Cont.)	3-Methoxy 4-4hydroxymandelic acid	7.00	Test		
	Newborn Screening (PKU, MSUD, Hypothyroidism, Galactosemia)	9.00	Specimen		
	Phenylalanine, Phosphatase-Alkaline, Phosphorus - Inorganic, Potassium, Protein	3.50	Test		
	Protein with electrophoresis	7.00	Test		
	Sodium, Serum	3.50	Test		
	Stones, Kidney	3.50	Test		
	Thyroid Function Testing:				
	T-3 Uptake	3.50	Test		
	T-4 RIA	7.00	Test		
	Thyroid Panel	7.00	Test		
	Thyroid Stimulating Hormone	7.00	Test		
	T-3 RIA	7.00	Test		
	Clinical Chemistry:				
	Transaminase (SGOT, SGPT)	3.50	Each		
	Triglycerides	3.50	Test		
	Urea Nitrogen (BUN)	3.50	Test		
	Uric Acid	3.50	Test		
	Vitamin B_{12}	7.00	Test		
	VMA	7.00	Test		
	Cytogenetics:				
	Buccal Smear for Sex Chromatin	10.00	Test		
	Chromosome Analysis from Blood	175.00	Test		
	Chromosome Analysis on Blood & Bone Marrow for Leukemia	175.00	Test		
	Prenatal Studies Using Amniotic Fluid for Chromosomal Analysis and AFP Determination	225.00	Test		
	Chromosome Analysis Using Skin	225.00	Test		
	Culture of Tissues & Mailing for Enzyme Studies	225.00	Test		
	Cytology:				
	Gynecologic Smear (Cervical, Endocervical, Vaginal Smear)	3.00	Test		
	Non-Gynecologic Cytology-Sputum, Bronchoscopy Brushings and Washings, Breast Discharge, Blood Fluids (Abdominal, Pericardial, Pleural, Spinal, Urine) Endoscopy Brushings & Washings, Needle Aspiration Biopsies, Other Scrapings	10.00	Each		
	Environmental Sciences:				
	Iron Bacteria	7.00	Test		
	Water (Bacteriology, Fluoride, Nitrate)	4.00	Sample		
	Water, Asbestos	95.00	Test		
	Immunology				
	Alpha Fetoprotein	7.50	Test		
	Alpha, Antitrypsin	3.50	Test		

Table 3-5
STATES REPORTING CHARGES FOR LABORATORY SERVICES — Continued

Lab.	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Wisconsin (Cont.)	Antinuclear Antibody, Antithyroid Antibody, Atypical Blood Factor Antibody, Blastomycosis, Brucellosis, Chlamydia trachomatis, Coccidioidomycosis, Cold Agglutinins, Complements, C-Reactive Protein, Cryptococcosis Antibody or Antigen, Epstein - Barr Virus, Genotype, Gonorrhea Antibody, Haptoglobin, Hepatitis, Histoplasmosis, Immunoglobulins, Infectious Mononucleosis, Mycoplasma (Hominis, Pneumoniae) Properdin Factor, Rh Factor, Rubella immune status, Salmonellosis, Streptococcal exoenzymes, syphilis (serum or spinal fluid), Toxoplasmosis, Tularemia, Ureaplasma Urealyticum	3.50	Each		
	Chlamydia trachomatis	7.00	Test		
	Complement Profile (Beta-A globulin, Beta-E globulin, Properdin Factor B)	7.00	Test		
	Fungal Serology (Blastomycosis, Coccidioidomycosis, Histoplasmosis)	7.00	Test		
	Hepatitis A Panel	10.00	Test		
	Hepatitis B Panel:				
	HB_s Ag, HB_s Ab, and HB_c Ab	15.00	Specimen		
	HB_e Ag and HB_eAb	10.00	Specimen		
	Immunoglobulin Quantitation	7.00	Test		
	IM Syndrome (Paired sera)	14.00	Pair		
	Prenatal Screen	15.00	Specimen		
	Sexually Transmitted Disease	15.00	Specimen		
	TORCH SCREEN	7.00	Specimen		
	Mycology (Fungus)				
	Antimicrobial Susceptibility Testing	7.00	Test		
	Culture (Primary)	3.50	Test		
	Culture, (Referred)	7.00	Test		
	Parasitology				
	Fecal Examination, Malaria & Microfilaria Blood Parasites	7.00	Test		
	Pinworms, arthropods, insects	3.50	Test		
	Toxicology				
	Alcohols/Volatiles	3.50	Test		
	Therapeutic Drug Monitoring	3.50	Test		
	Comprehensive Drug Screening	3.50	Test		
	Drugs of Abuse	3.50	Test		
	Drug identification	3.50	Test		
	Toxic Metals	3.50	Test		
	Other				
	Carbon monoxide, Cholinesterase,	3.50	Test		
	Cyanide, Erthrocyte Protoporphyrin	3.50	Test		
	Virology				
	Isolation Specimen	3.50	Test		
	Serology	3.50	Test		
	Rabies	9.00	Test		

SECTION IV

WORKLOAD REPORTING CATEGORIES

DIAGNOSTIC WORKLOAD SECTION

THE FOLLOWING DEFINITIONS APPLY TO CATEGORIES I THROUGH XII:

Workload is reported by the number of specimens in each category or sub-category. Types of procedures *routinely** used in your laboratory are to be indicated by checking the appropriate box. The Association (ASTPHLD) is interested in the type of procedures routinely followed in your laboratory. Therefore, do not check those procedures that you have the capability of performing but do not do so on a routine basis.

*Definition of *Routine* — Those tests performed as part of your standard operating procedures on a specimen or sample.

Specimen/Sample

Any material received in the lab for testing in a workload category or sub-category or a material which is divided into aliquots for testing in multiple categories or sub-categories is counted as *one specimen for each category or sub-category*. 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 sub-category in which it is tested.

Table 4-1
I. DIAGNOSTIC BACTERIOLOGY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Diagnostic Bacteriology Specimens	A Nasopharyngeal Specimens	B Mycobacterial Specimens	C Enteric Specimens	D Gonococcus Specimens	E Anaerobic Specimens	F Other Bacteriology Specimens
Total	**6,160,079**	**771,078**	**432,251**	**181,749**	**4,527,579**	**10,096**	**237,326**
Average	128.335	16.406	9.397	3.786	94,325	240	5.274
New England	**305,758**	**108,494**	**13,602**	**11,863**	**163,500**	**470**	**7,829**
Conn.	102,294	40,986	6,309	7,967	41,339	167	5,526
Mass.	–	–	–	–	–	–	–
Me.	23,149	906	3,206	452	17,803	99	683
N.H.	34,519	1,982	841	285	30,194	–	1,217
R.I.	130,591	64,501	1,858	1,913	61,939	30	350
Vt.	15,205	119	1,388	1,246	12,225	174	53
Middle Atlantic	**246,781**	**81**	**17,699**	**9150**	**216,985**	**45**	**2,821**
N.J.	238,788	–	14,091	5,695	216,962	25	2,015
N.Y.	–	–	–	–	–	–	–
Pa.	7,993	81	3,608	3,455	23	20	806
East North Central	**361,999**	**38,409**	**29,275**	**26,871**	**250,291**	**1,113**	**16,040**
Ill.	79,073	1,927	5,520	9,636	60,249	93	1,648
Ind.	10,117	231	2,457	2,341	4,656	18	414
Mich.	168,023	3,263	12,879	8,839	132,386	333	10,323
Ohio	67,905	26,310	3,561	1,505	35,731	262	536
Wisc.	36,881	6,678	4,858	4,550	17,269	407	3,119
West North Central	**467,941**	**147,450**	**28,041**	**16,173**	**257,489**	**804**	**17,984**
Ia.	101,198	33,669	2,433	1,555	58,060	365	5,116
Kans.	60,610	11,916	6,207	4,505	37,460	44	478
Minn.	121,159	2,445	12,267	2,194	104,017	61	175
Mo.	124,929	71,263	–	4,565	48,152	106	843
Nebr.	–	–	–	–	–	–	–
N.D.	38,673	19,353	3,388	2,153	3,851	210	9,718
S.D.	21,372	8,804	3,746	1,201	5,949	18	1,654
South Atlantic	**2,022,017**	**166,277**	**128,432**	**61,376**	**1,619,852**	**2,448**	**43,632**
Del.	42,953	7,137	–	562	33,911	–	1,343
D.C.	85,941	12,526	908	1,813	70,694	–	–
Fla.	679,773	21,896	44,369	29,978	576,062	349	7,119
Ga.	255,253	8,309	18,812	3,560	220,517	177	3,878
Md.	430,282	28,587	14,364	8,472	357,957	242	20,660
N.C.	21,609	947	14,248	3,902	473	590	1,449
S.C.	184,525	1,198	10,644	961	165,184	580	5,958
Va.	222,456	48,266	18,643	11,565	141,319	510	2,153
W Va.	99,225	37,411	6,444	563	53,735	–	1,072
East South Central	**891,959**	**55,357**	**77,416**	**8,881**	**742,483**	**1,436**	**6,386**
Ala.	342,241	683	29,845	2,175	308,538	124	876
Ky.	16,713	1,299	11,954	904	2,134	6	416
Miss.	225,707	25,126	15,895	3,848	177,693	–	3,145
Tenn.	307,298	28,249	19,722	1,954	254,118	1,306	1,949
West South Central	**1,191,344**	**38,566**	**89,184**	**18,856**	**918,136**	**1,737**	**124,865**
Ark.	116,667	13,472	23,750	1,282	77,855	107	201
La.	144,377	3,041	8,195	4,742	126,018	1,019	1,362
Okla.	127,877	16,688	10,652	1,559	98,283	91	604
Tex.	802,423	5,365	46,587	11,273	615,980	520	122,698
Mountain	**365,799**	**177,515**	**17,629**	**9,281**	**153,415**	**1,071**	**6,888**
Anz.	6,144	196	3,172	1,972	123	166	515
Colo.	63,244	34,846	1,604	1,581	25,028	185	–
Ida.	39,804	1,967	2,106	1,729	32,925	3	1,074
Mont.	14,937	1,091	2,424	482	10,350	590	–
Nev.	–	–	–	–	–	–	–
N.M.	76,256	3,290	5,909	2,486	59,391	82	5,098
Utah	24,304	105	2,051	1,004	21,012	45	87
Wyo.	141,110	136,020	363	27	4,586	–	114
Pacific	**300,141**	**38,911**	**28,543**	**18,993**	**202,216**	**969**	**10,509**
Alaska	89,970	21,751	8,632	1,457	56,044	82	2,004
Cal.	21,270	433	976	6,238	12,581	104	938
Hawaii	145,729	13,259	8,575	6,876	109,674	671	6,674
Ore.	7,437	1,803	3,300	1,284	663	39	348
Wash.	35,735	1,665	7,060	3,138	23,254	73	545
Territories	**6,340**	**18**	**2,430**	**305**	**3,212**	**3**	**372**
Guam	6,340	18	2,430	305	3,212	3	372
P.R.	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-2
I. DIAGNOSTIC BACTERIOLOGY
A. Nasopharyngeal Specimens

Lab & Region	1. Streptococcus Beta Hemolytic, Group A						
	Number of Specimens	Procedures Used					
		Culture	FA	Sero-grouping	Sero-typing	Bacitracin Disc	Other
Total	**729,685**						
Average	16,215						
New England	**107,712**						
Conn.	40,462	X	X	X	–	X	–
Mass.	–	–	–	–	–	–	–
Me.	774	X	X	X	X	X	–
N.H.	1,982	–	–	–	–	–	–
R.I.	64,441	X	X	–	–	–	–
Vt.	53	–	–	–	–	–	–
Middle Atlantic	**19**						
N.J.	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–
Pa.	19	X	–	X	–	X	–
East North Central	**30,122**						
Ill.	503	X	–	–	–	–	–
Ind.	–	–	–	–	–	–	–
Mich.	2,346	X	–	–	–	X	–
Ohio	20,889	X	X	X	–	–	–
Wisc.	6,384	X	–	–	–	X	–
West North Central	**142,925**						
Ia.	33,593	X	X	X	X	–	–
Kans.	11,761	X	X	–	–	–	–
Minn.	3	X	–	X	–	–	–
Mo.	70,761	X	X	–	–	–	–
Nebr.	–	–	–	–	–	–	–
N.D.	19,291	X	X	X	–	–	–
S.D.	7,516	X	X	–	–	–	–
South Atlantic	**143,406**						
Del.	7,137	X	X	–	–	–	–
D.C.	5,026	–	–	–	–	–	–
Fla.	10,749	X	–	–	–	X	–
Ga.	7,545	X	X	–	–	–	–
Md.	26,918	X	–	X	–	X	–
N.C.	767	X	X	X	–	–	–
S.C.	1,171	X	X	X	–	X	–
Va.	46,708	X	X	X	–	–	–
W.Va.	37,385	X	X	–	–	–	–
East South Central	**55,059**						
Ala.	616	X	X	–	–	–	–
Ky.	1,261	X	X	X	–	–	–
Miss.	25,126	X	X	–	–	–	–
Tenn.	28,056	–	X	–	–	–	–
West South Central	**37,464**						
Ark.	13,470	X	X	X	X	–	–
La.	2,838	X	X	X	–	–	–
Okla.	16,461	X	X	X	–	–	–
Tex.	4,695	X	X	X	X	–	–
Mountain	**176,341**						
Ariz.	163	X	X	X	X	–	Biochemicals
Colo.	34,800	X	X	–	–	–	–
Ida.	1,909	X	X	X	–	X	–
Mont.	128	X	–	X	–	–	–
Nev.	–	–	–	–	–	–	–
N.M.	3,276	X	X	X	–	X	–
Utah	55	X	–	–	–	X	–
Wyo.	136,010	X	X	X	–	–	–
Pacific	**36,619**						
Alaska	21,335	X	X	X	–	X	–
Cal.	–	–	–	–	–	–	–
Hawaii	13,009	X	X	X	X	–	–
Ore.	1,635	X	X	–	–	–	–
Wash.	640	X	X	–	–	–	–
Territories	**18**						
Guam	18	X	–	–	–	X	–
P.R.	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-3
I. DIAGNOSTIC BACTERIOLOGY
A. Nasopharyngeal Specimens

Lab. & Region	2. Diphtheria				
	Number of Specimens	Procedures Used			
		Direct Smear	Culture	Confirm. Sugars	Toxo-genicity
Total	12,653				
Average	452				
New England	9				
Conn.	2	X	X	X	X
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	–	–	–	–	–
R.I.	5	X	X	X	X
Vt.	2	–	–	–	–
Middle Atlantic	12				
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	12	–	–	–	–
East North Central	17				
Ill.	–	–	–	–	–
Ind.	–	–	–	–	–
Mich.	13	–	X	X	X
Ohio	–	–	–	–	–
Wisc.	4	X	X	X	X
West North Central	1,294				
Ia.	2	X	X	X	X
Kans	1	–	X	X	–
Minn.	28	–	X	X	X
Mo.	–	–	–	–	–
Nebr.	–	–	–	–	–
N.D.	10	–	X	X	X
S.D.	1,253	X	X	X	X
South Atlantic	10,762				
Del.	–	–	–	–	–
D.C.	–	–	–	–	–
Fla.	10,749	–	X	X	X
Ga.	–	–	–	–	–
Md.	–	–	–	–	–
N.C.	–	X	X	X	X
S.C.	1	X	X	–	X
Va.	12	–	X	X	X
W.Va.	–	–	–	–	–
East South Central	36				
Ala.	24	–	X	X	X
Ky.	–	–	–	–	–
Miss.	–	–	–	–	–
Tenn.	12	X	X	X	X
West South Central	61				
Ark.	2	X	X	X	–
La.	7	X	X	–	–
Okla.	9	X	X	X	X
Tex.	43	X	X	X	X
Mountain	84				
Ariz.	31	X	X	X	X
Colo.	28	X	X	–	X
Ida.	11	X	X	X	X
Mont.	–	–	–	–	–
Nev.	–	–	–	–	–
N.M.	14	X	X	X	X
Utah	–	–	–	–	–
Wyo.	–	–	–	–	–
Pacific	378				
Alaska	21	X	X	X	–
Cal.	–	X	X	X	X
Hawaii	23	X	X	X	X
Ore.	7	X	X	X	X
Wash.	327	X	X	X	X
Territories	–				
Guam	–	–	–	–	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-4
I. DIAGNOSTIC BACTERIOLOGY
A. Nasopharyngeal Specimens

Lab & Region	3. Pertussis				
	Number of Specimens	Procedures Used			
		Culture	FA	Serological	Biochemicals
Total	**6,681**				
Average	176				
New England	**274**				
Conn.	73	X	X	–	X
Mass.	–	–	–	–	–
Me	132	–	–	–	–
N.H.	–	–	–	–	–
R.I.	5	X	X	–	X
Vt.	64	–	–	–	–
Middle Atlantic	**36**				
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	36	X	X	–	X
East North Central	**3,018**				
Ill	1,424	X	X	–	–
Ind.	231	–	X	–	–
Mich.	887	X	X	–	X
Ohio	186	X	X	–	X
Wisc	290	X	X	–	X
West North Central	**674**				
Ia.	39	X	X	–	–
Kans.	26	–	X	–	–
Minn.	63	X	X	X	X
Mo.	459	X	X	–	–
Nebr.	–	–	–	–	–
N.D.	52	X	X	–	–
S.D	35	X	X	–	–
South Atlantic	**1,573**				
Del.	–	–	–	–	–
D.C.	–	–	–	–	–
Fla.	398	–	X	–	–
Ga.	764	X	X	–	–
Md.	114	X	–	–	–
N.C.	180	X	X	–	X
S.C.	–	X	X	–	X
Va.	91	–	X	–	–
W.Va.	26	–	X	–	–
East South Central	**262**				
Ala.	43	X	X	–	X
Ky.	38	–	X	–	–
Miss	–	–	X	–	–
Tenn.	181	X	X	X	X
West South Central	**317**				
Ark.	–	–	–	–	–
La.	196	X	X	X	–
Okla.	103	X	X	–	X
Tex.	18	X	X	X	X
Mountain	**137**				
Ariz.	2	X	–	–	–
Colo.	18	X	X	–	–
Ida.	47	X	X	X	X
Mont.	40	X	X	–	–
Nev.	–	–	–	–	–
N.M.	–	X	X	–	X
Utah	20	X	X	–	X
Wyo.	10	X	X	–	–
Pacific	**390**				
Alaska	53	X	X	–	X
Cal.	–	X	X	X	X
Hawaii	48	X	X	–	–
Ore.	124	X	X	–	–
Wash.	165	X	X	–	–
Territories	–				
Guam	–	–	–	–	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-5
I. DIAGNOSTIC BACTERIOLOGY
A. Nasopharyngeal Specimens

Lab	Number of Specimens	4. Other Nasopharyngeal Specimens Disease — Procedures Used
Total	22,174	
Average	964	
Alaska	342	Meningitidis, influenza, *S. pneumoniae*, staphylococcus — culture and biochemicals
Cal.	433	Infant botulism — cultures, smears; botulism specimens — animal inoculations
Conn.	449	Legionnaires' disease — FA; Vincent's infection — smear. Speciation, biochemicals
D.C.	7,500	Urine culture, miscellaneous — antibiotic susceptibility
Hawaii	179	Meningococcus, staphylococcus, *H. influenzae* — culture identification
Ia.	35	Vincent's angina — direct examination; *Staphylococcus aureus* — culture and identification; Streptococcus — Lancefield group
Kans.	128	Legionella — direct FA and culture; Leptospira — culture and darkfield
Md.	1,555	Bacteremia, bactenal — culture
Mich.	17	Vincent's angina — slide
Minn.	2,351	Referred cultures for identification — smear, biochemical, serological, animal pathology, toxin
Mo.	43	Reference streptococcus — grouping and biochemicals
Mont.	923	Streptococcus (groups B, C, D, E, F, G), Neissena sp., Staphylococcus sp., Haemophilus sp., Bacillus sp., Branhamella sp., Bacteroides sp., Pasteurella sp., Acinetobacter sp., Moraxella sp., Pseudomonas sp., Corynebactenum sp. — culture and biochemicals
N.J.	115	C. *jejuni*, C. *perfringens*, *S. aureus* — plating on selective media, confirmatory tests
Ohio	5,235	Staphylococcus, aerobic
Okla.	115	Haemophilus spp., streptococcus spp. (not group A), Bordetella spp. (not pertussis), miscellaneous bactenology — culture and biochemicals
Ore.	37	Miscellaneous URI- cultures for identification
Pa.	14	Staphylococcus in food handlers — cultures; Streptococcus, Beta hemolytic, not group A
R.I.	50	Meningococcus — culture, biochemicals, serogrouping; staphylococcus — culture, biochemicals; pneumococcus — culture, biochemicals; *H. influenzae* — culture, factors, typing
S.C.	26	Staphylococcus, streptococcus — non Beta hemolytic, haemophilus
Tex.	609	–
Utah	30	Meningitis — culture, biochemicals; Legionnaires' disease — culture, direct FA, biochemicals
Va.	1,455	Meningitidis, pneumococcus, *H. influenzae*, Staphylococcus — phage
Wash.	533	Legionnaires' disease, *N. meningitidis*, *S. aureus* — all bacterial culture and identification methods

Table 4-6
I. DIAGNOSTIC BACTERIOLOGY
B. Mycobacterial Specimens

Lab & Region	Number of Specimens	Procedures Used							
		Direct Smear	Concentrate Smear	Culture	Direct Suscept.- # of Drugs	Indirect Suscept.- # of Drugs	# of Biochemicals	Species Ident.	Other
Total	**432,251**								
Average	9,397								
New England	**13,602**								
Conn.	6,309	–	X	X	–	9	19	X	–
Mass.	–	–	–	–	–	–	–	–	–
Me.	3,206	X	X	X	6	6	8	X	Atypicals, unclassified
N.H.	841	X	X	X	–	–	4	–	–
R.I.	1,858	–	X	X	–	7	12	X	–
Vt.	1,388	–	X	X	6	6	–	X	–
Middle Atlantic	**17,699**								
N.J.	14,091	–	X	X	6	6	12	X	–
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	3,608	X	X	X	5	5	12	X	Indirect susceptibility to secondary drugs, temperature studies, light studies
East North Central	**29,275**								
Ill.	5,520	–	X	X	–	5	9	X	–
Ind.	2,457	X	X	X	6	6	6	X	–
Mich.	12,879	–	X	X	–	9	11	X	–
Ohio	3,561	–	X	X	10	10	10	X	–
Wisc.	4,858	X	X	X	7	7	10	X	–
West North Central	**28,041**								
Ia.	2,433	X	X	X	8	8	14	X	–
Kans.	6,207	X	X	X	9	9	18	X	–
Minn.	12,267	–	X	–	3	–	15	X	–
Mo.	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	3,388	–	X	X	5	5	9	X	–
S.D.	3,746	X	X	X	4	4	3	X	–
South Atlantic	**128,432**								
Del.	–	–	–	–	–	–	–	–	–
D.C.	908	X	X	X	–	4	8	X	–
Fla.	44,369	–	X	X	–	7	12	X	–
Ga.	18,812	X	X	X	5	9	12	X	–
Md.	14,364	X	X	X	4	9	9	X	–
N.C.	14,248	–	X	X	4	4	10	X	–
S.C.	10,644	X	X	X	7	7	10	X	–
Va.	18,643	–	X	X	4	4	12	X	–
W.Va.	6,444	–	X	X	9	9	6	X	–
East South Central	**77,416**								
Ala.	29,845	–	X	X	8	8	21	X	Serotype atypical mycobacter
Ky.	11,954	–	X	X	9	9	9	X	Fluorochrome smear
Miss.	15,895	–	–	–	–	7	6	X	–
Tenn.	19,722	–	X	X	–	6	–	–	–
West South Central	**89,184**								
Ark.	23,750	–	X	X	5	5	7	X	–
La.	8,195	X	X	X	–	5	13	X	–
Okla.	10,652	–	X	X	–	5	8	X	–
Tex.	46,587	X	X	X	5	8	14	X	–
Mountain	**17,629**								
Ariz.	3,172	X	X	X	8	8	12	X	–
Colo.	1,604	X	X	X	–	3	2	X	–
Ida.	2,106	X	X	X	4	4	–	X	–
Mont.	2,424	X	X	X	7	7	11	X	–
Nev.	–	–	–	–	–	–	–	–	–
N.M.	5,909	–	X	X	5	5	8	X	–
Utah	2,051	X	X	X	5	10	12	X	–
Wyo.	363	–	X	X	–	–	–	–	–
Pacific	**28,543**								
Alaska	8,632	X	X	X	–	5	6	X	–
Cal.	976	–	X	X	5	7	10	X	–
Hawaii	8,575	X	X	X	5	5	10	X	–
Ore.	3,300	–	X	X	–	–	13	X	–
Wash.	7,060	–	X	X	5	5	10	X	–
Territories	**2,430**								
Guam	2,430	X	X	X	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 4-7
I. DIAGNOSTIC BACTERIOLOGY
C. Enteric Specimens

Lab & Region	Number of Specimens	Procedures Used							
		Primary Plating	Enrichment Plating	Biochemicals	FA	Serogrouping	Serotyping	Phage Typing, S. typhi	Other
Total	**181,749**								
Average	3,786								
New England	**11,863**								
Conn.	7,967	X	X	X	–	X	X	–	–
Mass.	–	–	–	–	–	–	–	–	–
Me.	452	X	X	X	–	X	X	–	–
N.H.	285	X	X	X	–	X	–	–	–
R.I.	1,913	X	X	X	–	X	X	–	–
Vt.	1,246	X	X	X	–	X	X	–	–
Middle Atlantic	**9,150**								
N.J.	5,695	X	X	X	–	X	X	–	–
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	3,455	X	X	X	–	X	X	X	Food-borne outbreak specimens
East North Central	**26,871**								
Ill.	9,636	X	X	X	–	X	X	X	–
Ind.	2,341	–	–	–	–	–	–	–	–
Mich.	8,839	X	X	X	–	X	X	–	–
Ohio	1,505	X	X	X	–	X	X	–	–
Wisc.	4,550	X	X	X	–	X	X	–	–
West North Central	**16,173**								
Ia.	1,555	X	X	X	–	X	X	–	–
Kans.	4,505	X	X	X	X	X	X	–	–
Minn.	2,194	X	X	X	–	X	X	X	–
Mo.	4,565	X	X	X	–	X	X	–	–
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	2,153	X	X	X	–	X	X	–	–
S.D.	1,201	X	X	X	X	X	X	–	–
South Atlantic	**61,376**								
Del.	562	X	X	X	–	X	X	–	–
D.C.	1,813	–	X	–	–	X	X	–	Salmonella flagellar typing for other facilities
Fla.	29,978	X	X	X	–	X	X	–	–
Ga.	3,560	X	X	X	–	X	X	X	–
Md.	8,472	X	X	X	–	X	X	–	–
N.C.	3,902	X	X	X	–	X	X	–	Campylobacter identification
S.C.	961	X	X	X	–	X	X	–	–
Va.	11,565	X	X	X	–	X	X	–	–
W.Va.	563	X	X	X	–	X	X	–	–
East South Central	**8,881**								
Ala.	2,175	X	X	X	–	X	X	–	–
Ky.	904	X	X	X	X	X	X	X	–
Miss.	3,848	X	X	X	X	X	X	–	Subculture
Tenn.	1,954	X	X	X	–	X	X	–	–
West South Central	**18,856**								
Ark.	1,282	X	X	X	–	X	X	–	–
La.	4,742	X	X	X	–	X	X	X	–
Okla.	1,559	X	X	X	–	X	X	–	–
Tex.	11,273	X	X	X	X	X	X	X	–
Mountain	**9,281**								
Ariz.	1,972	X	X	X	X	X	X	–	–
Colo.	1,581	X	X	X	–	X	X	–	–
Ida.	1,729	X	X	X	–	X	X	–	Yersinia, campylobacter
Mont.	482	X	X	X	–	X	–	–	–
Nev.	–	–	–	–	–	–	–	–	–
N.M.	2,486	X	X	X	–	X	X	–	–
Utah	1,004	X	X	X	–	X	X	–	–
Wyo.	27	X	X	X	–	X	–	–	–
Pacific	**18,993**								
Alaska	1,457	X	X	X	X	X	X	–	API
Cal.	6,238	X	X	X	X	X	X	X	Sensitivity tests, campylobacter
Hawaii	6,876	X	X	X	X	X	X	X	–
Ore.	1,284	X	X	X	–	X	X	–	–
Wash.	3,138	X	X	X	–	X	X	–	–
Territories	**305**								
Guam	305	X	X	X	–	X	X	–	–
P.R.	–	X	X	X	–	X	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 4-8
I. DIAGNOSTIC BACTERIOLOGY
D. Gonococcus Specimens

Lab & Region	Number of Specimens	Procedures Used						
		Smear	Culture	Oxidase Reaction	FA	Bio-chemical	Beta-Lactamase	Other
Total	**4,527,579**							
Average	94,325							
New England	**163,500**							
Conn.	41,339	X	X	X	X	X	X	–
Mass.	–	–	–	–	–	–	–	–
Me.	17,803	X	X	X	X	X	X	–
N.H.	30,194	X	X	X	X	X	X	–
R.I.	61,939	X	X	X	X	X	X	–
Vt.	12,225	X	X	X	X	X	X	–
Middle Atlantic	**216,985**							
N.J.	216,962	X	X	X	–	X	X	X
N.Y.	–	–	–	–	–	–	–	–
Pa.	23	X	X	X	–	X	X	–
East North Central	**250,291**							
Ill.	60,249	X	X	X	–	X	X	–
Ind.	4,656	X	–	X	X	X	X	Spectinomycin resistance
Mich.	132,386	X	X	X	–	X	X	–
Ohio	35,731	X	X	–	X	X	X	–
Wisc.	17,269	X	X	X	–	X	X	Coagglutination
West North Central	**257,489**							
Ia.	58,060	X	X	X	X	X	X	–
Kans.	37,460	X	X	X	X	X	X	–
Minn.	104,017	X	X	X	X	X	X	Catalase
Mo.	48,152	X	X	X	X	X	X	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	3,851	X	X	X	X	X	X	–
S.D.	5,949	X	X	X	X	X	X	–
South Atlantic	**1,619,852**							
Del.	33,911	X	X	X	–	X	X	–
D.C.	70,694	X	X	X	–	X	X	Coagglutination
Fla.	576,062	X	X	X	–	X	X	–
Ga.	220,517	X	X	X	–	X	X	Coagglutination
Md.	357,957	X	X	X	X	X	X	–
N.C.	473	X	X	X	–	X	X	–
S.C.	165,184	X	X	X	X	X	X	–
Va.	141,319	X	X	X	X	X	X	–
W.Va.	53,735	–	–	–	–	–	–	–
East South Central	**742,483**							
Ala.	308,538	X	X	X	X	X	X	Spectinomycin sensitivity on PPNG
Ky.	2,134	X	X	X	X	X	X	–
Miss.	177,693	X	X	X	–	X	X	Gram stain and culture, drug susceptibility
Tenn.	254,118	X	X	X	X	X	X	–
West South Central	**918,136**							
Ark.	77,855	X	X	X	X	X	X	–
La.	126,018	X	X	X	–	X	X	–
Okla.	98,283	X	X	X	–	X	X	Phadebact
Tex.	615,980	X	X	X	X	X	X	–
Mountain	**153,415**							
Ariz.	123	X	X	X	X	X	–	–
Colo.	25,028	X	X	X	X	X	X	–
Ida.	32,925	X	X	X	X	X	X	–
Mont.	10,350	X	X	X	X	X	X	–
Nev.	–	–	–	–	–	–	–	–
N.M.	59,391	X	X	X	X	X	X	–
Utah	21,012	X	X	X	X	X	X	–
Wyo.	4,586	X	X	X	X	X	X	–
Pacific	**202,216**							
Alaska	56,044	X	X	X	X	X	X	–
Cal.	12,581	X	X	X	X	X	X	–
Hawaii	109,674	X	X	X	X	X	X	–
Ore.	663	X	X	X	X	X	X	–
Wash.	23,254	X	X	X	X	X	X	–
Territories	**3,212**							
Guam	3,212	X	X	X	–	X	X	Penicillin disk sensitivity
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 4-9
I. DIAGNOSTIC BACTERIOLOGY
E. Anaerobic Specimens

Lab & Region	Number of Specimens	Techniques Used		Procedures Used						
		Pre-reduced Media	Gas Chromatography	Gram Stain	Plating	Subculture	Biochemical	FA	GLC	Other
Total	**10,096**									
Average	240									
New England	**470**									
Conn.	167	–	X	X	X	X	X	X	X	–
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	99	X	X	X	X	X	X	–	X	–
N.H.	–	–	–	–	–	–	–	–	–	–
R.I.	30	X	–	X	X	X	X	–	–	–
Vt.	174	X	X	X	X	X	X	–	X	–
Middle Atlantic	**45**									
N.J.	25	–	X	X	X	–	X	–	X	–
N.Y	–	–	–	–	–	–	–	–	–	–
Pa.	20	X	–	X	X	X	X	–	–	–
East North Central	**1,113**									
Ill.	93	–	X	X	X	X	X	–	X	–
Ind.	18	–	X	X	X	X	X	–	X	Toxin studies
Mich.	333	X	X	X	X	X	X	–	X	–
Ohio	262	X	X	X	X	X	X	–	X	Botulism testing
Wisc.	407	X	X	X	X	X	X	–	X	–
West North Central	**804**									
Ia.	365	X	X	X	X	X	X	–	X	–
Kans.	44	X	X	X	X	X	X	X	X	–
Minn.	61	X	X	X	X	X	X	–	X	Animal toxogenicity, serology
Mo.	106	X	X	X	X	X	X	X	X	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	210	X	–	X	X	X	X	–	–	–
S.D.	18	X	–	X	X	X	–	–	–	–
South Atlantic	**2,448**									
Del.	–	–	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–	–
Fla.	349	X	X	X	X	X	X	X	X	–
Ga.	177	–	X	X	X	X	X	–	X	–
Md.	242	X	X	X	X	X	X	–	X	–
N.C.	590	X	X	X	X	X	X	X	X	–
S.C.	580	X	X	–	X	X	X	X	X	–
Va.	510	–	–	X	X	X	X	–	–	–
W.Va.	–	–	–	–	–	–	–	–	–	–
East South Central	**1,436**									
Ala.	124	X	X	X	X	X	X	X	–	Animal inoculation for toxin testing
Ky.	6	–	–	X	X	X	X	–	–	–
Miss.	–	–	–	–	–	–	–	–	–	–
Tenn.	1,306	–	X	X	X	X	X	–	X	–
West South Central	**1,737**									
Ark.	107	–	X	X	X	X	X	X	X	–
La.	1,019	X	X	X	X	X	X	–	X	Animal inoculation
Okla.	91	X	–	X	X	X	X	–	X	–
Tex.	520	X	X	X	X	X	X	X	X	–
Mountain	**1,071**									
Ariz.	166	X	X	X	X	X	X	X	X	–
Colo.	185	X	–	X	X	X	X	–	–	–
Ida.	3	X	–	X	–	–	–	–	–	–
Mont.	590	X	–	X	X	X	X	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	82	X	X	X	X	X	X	X	X	–
Utah	45	X	–	X	X	X	X	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific	**969**									
Alaska	82	X	X	X	X	X	X	–	–	–
Cal.	104	X	X	X	X	X	X	X	X	–
Hawaii	671	X	X	X	X	X	X	X	X	–
Ore.	39	–	X	X	X	X	X	X	X	–
Wash.	73	X	X	X	X	X	X	–	X	Mouse toxicity testing antibiograms, mouse neutralization
Territories	**3**									
Guam	3	X	–	X	X	X	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–

Table 4-10
I. DIAGNOSTIC BACTERIOLOGY
F. Other Bacteriology Specimens

Lab	Number Of Specimens	Disease — Procedures Used
Total	237,326	
Average	5,274	
Ala.	876	*Legionella pneumophila* — culture, FA; reference bactena, including aerobic and CO_2 organisms — cultures, biochemicals, serology; staphylococci — Gram stain, culture, coagulase
Alaska	2,004	Reference microbiology — culture; susceptibility — Kirby-Bauer, primary aerobic, blood — culture
Ariz.	515	Blood, miscellaneous — culture, isolation, biopsy, identification, biochemicals
Ark.	201	Streptococcus — culture; miscellaneous — blood culture, CSF culture
Cal.	938	Plague, Legionnaires', relapsing fever, aerobic bacteriology
Conn.	5,526	Genital smears (Not GC) — smear; nosocomial infections — phage typing; clinical cultures; referred cultures
Del.	1,343	Urine cultures — primary plating; reference cultures — enrichment plating; miscellaneous cultures — biochemicals
Fla.	7,119	Primary culture — smear, culture; sensitivity test — disc test; rheumatic fever prophylaxis — bacterial inhibition/penicillin sensitivity
Ga.	3,878	Meningitis, pneumonia, bacteremia, osteomyelitis, wounds, abscesses, conjunctivitis, etc. — usual and standard procedures as indicated
Guam	372	Trichomonas — Wet mounts; Monilia — cultures; urine — culture; vaginal and miscellaneous — cultures
Hawaii	6,674	Staphylococcal phage typing; antibiotic sensitivity — Kirby-Bauer; non-human enteric, Leptospirosis — culture identification; reference — subculture identification
Ida.	1,074	Reference bactena — biochemicals, cell wall, ANA
Ill.	1,648	Syphilis — Fontana; Vincent's angina — microscopic smear; staphylococcus infections — bacteriophage typing; miscellaneous infections — culture
Ind.	414	Aerobic reference cultures — staining, biochemicals, serology
Ia.	5,116	Legionella — DFA, IFA, culture and identification, reference bacteriology (*F. tularensis*, Brucella sp., miscellaneous gram-negative rods, etc.) — culture and identification, DFA; toxin studies — mouse inoculation; miscellaneous clinical materials — culture and identification; drug susceptiblity testing; Leptospira
Kans.	478	Food bacteriology — FDA, Staphylococcus — phage typing
Ky.	416	Staphylococcus bacteriophage — smear, coagulase, phage typing; miscellaneous cultures — smear, biochemicals, coagulase, serogrouping
La.	1,362	Referred cultures for identification — stain, culture, biochemicals; food poisoning — stain, culture, biochemicals; seafood routine screening, salmonella shigella, cholera — same as enteric; — plague — animal inoculation; clinical *Neisseria meningitidis* — same as G.C.
Me.	683	Toy stuffing — plate count, coliform by membrane filter; food poisoning — standard methods; reference cultures — CDC procedures
Md.	20,660	–
Mich.	10,323	Transudates/exudates — culture; saliva for Lactobacilli — culture; urines — culture; mycoplasma — culture; staphylocci — phage typing; aerobic referred cultures — identification; Salmonella/Shigella — serotyping; miscellaneous — culture
Minn.	175	Leptospirosis, blood, CSF, tissues, food poisonings, Legionnaires' bacterium-microscopic, culture, serology, pathogenicity and toxins.
Miss.	3,145	Miscellaneous waters, blood cultures, urine cultures, spinal fluid, miscellaneous cultures-primary plating, enrichment plating, biochemicals, serogrouping, subculture, serotyping, agglutination, gram stain, bacterial sensitivity testing

Table 4-10
I. DIAGNOSTIC BACTERIOLOGY
F. Other Bacteriology Specimens — Continued

Lab	Number Of Specimens	Disease — Procedures Used
Mo.	843	Legionnaires' — cultures, direct FA; Leptospirosis — microscopic and culture, aerobes — biochemicals, serology and microscopic
N.H.	1,217	Miscellaneous clinical specimens — culture and sensitivity; reference bacteriology — identification of isolate
N.J.	2,015	Referred cultures — biochemicals, identification; Legionnellosis — IFA, DFA, culture
N.M.	5,098	Plague — direct FA, phage, culture, animal inoculation; staphylococcal infections — phage typing if requested by epidemiologist; nosocomial infections — sterility spore test (FBL only)
N.C.	1,449	Reference specimens, clinical specimens, food, environmental and human specimens — smear, culture, biochemicals, serologic typing, and BAM techniques
N.D.	9,718	Bacteremia, UTI, spinal fluid, wound, miscellaneous — blood culture; referred — appropnate; Legionnaires' — culture, FA; antibiotic susceptibility — Kirby-Bauer
Ohio	536	Mycoplasma, Ureaplasma, Legionnaires', Leptospirosis, *Granuloma inguinale*
Okla	604	Wounds, blood, urine, CSF — smear, culture, biochemicals, serotype
Ore.	348	Miscellaneous specimens and cultures for identification
Pa.	806	Legionella sp. — culture and DFA; bactenal infections other than Legionella — standard techniques
R.I.	350	Miscellaneous reference cultures — culture, biochemicals
S.C.	5,958	Drug susceptibility — Kirby-Bauer; unnary tract infection — quantitative count, biochemicals; septicemia, meningitis — culture
S.D.	1,654	–
Tenn.	1,949	–
Tex.	122,698	–
Utah	87	Unne, blood — culture; plague, tularemia — culture and FA; Brucella — culture and agglutination
Vt.	53	Legionnellosis— culture
Va.	2,153	Dental, wound, sputum, animal inoculation, *H. ducreyi*, environmental food, urine, spinal fluid, blood culture
Wash.	545	Legionnaires' disease — stains, plating, embryonated eggs, guinea pigs; *N. meningitidis* — Gram stain, plating, serogrouping, subculture, reference cultures — all bacterial; wounds, bites, draining infections — procedures to isolate, identify, and determine sensitivity
W.Va.	1,072	General cultures
Wisc.	3,119	Unnary tract infection — unne culture; septicemia — blood culture; vanous infections — referred cultures; miscellaneous — smear and culture; meningococcal meningitis or septicemia — culture to serogrouping
Wyo.	114	Miscellaneous cultures for identification

Table 4-11
II. MYCOLOGY

Lab & Region	Number of Specimens	Procedures Used						
		Micro. Wet Mounts	Micro. Stains	Culture	FA	Bio-chemicals	Animal Inoculation	Other
Total	**55,009**							
Average	1,279							
New England	**2,821**							
Conn.	1,837	X	X	X	–	X	X	Differentiation media
Mass.	–	–	–	–	–	–	–	–
Me.	309	X	X	X	–	X	–	–
N.H.	84	X	X	X	–	X	–	–
R.I.	374	X	X	X	–	X	–	–
Vt.	217	X	X	X	–	X	–	–
Middle Atlantic	**1,463**							
N.J.	1,233	X	–	X	–	X	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	230	X	X	X	–	X	–	Slide cultures
East North Central	**7,187**							
Ill.	851	X	X	X	–	X	X	–
Ind.	594	X	X	X	–	X	X	Exoantigen test
Mich.	1,255	X	X	X	–	X	X	–
Ohio	1,013	X	X	X	–	X	X	–
Wisc.	3,474	X	X	X	–	X	–	–
West North Central	**5,397**							
Ia.	814	X	X	X	–	X	–	Immunodiffusion, exoantigen
Kans	1,067	X	X	X	–	X	–	Immunodiffusion
Minn.	2,950	X	X	X	–	X	X	Assimilation tests
Mo.	359	X	X	X	–	X	X	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	207	X	X	X	–	X	–	–
S.D.	–	X	X	X	–	–	–	–
South Atlantic	**11,856**							
Del.	–	X	X	X	–	X	–	–
D.C.	–	–	–	–	–	–	–	–
Fla.	2,782	X	X	X	X	X	–	–
Ga.	893	X	X	X	–	X	–	Temperature tolerance, in-vitro hair test
Md.	2,774	X	X	X	–	X	–	–
N.C.	1,175	X	X	X	–	X	–	–
S.C.	1,767	X	X	X	–	X	X	MIC sensitivities, exoantigen preparation, Lysozyme tests
Va.	2,007	X	X	X	–	X	X	–
W.Va.	458	X	X	X	X	X	X	–
East South Central	**8,714**							
Ala.	4,378	X	X	X	–	X	X	–
Ky.	–	–	–	–	–	–	–	–
Miss.	2,101	X	X	X	–	X	–	Hair culture
Tenn.	2,235	X	X	X	–	X	–	–
West South Central	**11,415**							
Ark.	2,514	X	X	X	–	X	–	–
La.	1,745	X	X	X	–	X	–	–
Okla	3,174	X	X	X	–	X	–	Exoantigen immunodiffusion
Tex.	3,982	X	X	X	X	X	X	Serologic
Mountain	**3,965**							
Ariz.	1,111	X	X	X	–	X	–	In-vitro conversion
Colo.	283	X	X	X	–	X	–	–
Ida.	1,238	X	X	X	X	X	–	Exoantigen, cell wall analysis
Mont.	213	X	X	X	–	X	–	–
Nev.	–	–	–	–	–	–	–	–
N.M.	900	X	X	X	–	X	X	–
Utah	220	X	X	X	–	X	X	–
Wyo.	–	–	–	–	–	–	–	–
Pacific	**2,055**							
Alaska	323	X	X	X	–	X	–	–
Cal.	482	X	X	X	X	X	X	–
Hawaii	911	X	X	X	–	X	X	–
Ore.	180	X	X	X	–	X	X	–
Wash.	159	–	X	X	–	X	X	Tease mounts
Territories	**136**							
Guam	136	X	X	X	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 4-12
III. PARASITOLOGY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Parasitology Specimens	A	B
		Intestinal Specimens	Other Specimens
Total	**299,182**	**294,469**	**4,713**
Average	6,106	6,010	127
New England	**19,449**	**18,589**	**860**
Conn.	10,294	9,440	854
Mass.	–	–	–
Me.	348	348	–
N.H.	116	116	–
R.I.	6,312	6,310	2
Vt.	2,379	2,375	4
Middle Atlantic	**1,616**	**1,456**	**160**
N.J.	1,258	1,212	46
N.Y.	–	–	–
Pa.	358	244	114
East North Central	**18,226**	**18,144**	**82**
Ill	2,438	2,414	24
Ind.	2,257	2,240	17
Mich.	5,407	5,400	7
Ohio	757	752	5
Wisc.	7,367	7,338	29
West North Central	**24,341**	**24,035**	**306**
Ia.	3,859	3,815	44
Kans.	8,132	8,088	44
Minn.	5,887	5,803	84
Mo.	2,885	2,885	–
Nebr	–	–	–
N.D.	2,445	2,311	134
S.D.	1,133	1,133	–
South Atlantic	**132,181**	**130,113**	**2,068**
Del.	316	316	–
D.C.	145	145	–
Fla.	63,029	62,409	620
Ga.	22,888	22,858	30
Md.	10,685	10,588	97
N.C.	6,398	6,263	135
S.C.	8,310	7,139	1,171
Va.	17,221	17,221	–
W Va.	3,189	3,174	15
East South Central	**32,795**	**32,750**	**45**
Ala.	12,920	12,893	27
Ky.	4,454	4,452	2
Miss.	9,031	9,025	6
Tenn.	6,390	6,380	10
West South Central	**32,215**	**31,305**	**910**
Ark.	1,941	1,915	26
La.	16,167	15,836	331
Okla.	3,659	3,600	59
Tex.	10,448	9,954	494
Mountain	**10,230**	**10,204**	**26**
Anz.	112	108	4
Colo.	2,764	2,764	–
Ida.	1,299	1,288	11
Mont.	1,368	1,368	–
Nev.	–	–	–
N M.	2,050	2,040	10
Utah	2,486	2,485	1
Wyo.	151	151	–
Pacific	**21,410**	**21,154**	**256**
Alaska	3,278	3,265	13
Cal.	1,102	965	137
Hawaii	6,749	6,696	53
Ore.	3,379	3,375	4
Wash.	6,902	6,853	49
Territories	**6,719**	**6,719**	**–**
Guam	1,639	1,639	–
P.R.	5,080	5,080	–
V.I.	–	–	–

Table 4-13
III. PARASITOLOGY
A. Intestinal Specimens

Lab & Region	Number of Specimens	Procedures Used				
		Gross	Direct (Incl. Pinworms)	Concentrate Smear	Stained Smear	Other
Total	**294,469**					
Average	6,010					
New England	**18,589**					
Conn.	9,440	X	X	X	X	–
Mass	–	–	–	–	–	–
Me	348	X	X	X	X	–
N.H.	116	X	X	X	–	–
R.I.	6,310	X	X	X	X	–
Vt.	2,375	X	X	X	X	–
Middle Atlantic	**1,456**					
N.J.	1,212	X	X	X	X	–
N.Y.	–	–	–	–	–	–
Pa.	244	X	X	X	X	Clearing adult helminths
East North Central	**18,144**					
Ill.	2,414	X	X	X	X	–
Ind.	2,240	–	X	X	X	–
Mich.	5,400	X	X	X	X	–
Ohio	752	X	X	–	–	–
Wisc.	7,338	X	X	X	X	–
West North Central	**24,035**					
Ia.	3,815	X	X	X	X	Environmental and potable water filtration
Kans.	8,088	X	X	X	X	–
Minn	5,803	X	X	X	X	–
Mo.	2,885	X	X	X	X	–
Nebr.	–	–	–	–	–	–
N.D.	2,311	X	X	X	X	–
S.D.	1,133	X	X	X	X	–
South Atlantic	**130,113**					
Del.	316	X	X	X	X	–
D.C.	145	–	–	–	–	–
Fla.	62,409	X	X	X	X	–
Ga.	22,858	–	X	X	X	Worm identification
Md	10,588	X	X	X	X	–
N.C.	6,263	X	X	X	X	Mounted, stained worm segments
S.C.	7,139	X	X	X	X	Occult blood
Va.	17,221	–	X	X	X	PVA
W.Va	3,174	X	X	X	X	–
East South Central	**32,750**					
Ala.	12,893	–	X	X	X	–
Ky.	4,452	X	X	X	X	–
Miss.	9,025	–	X	X	X	–
Tenn.	6,380	–	X	X	X	–
West South Central	**31,305**					
Ark.	1,915	–	X	X	X	–
La.	15,836	X	X	X	X	–
Okla	3,600	X	X	X	X	–
Tex.	9,954	X	X	X	X	Culture
Mountain	**10,204**					
Ariz.	108	–	X	X	X	–
Colo.	2,764	X	–	X	X	–
Ida.	1,288	X	X	X	X	Stoll count, whole mounts
Mont.	1,368	X	X	X	X	–
Nev.	–	–	–	–	–	–
N.M.	2,040	X	X	X	X	–
Utah	2,485	X	X	X	X	–
Wyo.	151	–	X	X	–	–
Pacific	**21,154**					
Alaska	3,265	X	X	X	X	–
Cal.	965	X	X	X	X	–
Hawaii	6,696	X	X	X	X	–
Ore.	3,375	X	X	X	X	–
Wash.	6,853	X	X	X	X	–
Territories	**6,719**					
Guam	1,639	–	X	X	–	–
P.R.	5,080	–	X	X	–	–
V.I.	–	–	–	–	–	–

Table 4-14
III. PARASITOLOGY
B. Other Parasitology Specimens

Lab & Region	Number of Specimens	Types of Specimens			
		Malaria	Trichinosis	Toxo-plasmosis	Other (Disease Entity-Procedures Used)
Total	**4,713**				
Average	127				
New England	**860**				
Conn.	854	X	X	–	Material for identification
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	–	–	–	–	–
R.I.	2	X	–	–	–
Vt.	4	X	X	–	–
Middle Atlantic	**160**				
N.J.	46	X	X	–	Environmental isolation of Giardia
N.Y.	–	–	–	–	–
Pa.	114	X	X	X	Arthropod identification, sputum and tissue examination, water examination
East North Central	**82**				
Ill.	24	X	–	–	Worms — gross exam
Ind.	17	X	–	–	Environmental, arthropods
Mich.	7	X	–	–	–
Ohio	5	X	X	–	–
Wisc.	29	X	–	–	Worms, insects
West North Central	**306**				
Ia.	44	X	–	–	Arthropods
Kans.	44	X	–	–	–
Minn.	84	X	X	–	–
Mo.	–	X	–	–	–
Nebr.	–	–	–	–	–
N.D.	134	X	–	X	–
S.D.	–	–	–	–	–
South Atlantic	**2,068**				
Del.	–	–	–	–	–
D.C.	–	–	–	–	–
Fla.	620	X	–	–	–
Ga.	30	X	–	–	Ectoparasites
Md.	97	X	–	–	–
N.C.	135	X	–	–	Arthropod identification, non-pathogenic helminth, water—Giardia
S.C.	1,171	X	–	–	Vaginal wet mounts
Va.	–	–	–	–	–
W. Va.	15	–	–	–	Insect identification
East South Central	**45**				
Ala.	27	X	–	–	Specimens for identification
Ky.	2	X	–	–	–
Miss.	6	X	–	–	–
Tenn.	10	X	–	–	Arthropod
West South Central	**910**				
Ark.	26	X	–	X	Ectoparasites
La.	331	X	X	–	Occult blood, lice, water-living nematodes, nit identification; food-insects
Okla.	59	X	–	–	Insect identification, microfilana identification, occult blood
Tex.	494	X	X	X	–
Mountain	**26**				
Ariz.	4	X	–	–	–
Colo.	–	–	–	–	–
Ida.	11	X	X	–	–
Mont.	–	–	–	–	–
Nev.	–	–	–	–	–
N.M.	10	X	X	–	–
Utah	1	X	–	–	–
Wyo.	–	–	–	–	–
Pacific	**256**				
Alaska	13	X	–	–	Arthropod identification
Cal.	137	X	X	X	Tissue parasites, larvae
Hawaii	53	X	–	X	Insect identification
Ore.	4	X	X	X	–
Wash.	49	X	–	–	Microfilanae, Arthropods
Territories	**–**				
Guam	–	–	–	–	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-15
IV. VIROLOGY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Virology Specimens	A	B	C	D
		Rabies Specimens	Viral Isolations	Rickettsial Ident. Isolations	Other
Total	**259,173**	**79,030**	**110,073**	**8,727**	**61,343**
Average	5,289	1,646	2,822	873	4,382
New England	**7,854**	**870**	**6,984**	–	–
Conn.	6,197	288	5,909	–	–
Mass.	–	–	–	–	–
Me.	1,275	200	1,075	–	–
N.H.	193	193	–	–	–
R.I.	69	69	–	–	–
Vt.	120	120	–	–	–
Middle Atlantic	**13,315**	**2,177**	**5,855**	**32**	**5,251**
N.J.	12,325	1,847	5,195	32	5,251
N.Y.	–	–	–	–	–
Pa.	990	330	660	–	–
East North Central	**55,120**	**12,857**	**27,766**	**3,371**	**11,126**
Ill.	15,919	3,071	3,170	–	9,678
Ind.	3,654	2,926	728	–	–
Mich.	6,639	1,246	5,393	–	–
Ohio	18,259	3,218	10,662	3,371	1,008
Wisc.	10,649	2,396	7,813	–	440
West North Central	**36,614**	**6,653**	**11,435**	**26**	**18,500**
Ia.	5,124	1,295	3,829	–	–
Kans.	1,083	–	1,083	–	–
Minn.	6,804	2,134	4,670	–	–
Mo	3,647	2,573	1,074	–	–
Nebr	–	–	–	–	–
N.D	19,236	553	183	–	18,500
S.D	720	98	596	26	–
South Atlantic	**37,957**	**15,160**	**20,242**	**306**	**2,249**
Del.	1,220	154	1,066	–	–
D.C.	91	91	–	–	–
Fla.	8,138	4,574	3,564	–	–
Ga.	4,252	2,020	1,765	27	440
Md.	7,932	2,821	5,090	21	–
N.C.	5,797	1,812	3,362	–	623
S.C.	7,603	1,636	4,523	258	1,186
Va.	1,582	1,381	201	–	–
W.Va.	1,342	671	671	–	–
East South Central	**9,892**	**8,679**	**1,210**	–	3
Ala.	3,054	3,054	–	–	–
Ky.	2,279	1,957	319	–	3
Miss.	661	661	–	–	–
Tenn.	3,898	3,007	891	–	–
West South Central	**42,622**	**20,043**	**10,730**	**4,963**	**6,886**
Ark.	2,034	1,967	62	5	–
La.	2,375	2,361	14	–	–
Okla.	5,238	3,639	1,500	–	99
Tex.	32,975	12,076	9,154	4,958	6,787
Mountain	**29,435**	**4,444**	**7,906**	**29**	**17,056**
Ariz.	3,740	2,079	1,651	10	–
Colo.	643	643	–	–	–
Ida.	1,772	154	1,618	–	–
Mont.	651	45	587	19	–
Nev.	–	–	–	–	–
N.M.	18,557	713	788	–	17,056
Utah	3,530	268	3,262	–	–
Wyo.	542	542	–	–	–
Pacific	**19,382**	**1,403**	**17,945**	–	**34**
Alaska	6,906	318	6,588	–	–
Cal.	5,961	539	5,388	–	34
Hawaii	2,813	12	2,801	–	–
Ore.	2,621	134	2,487	–	–
Wash.	1,081	400	681	–	–
Territories	**6,982**	**6,744**	–	–	**238**
Guam	247	9	–	–	238
P.R.	6,735	6,735	–	–	–
V.I.	–	–	–	–	–

Table 4-16
IV. VIROLOGY
A. Rabies Specimens

Lab & Region	Number of Specimens	Procedures Used			
		Stained Smear	FRA	Animal Inoculation	Other
Total	**79,030**				
Average	1,646				
New England	**870**				
Conn.	288	–	X	X	–
Mass.	–	–	–	–	–
Me.	200	–	X	–	–
N.H.	193	–	X	X	–
R.I.	69	–	X	X	–
Vt.	120	–	X	X	–
Middle Atlantic	**2,177**				
N.J.	1,847	–	X	X	–
N.Y.	–	–	–	–	–
Pa.	330	–	X	X	–
East North Central	**12,857**				
Ill.	3,071	–	X	–	–
Ind.	2,926	X	X	X	–
Mich.	1,246	–	X	X	–
Ohio	3,218	–	X	–	–
Wisc.	2,396	–	X	X	–
West North Central	**6,653**				
Ia.	1,295	–	X	X	–
Kans.	–	–	–	–	–
Minn.	2,134	–	X	X	–
Mo.	2,573	X	X	X	–
Nebr.	–	–	–	–	–
N.D.	553	–	X	–	–
S.D.	98	–	X	X	–
South Atlantic	**15,160**				
Del.	154	–	X	–	–
D.C.	91	–	–	–	–
Fla.	4,574	X	X	–	–
Ga.	2,020	–	X	–	–
Md.	2,821	X	X	X	Mouse neutralization test for antibody
N.C.	1,812	–	X	X	–
S.C.	1,636	–	X	X	–
Va.	1,381	X	X	X	–
W Va.	671	–	X	X	–
East South Central	**8,679**				
Ala.	3,054	–	X	X	–
Ky.	1,957	X	X	X	–
Miss.	661	X	X	–	–
Tenn.	3,007	X	X	X	–
West South Central	**20,043**				
Ark.	1,967	X	X	–	–
La.	2,361	–	X	X	–
Okla.	3,639	–	X	X	–
Tex.	12,076	–	X	X	–
Mountain	**4,444**				
Ariz.	2,079	–	X	X	–
Colo.	643	–	X	X	–
Ida.	154	–	X	–	–
Mont.	45	–	–	–	(Referred to CDC)
Nev.	–	–	–	–	–
N.M.	713	–	X	X	–
Utah	268	X	X	X	–
Wyo.	542	X	X	–	–
Pacific	**1,403**				
Alaska	318	X	X	X	–
Cal.	539	–	X	X	–
Hawaii	12	X	X	–	–
Ore.	134	X	X	X	–
Wash.	400	–	X	X	–
Territories	**6,744**				
Guam	9	–	X	–	–
P.R.	6,735	–	X	–	–
V.I.	–	–	–	–	–

Table 4-17
IV. VIROLOGY
B. Viral Isolation Specimens

Lab	Number of Specimens	Types of Specimens						Procedures Used									
		Enteric	Arbovirus Human Origin	Arbovirus Non-Human Orig.	Respiratory	Exanthem	Other	Tissue Culture Hosts	Eggs	Animal Hosts	HI/HA	CF	Neutralization Tests	FA—Orig. Spec.	FA—Other	HAdI/HAd	Other
Total Average	110,073 2,822																
Alaska	6,588	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
Anz	1,651	X	X		X	X	Central nervous system	X	X				X				
Ark	62	X	X	X	X	X			-		X	X		X			
Cal	5,388	X	X	X	X	X		X	X	X	X	X	X	X	X	X	Electron microscopy, RIA, EIA
Conn	5,909	X			X	X		X				X	X	X	X	X	ELISA direct
Del	1,066	X	X		X			X	X	X	X	X	X	X	X	X	
Fla	3,564	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
Ga	1,765	X			X	X	CMV, HSV, varicella zoster, chlamydia	X	X		X	X	X	X	X	X	Direct electron microscopy, immuno-electron microscopy
Hawaii	2,801	X	-	-	X	X	Herpes	X	X		X	X	X	X	X	X	
Ida	1,618	-			X	X	-	X	X								
Ill	3,170	X		X	X	X	Central nervous system	X	X		X	X	X	X		X	
Ind	728	X		-	X	X		X			X	X	X				
Ia.	3,829	X	X	X	X	X	Mosquito pools arbovirus isolation, clostridium difficile toxin		-		-						
Kans	1,083	X	X		X	X		X	X	X	X	X	X				
Ky	319	X	X		X	X	Autopsy material	X			X	X	X				
La	14	X		X	X				X	X	X	X				X	
Me	1,075	X			X	X	Vesicle fluids	X	X		X				X		
Md	5,090	X	X	X	X	X	Venereal, ocular, urinary tract	X	X	X	X	X	X	X	X	X	ELISA
Mich	5,393	X	-		X	X	Referred isolates	X	X	X	X	X	X	X	X	X	
Minn	4,670	X			X	X	CMV (urine)	X			X		X				
Mo	1,074	X	X	X	X	X		X	X	X	X	X	X		X	X	
Mont	587	X	X		X		Urine, lesion, tissue, saliva, eye swab	X	X	X	X	X	X	X	X	X	
N J	5,195	X	X	X	X	X	CNS (non arbovirus), STD (chlamydia)	X	X	X	X	X	X	X	X	X	Interference interference inhibition
N M	788	X		.	X	X	Autopsy, biopsy, herpes cultures	X	-	X	X	X	X	X	X	X	
N C	3,362	X	X	X	X	X	Congenital, central nervous system	X	X	X	X	X	X	X	X	X	
N D	183	X	X		X	X											(Sent to CDC)
Ohio	10,662	X	X	X	X	X		X	X		X	X	X		X	X	
Okla	1,500	X	-	-	X	X	CSF, urine, autopsy, lesions	X	X	X	X		X			X	
Ore	2,487	X			X	X	Tissue, body fluid, exudates, biopsy and autopsy	X	X	X	X	X	X			X	
Pa	660	X	X		X	X	CSF, urine, tissue	X	X	X	X		X	X		X	
S C	4,523	X			X	X	Neuro-CSF, tissue, vaginal and urethral, urine	X	X	X	X	X	X	X	X	X	Mycoplasma (bi phasic media), Chlamydia (iodine stain of tissue culture)
S D	596	X	X		X	X		X	X	X	X	X	X	X	X	X	
Tenn	891	X			X	X		X	X	X	X		X			X	
Tex	9,154	X	X	X	X	X	Sexually transmitted diseases	X	X	X	X	X	X	X	X	X	
Utah	3,262	X	X	X	X	X	Herpes, LCM, chlamydia, trachomatis, psittaci	X	X	X	X	X	X	X	X	X	
Va	201	X	X		X	X		X	X	X	X	X	X	X	X	X	
Wash	681	X		X	X	X	Chlamydia psittacosis in birds	X	X	X	X	X	X	X	X	X	Macchiavello s stain
W Va	671	X			X	X		X	X	-			X	X			
Wisc	7,813	X	X		X	X	Blood, tissue, genital, spinal fluid, miscellaneous	X	X	X	X	X	X	X	X	X	CIE EIA indirect FA

Table 4-18
IV. VIROLOGY
C. Rickettsial Identification Specimens

Lab & Region	Number of Specimens	Type of Specimens		Procedures Used		
		Tick	Other	Hemolymph	FA	Other
Total	**8,727**					
Average	873					
New England	–					
Conn.	–	–	–	–	–	–
Mass.	–	–	–	–	–	–
Me.	–	–	–	–	–	–
N.H.	–	–	–	–	–	–
R.I.	–	–	–	–	–	–
Vt.	–	–	–	–	–	–
Mid Atlantic	**32**					
N.J.	32	X	X	X	X	Egg inoculation, guinea pig inoculation, Gimenez stain
N.Y.	–	–	–	–	–	–
Pa.	–	–	–	–	–	–
East North Central	**3,371**					
Ill.	–	–	–	–	–	–
Ind.	–	–	–	–	–	–
Mich.	–	–	–	–	–	–
Ohio	3,371	X	–	X	X	–
Wisc.	–	–	–	–	–	–
West North Central	**26**					
Ia.	–	–	–	–	–	–
Kans.	–	–	–	–	–	–
Minn.	–	–	–	–	–	–
Mo.	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–
N.D.	–	–	–	–	–	–
S.D.	26	X	–	X	X	–
South Atlantic	**306**					
Del.	–	–	–	–	–	–
D.C.	–	–	–	–	–	–
Fla.	–	–	–	–	–	–
Ga.	27	X	–	–	–	Tick identification (species)
Md.	21	X	X	X	X	ELISA, encephalitis
N.C.	–	–	–	–	–	–
S.C.	258	X	–	X	X	–
Va.	–	–	–	–	–	–
W Va.	–	–	–	–	–	–
East South Central	–					
Ala.	–	–	–	–	–	–
Ky.	–	–	–	–	–	–
Miss.	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–
West South Central	**4,963**					
Ark.	5	X	–	X	X	CF, Weil - Felix
La.	–	–	–	–	–	–
Okla.	–	–	–	–	–	–
Tex.	4,958	X	–	X	X	–
Mountain	**29**					
Anz.	10	–	X	–	–	Complement fixation
Colo.	–	–	–	–	–	–
Ida.	–	–	–	–	–	–
Mont.	19	X	–	X	X	–
Nev.	–	–	–	–	–	–
N.M.	–	–	–	–	–	–
Utah	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–
Pacific	–					
Alaska	–	–	–	–	–	–
Cal.	–	–	–	–	X	–
Hawaii	–	–	–	–	–	–
Ore.	–	–	–	–	–	–
Wash.	–	–	–	–	–	–
Territories	–					
Guam	–	–	–	–	–	–
P.R.	–	–	–	–	–	–
V.I.	–	–	–	–	–	–

Table 4-19
IV. VIROLOGY
D. Other Virology Specimens

Lab	Number of Specimens	Disease Entity — Procedures Used
Total	**61,343**	
Average	4,382	
Cal.	34	Sewage effluents, treated/raw waters
Ga.	440	Herpes simplex — FA; chlamydia — Gimenez
Guam	238	Rubella — HI titration
Ill.	9,678	Respiratory — CF, central nervous system — CF; rickettsial — CF, IFA, measles — HAI; rubella — HAI, Latex, Agglutination; arbovirus — HAI; arbovirus-avian serology — HAI
Ky	3	Herpes — direct FA
N.J.	5,251	Hepatitis — EIA/RIA; EBV — FA; rotavirus — RIA
N.M.	17,056	Rubella — enzyme immunoassay; hepatitis A & B — radioimmunoassay
N.C.	623	Chlamydia — tissue culture
N.D.	18,500	Rubella — enzyme assay; influenzae A & B — IFA, HAI; WEE & St. Louis encephalitis — IFA, HAI, CF; rubeola — CF, IFA; CMV — IFA, Epstein-Barr — IFA; herpes I & II — IFA; LCM — CF; LGV and psittacosis — CF, para-influenzae I, II, III — CF; respiratory syncytial — CF; adenovirus — CF; V-Z — IFA.
Ohio	1,008	Arthropods, non-arthropods
Okla.	99	Rubella, arbovirus, influenza — HI
S.C.	1,186	Herpes — direct FA
Tex.	6,787	Chlamydia — culture/stained
Wisc.	440	Rotavirus — EIA

Table 4-20
V. IMMUNOLOGY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Immunology Specimens	A	B	C	D	E	F
		Syphilis Serology	Bacterial Serology	Fungal Serology	Parasitic Serology	Viral and Rickettsial Serology	Other
TOTAL	**5,849,199**	**4,394,467**	**61,223**	**88,081**	**134,973**	**1,146,028**	**24,427**
AVERAGE	121.858	93.499	1.391	2.591	3.970	26.046	1.745
New England	**210,429**	**139,951**	**18,598**	**1,481**	**5,303**	**44,124**	**972**
Conn.	85,987	58,830	2,736	1,114	2,471	20,608	228
Mass.	–	–	–	–	–	–	–
Me	17,168	2,050	212	284	2,229	12,393	–
N.H.	5,845	5,845	–	–	–	–	–
R.I.	72,765	57,072	15,571	–	18	104	–
Vt.	28,664	16,154	79	83	585	11,019	744
Middle Atlantic	**225,215**	**172,971**	**1,538**	**407**	**2,248**	**47,949**	**102**
N.J.	219,678	171,534	526	119	1,927	45,572	–
N.Y.	–	–	–	–	–	–	–
Pa.	5,537	1,437	1,012	288	321	2,377	102
East North Central	**567,238**	**331,180**	**8,722**	**24,989**	**26,620**	**170,680**	**5,047**
Ill.	78,676	61,996	130	15,244	1,306	–	–
Ind.	41,583	29,023	1,386	2,575	777	7,822	–
Mich.	237,593	152,693	3,547	2,900	4,967	73,486	–
Ohio	69,471	32,952	221	1,887	3,089	30,151	1,171
Wisc.	139,915	54,516	3,438	2,383	16,481	59,221	3,876
West North Central	**397,836**	**237,914**	**6,783**	**12,809**	**7,508**	**132,748**	**74**
Ia.	90,893	40,443	4,422	4,421	4,268	37,265	74
Kans.	77,000	47,131	502	1,121	–	28,246	–
Minn.	66,036	42,767	947	3,139	1,946	17,237	–
Mo.	101,308	65,651	420	3,957	1,162	30,118	–
Nebr.	–	–	–	–	–	–	–
N.D.	34,945	29,514	173	–	132	5,126	–
S.D.	27,654	12,408	319	171	–	14,756	–
South Atlantic	**2,068,150**	**1,608,464**	**13,723**	**9,923**	**29,210**	**404,259**	**2,571**
Del.	42,962	34,324	259	–	–	8,379	–
D.C.	87,282	86,308	–	–	–	–	974
Fla.	600,119	518,436	5,507	–	1,466	74,710	–
Ga.	373,771	316,521	397	1,324	1,661	53,868	–
Md.	370,705	212,950	3,598	3,458	20,231	128,981	1,487
N.C.	212,310	148,309	1,027	2,340	3,192	57,442	–
S.C.	154,144	120,252	724	1,206	1,136	30,826	–
Va.	176,547	136,901	2,211	1,397	1,107	34,821	110
W.Va.	50,310	34,463	–	198	417	15,232	–
East South Central	**757,029**	**634,050**	**1,421**	**9,687**	**2,788**	**108,268**	**815**
Ala.	249,939	225,038	543	6,258	1,230	16,870	–
Ky.	69,805	45,885	291	75	1,558	21,996	–
Miss.	224,718	203,894	583	1,808	–	18,433	–
Tenn.	212,567	159,233	4	1,546	–	50,969	815
West South Central	**1,153,100**	**957,515**	**4,366**	**17,195**	**11,893**	**150,439**	**11,692**
Ark.	107,306	94,605	552	2,105	331	9,713	–
La.	209,596	132,185	658	1,770	3,743	71,236	4
Okla.	106,176	93,969	690	–	–	11,517	–
Tex.	730,022	636,756	2,466	13,320	7,819	57,973	11,688
Mountain	**206,865**	**152,222**	**927**	**3,624**	**1,495**	**48,304**	**293**
Anz.	46,513	29,817	6	3,197	581	12,912	–
Colo.	64,035	62,530	80	–	–	1,425	–
Ida.	11,365	7,635	52	125	194	3,359	–
Mont.	49,267	22,875	393	165	304	25,530	–
Nev.	–	–	–	–	–	–	–
N.M.	3,422	–	191	137	238	2,563	293
Utah	20,916	18,327	191	–	178	2,220	–
Wyo.	11,347	11,038	14	–	–	295	–
Pacific	**261,047**	**157,910**	**5,145**	**7,966**	**47,908**	**39,257**	**2,861**
Alaska	52,472	40,024	37	–	–	12,411	–
Cal.	37,053	14,082	2,953	7,638	1,786	7,733	2,861
Hawaii	44,453	30,545	1,221	–	–	12,687	–
Ore.	96,112	44,767	837	328	46,122	4,058	–
Wash.	30,957	28,492	97	–	–	2,368	–
Territories	**2,290**	**2,290**	–	–	–	–	–
Guam	2,290	2,290	–	–	–	–	–
P.R.	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-21
V. IMMUNOLOGY
A. Syphilis Serology Specimens

Lab & Region	Number of Specimens	Procedures Used									
		VDRL	RPR	ART	FTA-ABS	AFTA-ABS	FTA-ABS (IgM)	DFATP	MHA-TP	Dark-field	Other
Total	**4,394,467**										
Average	93,499										
New England	**139,951**										
Conn.	58,830	X	X	X	X	–	–	–	–	X	–
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	2,050	X	X	–	X	–	–	–	X	–	–
N.H.	5,845	–	–	–	–	–	–	–	–	–	–
R.I.	57,072	X	X	–	X	–	–	–	–	–	–
Vt.	16,154	–	X	X	X	–	–	X	–	X	–
Middle Atlantic	**172,971**										
N.J.	171,534	X	X	–	X	–	–	–	X	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	1,437	X	X	–	X	–	–	–	–	–	–
East North Central	**331,180**										
Ill.	61,996	X	X	–	X	–	–	–	X	–	–
Ind.	29,023	X	X	X	X	–	–	–	–	–	–
Mich.	152,693	X	–	–	X	–	–	X	–	–	HATTS
Ohio	32,952	X	X	–	X	–	–	–	X	–	–
Wisc.	54,516	X	–	–	X	–	X	–	X	X	–
West North Central	**237,914**										
Ia.	40,443	X	X	–	X	–	X	–	X	–	HATTS, Spinal fluid,
Kans.	47,131	X	–	–	X	–	–	–	–	–	–
Minn.	42,767	X	X	–	–	–	–	–	–	–	FADF
Mo.	65,651	X	X	–	X	–	–	–	X	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–
N.D.	29,514	–	X	–	X	–	–	–	–	X	–
S.D.	12,408	X	X	–	X	–	–	–	X	–	–
South Atlantic	**1,608,464**										
Del.	34,324	X	X	–	X	–	–	–	–	X	–
D.C.	86,308	X	X	–	X	–	–	–	X	–	–
Fla.	518,436	X	X	–	X	–	X	–	X	–	–
Ga.	316,521	X	X	–	X	–	–	–	X	X	–
Md.	212,950	X	X	–	X	–	X	–	–	X	–
N.C.	148,309	X	–	–	X	–	–	X	–	–	–
S.C.	120,252	X	X	–	X	–	–	–	–	X	–
Va.	136,901	X	X	–	X	–	–	–	X	–	–
W.Va.	34,463	X	X	–	X	–	–	–	X	–	–
East South Central	**634,050**										
Ala.	225,038	X	–	–	X	–	–	–	X	–	–
Ky.	45,885	X	X	–	X	–	–	–	–	–	–
Miss.	203,894	X	X	–	X	–	–	–	–	–	–
Tenn.	159,233	X	X	–	X	–	–	–	X	–	Total protein
West South Central	**957,515**										
Ark.	94,605	X	–	–	X	–	–	–	X	–	Darkfield FA
La.	132,185	X	–	–	X	–	–	–	–	–	–
Okla.	93,969	X	X	–	X	–	–	–	–	–	–
Tex.	636,756	X	X	–	X	–	–	–	X	X	–
Mountain	**152,222**										
Ariz.	29,817	X	–	–	–	X	–	–	X	–	–
Colo.	62,530	X	–	–	X	–	–	–	–	–	–
Ida.	7,635	X	X	–	X	–	–	–	–	X	–
Mont.	22,875	X	X	–	X	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	–	X	X	–	X	–	–	–	–	–	–
Utah	18,327	X	X	–	X	–	–	–	–	–	–
Wyo.	11,038	X	–	–	X	–	–	–	–	–	–
Pacific	**157,910**										
Alaska	40,024	X	X	–	X	–	–	–	X	X	–
Cal.	14,082	X	X	–	X	–	–	–	X	X	–
Hawaii	30,545	X	X	–	X	–	–	–	–	X	–
Ore.	44,767	X	X	X	X	–	X	–	–	X	–
Wash.	28,492	X	X	–	X	–	–	–	–	X	–
Territories	**2,290**										
Guam	2,290	X	–	–	X	–	–	–	–	X	–
P.R.	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–

Table 4-22
V. IMMUNOLOGY
B. Bacterial Serology Specimens

Lab & Region	Number of Specimens	Types of Specimens					
		Brucellosis	Tularemia	Strept. Antibodies	Leptospirosis	Salmonellosis	Other
Total	**61,223**						
Average	1,391						
New England	**18,598**						
Conn.	2,736	X	X	X	X	X	*Legionella pneumophila*, *Bordetella pertussis*, (Leptospirosis to CDC)
Mass.	–	–	–	–	–	–	–
Me.	212	–	–	–	–	–	Legionella
N.H.	–	–	–	–	–	–	–
R.I.	15,571	X	–	–	–	X	Febriles, Legionnaires
Vt.	79	X	X	–	–	X	–
Middle Atlantic	**1,538**						
N.J.	526	X	X	–	X	–	–
N.Y.	–	–	–	–	–	–	–
Pa.	1,012	X	X	X	X	–	Legionella sp. (tetanus, diphtheria and melioidosis referred to CDC)
East North Central	**8,722**						
Ill.	130	X	X	–	–	–	–
Ind.	1,386	X	X	–	X	X	Legionella
Mich.	3,547	X	X	–	X	–	Legionellosis, pertussis
Ohio	221	X	X	–	X	–	–
Wisc.	3,438	X	X	X	–	X	–
West North Central	**6,783**						
Ia.	4,422	X	X	X	X	–	–
Kans.	502	X	X	–	X	–	Legionnaires'
Minn.	947	X	X	–	–	–	Weil-Felix
Mo.	420	X	X	–	–	–	Legionnaires'
Nebr.	–	–	–	–	–	–	–
N.D.	173	X	X	X	–	X	–
S.D.	319	X	X	X	–	X	–
South Atlantic	**13,723**						
Del.	259	–	–	–	–	X	–
D.C.	–	–	–	–	–	–	–
Fla.	5,507	X	–	–	X	–	–
Ga.	397	X	X	–	–	–	Proteus OX-19, typhoid O
Md.	3,598	X	X	X	X	X	Pertussis, *Pasteurella multocida*, tetanus antitoxin, diphthena antitoxin
N.C.	1,027	X	X	X	–	–	–
S.C.	724	X	X	X	–	–	Legionnaires'
Va.	2,211	X	X	X	X	–	Legionnaires'—IFA; latex rickettsial
W. Va.	–	–	–	–	–	–	–
East South Central	**1,421**						
Ala.	543	X	X	–	–	–	*Legionella pneumophila*
Ky.	291	X	X	–	–	X	Typhoid O, H, Vi, Legionnaires'
Miss.	583	X	X	X	–	–	–
Tenn.	4	X	–	–	–	–	–
West South Central	**4,366**						
Ark.	552	X	X	–	X	X	–
La.	658	X	X	–	X	–	Legionnaires'
Okla.	690	X	X	–	–	–	–
Tex.	2,466	X	X	X	X	–	–
Mountain	**927**						
Ariz.	6	X	X	–	–	–	–
Colo.	80	X	X	–	–	–	Heterophile
Ida.	52	X	X	–	–	–	–
Mont.	393	X	X	–	X	–	Legionella
Nev.	–	–	–	–	–	–	–
N.M.	191	X	X	–	X	–	–
Utah	191	X	X	–	–	–	Legionnaires' disease
Wyo.	14	X	X	–	–	–	–
Pacific	**5,145**						
Alaska	37	X	X	–	–	–	–
Cal.	2,953	X	X	–	X	X	*Yersinia enterocolitica*, *Yersinia pseudotuberculosis*, Legionnaires'
Hawaii	1,221	X	X	X	X	X	–
Ore.	837	X	X	–	X	–	–
Wash.	97	X	X	–	X	–	Proteus OX-2, OX-19, OX-K
Territories	–						
Guam	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-23
V. IMMUNOLOGY
C. Fungal Serology Specimens

Lab & Region	Number of Specimens	Types of Specimens						
		Blastomycosis	Coccidioido-mycosis	Histoplasmosis	Cryptococcosis	Aspergillosis	Candidiasis	Other
Total	**88,081**							
Average	2,591							
New England	**1,481**							
Conn.	1,114	X	X	X	X	X	X	(Referred to CDC)
Mass.	–	–	–	–	–	–	–	–
Me.	284	X	X	X	X	X	–	–
N.H.	–	–	–	–	–	–	–	–
R.I.	–	–	–	–	–	–	–	–
Vt.	83	X	X	X	–	–	–	–
Middle Atlantic	**407**							
N.J.	119	X	X	X	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	288	X	X	X	X	X	X	Sporotnchosis
East North Central	**24,989**							
Ill.	15,244	X	X	X	–	–	–	–
Ind.	2,575	X	X	X	X	X	X	–
Mich.	2,900	X	X	X	–	–	–	–
Ohio	1,887	X	X	X	X	X	–	–
Wisc.	2,383	X	X	X	X	–	–	–
West North Central	**12,809**							
Ia.	4,421	X	X	X	X	–	–	–
Kans.	1,121	X	X	X	–	–	–	–
Minn.	3,139	X	X	X	X	X	X	–
Mo.	3,957	X	X	X	X	–	–	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–
S.D.	171	X	X	X	X	–	–	–
South Atlantic	**9,923**							
Del.	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–
Ga.	1,324	X	X	X	–	–	–	–
Md.	3,458	X	X	X	–	–	–	–
N.C.	2,340	X	X	X	X	–	–	–
S.C.	1,206	X	X	X	X	X	X	Sporotrichosis
Va.	1,397	X	X	X	X	–	–	–
W. Va.	198	X	X	X	–	–	–	–
East South Central	**9,687**							
Ala.	6,258	X	X	–	–	X	–	–
Ky.	75	X	X	X	–	–	–	–
Miss.	1,808	X	X	X	–	–	–	–
Tenn.	1,546	X	–	X	–	–	–	–
West South Central	**17,195**							
Ark.	2,105	X	X	X	X	X	–	–
La.	1,770	X	X	X	X	–	–	–
Okla.	–	–	–	–	–	–	–	–
Tex.	13,320	X	X	X	X	X	X	–
Mountain	**3,624**							
Anz.	3,197	–	X	X	–	–	–	–
Colo.	–	–	–	–	–	–	–	–
Ida.	125	X	X	X	–	–	–	–
Mont.	165	X	X	X	X	X	X	(Referred to CDC)
Nev.	–	–	–	–	–	–	–	–
N.M.	137	X	X	X	X	X	X	Actinomyces
Utah	–	–	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–
Pacific	**7,966**							
Alaska	–	–	–	–	–	–	–	–
Cal.	7,638	X	X	X	X	–	–	–
Hawaii	–	–	–	–	–	–	–	–
Ore.	328	X	X	X	–	–	–	Sporotrichosis, candidiasis
Wash.	–	–	–	–	–	–	–	–
Territories	–							
Guam	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 4-24
V. IMMUNOLOGY
D. Parasitic Serology Specimens

Lab & Region	Number of Specimens	Types of Specimens					
		Trichinosis	Toxoplasmosis	Amebiasis	Echinococcosis	Trypanosomiasis	Other
Total	**134,973**						
Average	3,970						
New England	**5,303**						
Conn.	2,471	X	X	–	–	–	(Others referred to CDC)
Mass.	–	–	–	–	–	–	–
Me.	2,229	–	X	–	–	–	–
N.H.	–	–	–	–	–	–	–
R.I.	18	–	X	–	–	–	–
Vt.	585	–	X	–	–	–	–
Middle Atlantic	**2,248**						
N.J.	1,927	X	X	X	–	–	–
N.Y.	–	–	–	–	–	–	–
Pa.	321	X	X	X	X	X	Toxocanasis, ascanasis, cystocercosis, malana, pneumocystiosis, hookworm, strongyloidiasis, filanasis, paragonimiasis, babesiosis, schistosomiasis, clonorchiasis
East North Central	**26,620**						
Ill.	1,306	–	X	–	–	–	–
Ind.	777	X	X	X	–	–	–
Mich.	4,967	–	X	–	–	–	–
Ohio	3,089	–	X	X	–	–	–
Wisc.	16,481	–	X	–	–	–	–
West North Central	**7,508**						
Ia.	4,268	X	X	X	–	–	–
Kans.	–	–	–	–	–	–	–
Minn.	1,946	–	X	–	–	–	–
Mo.	1,162	–	X	–	–	–	–
Nebr.	–	–	–	–	–	–	–
N.D.	132	–	X	–	–	–	–
S.D.	–	–	–	–	–	–	–
South Atlantic	**29,210**						
Del.	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–
Fla.	1,466	–	X	–	–	–	–
Ga.	1,661	–	X	–	–	–	–
Md.	20,231	X	X	X	X	–	–
N.C.	3,192	–	X	X	–	–	–
S.C.	1,136	–	X	X	–	–	–
Va.	1,107	X	X	–	–	–	–
W.Va.	417	–	X	–	–	–	–
East South Central	**2,788**						
Ala.	1,230	–	X	X	–	–	–
Ky.	1,558	–	X	–	–	–	–
Miss.	–	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–
West South Central	**11,893**						
Ark.	331	X	X	X	X	X	–
La.	3,743	–	X	–	–	–	–
Okla.	–	–	–	–	–	–	–
Tex.	7,819	X	X	X	–	–	–
Mountain	**1,495**						
Ariz.	581	–	X	–	–	–	–
Colo.	–	–	–	–	–	–	–
Ida.	194	–	X	–	–	–	–
Mont.	304	X	X	X	X	X	–
Nev.	–	–	–	–	–	–	–
N.M.	238	–	X	X	–	–	–
Utah	178	–	X	–	–	–	–
Wyo.	–	–	–	–	–	–	–
Pacific	**47,908**						
Alaska	–	–	–	–	–	–	–
Cal.	1,786	X	X	X	–	–	–
Hawaii	–	–	–	–	–	–	–
Ore.	46,122	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–
Territories	–						
Guam	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-25
V. IMMUNOLOGY
E. Viral and Rickettsial Serology Specimens

Lab & Region	Number of Specimens	Procedures Used													
		CF	HI	HAdI	Immunodiffusion (Agar Gel)	Neut. (Tissue Cul.)	Neut. Rabies	FA	Radioimmunoassay	Passive Hemagglutination	Reverse Passive Hemagglutination	OX-Cell Hemolysin	Slide Agglutination	Heterophile Tests	Other
Total	**1,146,028**														
Average	26,046														
New England	**44,124**														
Conn.	20,608	X	X	–	–	–	–	–	X	X	–	–	–	–	–
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	12,393	X	X	X	–	–	–	X	–	X	X	X	–	–	–
N.H.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
R.I.	104	–	X	X	–	–	–	–	–	–	–	–	X	X	X
Vt.	11,019	X	X	–	–	–	–	–	–	–	–	X	–	–	–
Middle Atlantic	**47,949**														
N.J.	45,572	X	X	–	–	X	–	X	X	X	–	–	X	X	EIA
N.Y.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	2,377	X	X	–	X	–	–	X	–	–	–	–	–	–	Immunoglobin separation and testing
East North Central	**170,680**														
Ill.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ind.	7,822	X	X	–	–	X	–	–	–	–	–	X	X	–	Passive latex agglutination
Mich.	73,486	X	X	–	–	X	–	–	X	–	–	X	–	–	Immune adherence
Ohio	30,151	X	X	–	–	X	–	X	–	–	–	X	X	X	IFA
Wisc.	59,221	X	–	–	–	–	–	X	X	X	–	X	–	–	Cold agglutinins, hemagglutination, EIA
West North Central	**132,748**														
Ia.	37,265	X	X	–	–	X	–	–	X	–	–	–	–	–	ELISA
Kans.	28,246	X	X	–	–	X	–	–	X	X	–	–	–	–	–
Minn.	17,237	X	X	–	X	X	–	–	–	–	–	X	–	–	Rubella
Mo.	30,118	X	X	X	X	X	–	X	X	X	–	X	X	X	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	5,126	–	–	–	–	–	–	X	–	X	–	X	X	X	–
S.D.	14,756	X	X	–	–	X	–	X	–	–	–	–	–	–	ELISA
South Atlantic	**404,259**														
Del.	8,379	X	X	–	–	–	–	–	–	–	–	–	–	–	–
D.C.	–	–	X	–	–	–	–	X	–	–	–	–	–	–	–
Fla.	74,710	X	X	–	–	X	–	–	–	–	–	–	–	–	–
Ga.	53,868	X	X	–	–	X	–	X	X	X	–	–	–	–	–
Md.	128,981	X	X	X	X	X	X	X	X	X	–	X	X	X	–
N.C.	57,442	X	X	X	X	X	–	X	–	X	–	X	–	–	–
S.C.	30,826	X	X	X	X	–	–	–	–	–	X	X	X	X	–
Va.	34,821	X	X	–	–	–	–	–	–	X	–	X	X	X	–
W.Va.	15,232	X	–	–	–	–	–	–	X	–	–	–	–	–	EIA
East South Central	**108,268**														
Ala.	16,870	X	X	–	–	–	–	–	–	–	–	X	X	–	Rubacell, hepatitis
Ky.	21,996	X	X	–	–	–	–	–	–	–	–	–	X	X	–
Miss.	18,433	–	X	–	–	–	–	–	–	–	–	–	–	–	–
Tenn.	50,969	X	–	–	–	–	–	–	–	–	–	–	–	–	EIA
West South Central	**150,439**														
Ark.	9,713	X	X	–	–	–	–	X	X	X	–	–	X	X	–
La.	71,236	X	X	–	–	–	–	–	–	X	–	–	–	–	HI-encephalitis
Okla.	11,517	X	X	–	–	–	–	–	–	X	–	–	X	X	Latex antigen
Tex.	57,973	X	X	X	X	X	X	–	X	X	X	–	–	–	–
Mountain	**48,304**														
Anz.	12,912	X	X	–	–	–	–	–	–	–	–	–	–	–	Hepatitis
Colo.	1,425	X	X	–	–	–	–	X	–	–	–	–	–	–	–
Ida.	3,359	X	X	–	–	–	–	X	–	X	–	–	–	–	–
Mont.	25,530	X	X	X	–	X	–	X	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	2,563	X	X	X	–	X	X	–	–	–	–	–	–	–	Enzyme immunoassay
Utah	2,220	X	X	X	–	X	–	X	–	–	–	–	X	X	–
Wyo.	295	X	–	–	–	–	–	–	–	–	–	–	X	–	–
Pacific	**39,257**														
Alaska	12,411	–	–	–	–	–	–	–	–	–	–	X	X	–	Rubacell, hepatitis
Cal.	7,733	X	X	–	X	X	X	X	X	X	–	–	–	–	EIA, ACIF, IEM
Hawaii	12,687	X	X	X	X	X	–	X	–	X	X	–	–	–	–
Ore.	4,058	X	X	X	–	X	–	–	–	–	–	–	X	X	–
Wash.	2,368	X	X	–	–	–	–	–	–	–	–	–	–	–	–
Territories	–														
Guam	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 4-26
V. IMMUNOLOGY
F. Other Serology Specimens

Lab	Number of Specimens	Disease Entity — Procedures Used
Total	**24,427**	
Average	1,745	
Cal.	2,861	WEE — IFA, St. Louis — IFA; meat adulteration — ppt test
Conn.	228	(Specimens referred elsewhere)
D.C.	974	Rubella — HI
Ia.	74	Rheumatoid Factor, C-reactive protein
La.	4	Korean hemorrhagic fever — IFA
Md.	1,487	Complement, autoimmune diseases
N.M.	293	*Chlamydia trachomatis* — culture; ureaplasma — culture
Ohio	1,171	Legionnaires' — IFA
Pa.	102	(Rabies antibody - referred to CDC)
Tenn.	815	Legionnaires' — IFA
Tex.	11,688	–
Vt.	744	Legionellosis — IFA
Va.	110	Rickettsial — IFA
Wisc.	3,876	Autoimmune; RA — nephelometry; ANA — fluorescent antibody; anti-thyroid — passive hemagglutination

Table 4-27
VI. HEMATOLOGY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Hematology Specimens	A	B	C
		Hematology Specimens	Immunohematology Specimens	Hemoglobinopathy Specimens
Total	**1,092,947**	**387,394**	**216,768**	**488,785**
Average	36,432	21,522	9,853	22,218
New England	**8,212**	**5,477**	–	**2,735**
Conn	7,618	5,477	–	2,141
Mass.	–	–	–	–
Me.	–	–	–	–
N.H.	–	–	–	–
R.I.	594	–	–	594
Vt.	–	–	–	–
Middle Atlantic	**110**	**68**	**18**	**24**
N.J.	–	–	–	–
N.Y.	–	–	–	–
Pa.	110	68	18	24
East North Central	**52,138**	**12,416**	**37,840**	**1,882**
Ill.	–	–	–	–
Ind.	–	–	–	–
Mich.	12,416	12,416	–	–
Ohio	1,882	–	–	1,882
Wisc.	37,840	–	37,840	–
West North Central	**19,439**	–	**10,861**	**8,578**
Ia.	–	–	–	–
Kans.	–	–	–	–
Minn.	12,854	–	4,276	8,578
Mo.	–	–	–	–
Nebr.	–	–	–	–
N.D.	6,585	–	6,585	–
S.D.	–	–	–	–
South Atlantic	**518,901**	**195,920**	**73,861**	**249,120**
Del.	2,749	89	–	2,660
D.C.	54,424	40,959	4,627	8,838
Fla.	137,401	61,412	17,659	58,330
Ga.	100,232	951	13,717	85,564
Md.	81,002	46,284	12,569	22,149
N.C.	61,209	2,272	9,467	49,470
S.C.	60,971	43,713	5,419	11,839
Va.	19,856	–	10,403	9,453
W.Va.	1,057	240	–	817
East South Central	**150,873**	**33,468**	**32,781**	**84,624**
Ala.	64,682	–	12,712	51,970
Ky.	5,964	–	5,964	–
Miss.	80,227	33,468	14,105	32,654
Tenn.	–	–	–	–
West South Central	**258,386**	**74,925**	**44,674**	**138,787**
Ark.	24,744	4,660	10,756	9,328
La.	67,232	–	3,479	63,753
Okla.	9,017	207	4,855	3,955
Tex.	157,393	70,058	25,584	61,751
Mountain	**14,958**	**3,656**	**10,888**	**414**
Anz.	–	–	–	–
Colo.	9,392	–	9,392	–
Ida.	3,656	3,656	–	–
Mont.	–	–	–	–
Nev.	–	–	–	–
N.M.	1,910	–	1,496	414
Utah	–	–	–	–
Wyo.	–	–	–	–
Pacific	**2,621**	–	–	**2,621**
Alaska	–	–	–	–
Cal.	–	–	–	–
Hawaii	–	–	–	–
Ore.	–	–	–	–
Wash.	2,621	–	–	2,621
Territories	**67,309**	**61,464**	**5,845**	–
Guam	15,375	14,465	910	–
P.R.	51,934	46,999	4,935	–
V.I.	–	–	–	–

Table 4-28
VI. HEMATOLOGY
A. Hematology Specimens

Lab & Region	Number of Specimens	Hematocrit	Hemoglobin	Cell Count	Sed. Rate	Reticulo-cyte Count	Differ-ential	Prothrombin Time	Platelet Count	Other
Total	**387,394**									
Average	21,522									
New England	**5,477**									
Conn.	5,477	X	X	X	X	X	X	X	X	–
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–	–	–
N.H.	–	–	–	–	–	–	–	–	–	–
R.I.	–	–	–	–	–	–	–	–	–	–
Vt.	–	–	–	–	–	–	–	–	–	–
Middle Atlantic	**68**									
N.J.	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	68	X	X	X	–	–	X	X	–	–
East North Central	**12,416**									
Ill.	–	–	–	–	–	–	–	–	–	–
Ind.	–	–	–	–	–	–	–	–	–	–
Mich.	12,416	X	X	X	X	X	X	X	X	–
Ohio	–	–	–	–	–	–	–	–	–	–
Wisc.	–	–	–	–	–	–	–	–	–	–
West North Central	**–**									
Ia.	–	–	–	–	–	–	–	–	–	–
Kans.	–	–	–	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–	–	–
S.D.	–	–	–	–	–	–	–	–	–	–
South Atlantic	**195,920**									
Del.	89	X	X	X	–	–	X	–	–	–
D.C.	40,959	X	X	–	–	–	X	–	X	–
Fla.	61,412	X	X	X	X	–	–	–	–	–
Ga.	951	X	X	X	–	–	X	–	–	–
Md.	46,284	X	X	X	X	X	X	X	X	L-E preparation, Bence - Jones protein, spinal fluid WBC, asbestos bodies
N.C.	2,272	X	X	X	–	–	X	–	–	–
S.C.	43,713	X	X	X	X	X	X	X	X	–
Va.	–	–	–	–	–	–	–	–	–	–
W.Va.	240	X	X	X	–	–	X	–	–	–
East South Central	**33,468**									
Ala.	–	–	–	–	–	–	–	–	–	–
Ky.	–	–	–	–	–	–	–	–	–	–
Miss.	33,468	X	X	X	–	–	–	–	–	MCV, MCH, MCHC
Tenn.	–	–	–	–	–	–	–	–	–	–
West South Central	**74,925**									
Ark.	4,660	X	–	X	–	–	X	–	–	–
La.	–	–	–	–	–	–	–	–	–	–
Okla.	207	X	–	X	–	–	X	–	X	–
Tex.	70,058	–	X	–	–	–	–	–	–	–
Mountain	**3,656**									
Anz.	–	–	–	–	–	–	–	–	–	–
Colo.	–	–	–	–	–	–	–	–	–	–
Ida.	3,656	X	–	–	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	–	–	–	–	–	–	–	–
Utah	–	–	–	–	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific	**–**									
Alaska	–	–	–	–	–	–	–	–	–	–
Cal.	–	–	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–	–	–	–
Territories	**61,464**									
Guam	14,465	X	X	X	X	X	X	–	X	EKG
P.R.	46,999	X	X	X	X	X	X	X	X	L-E cell preparation, ANA
V.I.	–	–	–	–	–	–	–	–	–	–

Table 4-29
VI. HEMATOLOGY
B. Immunohematology Specimens

Lab & Region	Number of Specimens	Blood Grouping	Blood Typing	Other Test
Total	**216,768**			
Average	9,853			
New England	–			
Conn.	–	–	–	–
Mass.	–	–	–	–
Me.	–	–	–	–
N.H.	–	–	–	–
R.I.	–	–	–	–
Vt.	–	–	–	–
Middle Atlantic	**18**			
N.J.	–	–	–	–
N.Y.	–	–	–	–
Pa.	18	X	X	–
East North Central	**37,840**			
Ill.	–	–	–	–
Ind.	–	–	–	–
Mich.	–	–	–	–
Ohio	–	–	–	–
Wisc.	37,840	X	X	–
West North Central	**10,861**			
Ia.	–	–	–	–
Kans.	–	–	–	–
Minn.	–	–	–	–
Mo.	4,276	X	X	ASO
Nebr.	–	–	–	–
N.D.	6,585	X	X	Coombs
S.D.	–	–	–	–
South Atlantic	**73,861**			
Del.	–	–	–	–
D.C.	4,627	X	X	Rh antibody screen
Fla.	17,659	–	X	Rh antibody screen
Ga.	13,717	–	X	Rh antibody screen
Md.	12,569	X	X	–
N.C.	9,467	X	X	–
S.C.	5,419	X	X	–
Va.	10,403	X	X	Unexpected antibody, screen test
W Va.	–	–	–	–
East South Central	**32,781**			
Ala.	12,712	–	–	Rh antibody
Ky.	5,964	–	X	Antibody identification
Miss.	14,105	X	X	Indirect Coombs (identification and titration)
Tenn.	–	–	–	–
West South Central	**44,674**			
Ark.	10,756	X	X	Rh antibody and titer
La.	3,479	X	X	Coombs
Okla.	4,855	X	X	–
Tex.	25,584	X	X	Antibodies
Mountain	**10,888**			
Anz.	–	–	–	–
Colo.	9,392	–	X	–
Ida.	–	–	–	–
Mont.	–	–	–	–
Nev.	–	–	–	–
N.M.	1,496	X	X	Antibody screening test
Utah	–	–	–	–
Wyo.	–	–	–	–
Pacific	–			
Alaska	–	–	–	–
Cal.	–	–	–	–
Hawaii	–	–	–	–
Ore.	–	–	–	–
Wash.	–	–	–	–
Territories	**5,845**			
Guam	910	X	X	–
P.R.	4,935	–	–	D^u determination, indirect Coombs
V.I.	–	–	–	–

Table 4-30
VI. HEMATOLOGY
C. Hemoglobinopathy Specimens

Lab & Region	Number of Specimens	Procedures Used						
		Hemoglobin Cellulose Acetate Electro.	Citrate Agar Electrophoresis	Solubility Testing	Fetal Hemoglobin Assay	Hemoglobin A_2 Quantitation	Densitometry	Other
Total	**488,785**							
Average	22,218							
New England	**2,735**							
Conn.	2,141	X	X	X	X	X	X	–
Mass.	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–
N.H.	–	–	–	–	–	–	–	–
R.I.	594	X	–	X	–	–	–	–
Vt.	–	–	–	–	–	–	–	–
Middle Atlantic	**24**							
N.J.	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	24	X	X	X	X	–	X	–
East North Central	**1,882**							
Ill.	–	–	–	–	–	–	–	–
Ind.	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–
Ohio	1,882	X	X	X	–	–	–	–
Wisc.	–	–	–	–	–	–	–	–
West North Central	**8,578**							
Ia.	–	–	–	–	–	–	–	–
Kans.	–	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–
Mo.	8,578	X	X	X	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–
S.D.	–	–	–	–	–	–	–	–
South Atlantic	**249,120**							
Del.	2,660	X	–	X	–	–	X	–
D.C.	8,838	X	–	X	–	–	–	–
Fla.	58,330	X	X	X	X	X	–	–
Ga.	85,564	X	–	X	–	–	–	–
Md.	22,149	X	X	X	X	X	X	–
N.C.	49,470	X	X	X	X	X	X	–
S.C.	11,839	X	X	X	–	–	–	–
Va.	9,453	X	X	X	–	–	–	–
W Va.	817	X	X	X	–	–	–	–
East South Central	**84,624**							
Ala.	51,970	X	X	–	–	X	–	Alkaline globin chain electrophoresis, acid globin chain electrophoresis
Ky.	–	–	–	–	–	–	–	–
Miss.	32,654	X	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–	–
West South Central	**138,787**							
Ark.	9,328	X	–	X	–	–	–	–
La.	63,753	X	X	–	–	–	X	–
Okla.	3,955	X	X	X	–	–	–	–
Tex.	61,751	X	X	–	–	X	X	–
Mountain	**414**							
Ariz.	–	–	–	–	–	–	–	–
Colo.	–	–	–	–	–	–	–	–
Ida.	–	–	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–
N.M.	414	X	X	X	–	–	X	–
Utah	–	–	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–
Pacific	**2,621**							
Alaska	–	–	–	–	–	–	–	–
Cal.	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–
Wash.	2,621	–	–	–	–	–	–	–
Territories	**–**							
Guam	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 4-31
VII. CLINICAL CHEMISTRY
SUMMARY OF SPECIMENS BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Clinical Chemistry Specimens	A	B	C	D	E
		Clinical Chemistry Specimens	Urinalysis Specimens	Inborn Errors of Metabolism	Multiphasic Screening	Other Clinical Chemistry
Total	**5,544,190**	**460,088**	**114,815**	**4,759,713**	**85,218**	**124,356**
Average	138,605	18,404	6,754	135,992	10,652	24,871
New England	**147,456**	**4,836**	**928**	**140,446**	**1,246**	–
Conn.	87,894	4,836	928	80,884	1,246	–
Mass.	–	–	–	–	–	–
Me.	16,910	–	–	16,910	–	–
N.H.	19,099	–	–	19,099	–	–
R.I.	23,553	–	–	23,553	–	–
Vt.	–	–	–	–	–	–
Middle Atlantic	**341,604**	**434**	**11**	**341,159**	–	–
N.J.	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–
Pa.	341,604	434	11	341,159	–	–
East North Central	**1,042,335**	**48,035**	**7,004**	**987,296**	–	–
Ill.	200,950	–	–	200,950	–	–
Ind.	–	–	–	–	–	–
Mich.	255,518	16,602	6,378	232,538	–	–
Ohio	208,309	541	–	207,768	–	–
Wisc.	377,558	30,892	626	346,040	–	–
West North Central	**341,455**	**1,035**	–	**340,420**	–	–
Ia.	31,398	992	–	30,406	–	–
Kans.	67,277	–	–	67,277	–	–
Minn.	83,355	–	–	83,355	–	–
Mo.	138,382	25	–	138,357	–	–
Nebr.	–	–	–	–	–	–
N.D.	21,043	18	–	21,025	–	–
S.D.	–	–	–	–	–	–
South Atlantic	**1,320,165**	**203,947**	**48,698**	**993,399**	**70,794**	**3,327**
Del.	2,944	–	369	–	–	2,575
D.C.	–	–	–	–	–	–
Fla.	315,109	79,931	–	205,883	29,295	–
Ga.	133,792	12,518	453	120,077	–	744
Md.	225,580	70,525	22,913	132,142	–	–
N.C.	191,292	12,024	63	146,742	32,463	–
S.C.	146,891	3,698	24,900	111,840	6,445	8
Va.	229,662	16,214	–	212,826	622	–
W.Va.	74,895	9,037	–	63,889	1,969	–
East South Central	**473,406**	**72,309**	–	**383,163**	**8,967**	**8,967**
Ala.	198,511	–	–	198,511	–	–
Ky.	116,854	9,831	–	107,023	–	–
Miss.	80,412	62,478	–	–	8,967	8,967
Tenn.	77,629	–	–	77,629	–	–
West South Central	**1,260,048**	**101,608**	**39,084**	**1,003,083**	**4,211**	**112,062**
Ark.	76,494	4,212	6	72,276	–	–
La.	173,345	748	1,982	166,404	4,211	–
Okla.	111,108	3,820	3,239	104,049	–	–
Tex.	899,101	92,828	33,857	660,354	–	112,062
Mountain	**302,056**	**163**	**5,359**	**296,534**	–	–
Anz.	–	–	–	–	–	–
Colo.	171,403	–	–	171,403	–	–
Ida.	5,533	–	5,359	174	–	–
Mont.	–	–	–	–	–	–
Nev.	–	–	–	–	–	–
N.M.	40,973	163	–	40,810	–	–
Utah	84,147	–	–	84,147	–	–
Wyo.	–	–	–	–	–	–
Pacific	**280,719**	**279**	**6,227**	**274,213**	–	–
Alaska	–	–	–	–	–	–
Cal.	3,441	279	–	3,162	–	–
Hawaii	6,227	–	6,227	–	–	–
Ore.	162,896	–	–	162,896	–	–
Wash.	108,155	–	–	108,155	–	–
Territories	**34,946**	**27,442**	**7,504**	–	–	–
Guam	7,088	3,604	3,484	–	–	–
P.R.	27,858	23,838	4,020	–	–	–
V.I.	–	–	–	–	–	–

Table 4-32
VII. CLINICAL CHEMISTRY
A. Clinical Chemistry Specimens

Lab	Number of Specimens	Types of Tests																						Other
		Glucose	Cholesterol	BUN	Uric Acid	Transaminases	Alkaline Phos.	Total Proteins	Serum Iron	Iron Binding Capacity	Triglycerides	Lactic Acid	Bilirubin	T_4, T_3, T_3 Uptake	Sodium	Potassium	Phosphorous	Calcium	Creatinine	Acid Phosphatase	Albumin	Chloride	LDH	
Total	**460,088**																							
Average	18,404																							
Ark.	4,212	X	X	X	X	X	X	X	–	–	X	–	X		X	X	–	X	X	X	–	X	X	–
Cal.	279	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Conn.	4,836	X	X	X	X	X	X	X	X	X	X	–	X	–	X	X	X	X	X	–	X	X	X	HDL, amylase
Fla.	79,931	X	X	X	X	X	X	X	–	–	X	–	X	–	X	X	X	X	X	X	X	X	–	–
Ga.	12,518	X	X	X	X	X	X	X	–	–	–	–	–	–	X	X	–	–	X	–	–	–	X	Lithium, hemoglobin A ic
Guam	3,604	X	X	X	X	–	–	X	–	–	–	–	X	–	–	–	–	–	X	–	X	–	–	SGOT, SGPT
Ia.	992	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	Blood lead
Ky.	9,831	X	X	X	X	–	X	X	–	–	X	–	X	–	X	X	X	X	X	X	X	X	X	SGOT, HBDH, lithium, GGTP, SGPT, Amyl, CPK, HDL, cholinesterase
La.	748	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Md.	70,525	X	X	X	X	X	X	X	X	X	X	–	X	X	X	X	X	X	X	–	X	X	X	
Mich.	16,602	X	X	X	X	X	–	X	–	–	–	–	X	–	X	X	–	–	X	–	–	X	–	
Miss.	62,478	X	X	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X	X	X	
Mo.	25	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
N.M.	163	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	Cholinesterase, lithium in blood
N.C.	12,024	–	–	–	–	–	–	–	X	X	X	–	–	X	–	–	–	–	–	–	–	–	–	
N.D.	18	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	–	–	Magnesium
Ohio	541	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Okla.	3,820	X	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Pa.	434	X	X	X	X	X	X	X	X	–	X	–	X	–	X	X	X	X	X	–	X	X	X	GGT, HDL
P.R.	23,838	X	X	X	X	X	X	X	–	–	X	–	X	X	X	X	X	X	X	X	X	X	–	Lithium
S.C.	3,698	–	–	–	–	–	–	X	–	–	–	–	X	–	X	X	X	X	X	–	X	X	–	CO_2
Tex.	92,828	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Va.	16,214	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
W Va.	9,037	X	X	X	X	–	–	X	–	–	X	–	–	X	X	X	–	–	X	–	–	–	–	
Wisc.	30,892	X	X	X	X	X	X	X	X	X	X	–	X	X	X	X	X	X	X	–	X	X	X	TSH, lithium, magnesium, vitamin B-12, folate, gamma GT, amylase, HDL, cholesterol

Table 4-33
VII. CLINICAL CHEMISTRY
B. Urinalysis Specimens

Lab & Region	Number of Specimens	Procedures Used			
		Routine	Microscopic	Pregnancy Test	Other
Total	**114,815**				
Average	6,754				
New England	**928**				
Conn.	928	X	X	–	–
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	–	–	–	–	–
R.I.	–	–	–	–	–
Vt.	–	–	–	–	–
Middle Atlantic	**11**				
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	11	X	X	X	–
East North Central	**7,004**				
Ill.	–	–	–	–	–
Ind.	–	–	–	–	–
Mich.	6,378	X	X	–	–
Ohio	–	–	–	–	–
Wisc.	626	–	–	–	17-OH steroids, 17-keto steroids, 17-ketogenic, VMA, % HIAA, creatinine, protein, calcium
West North Central	–				
Ia.	–	–	–	–	–
Kans.	–	–	–	–	–
Minn.	–	–	–	–	–
Mo.	–	–	–	–	–
Nebr.	–	–	–	–	–
N.D.	–	–	–	–	–
S.D.	–	–	–	–	–
South Atlantic	**48,698**				
Del.	369	X	X	–	–
D.C.	–	X	X	X	–
Fla.	–	–	–	–	–
Ga.	453	X	X	–	–
Md.	22,913	X	X	X	–
N.C.	63	X	X	–	–
S.C.	24,900	X	X	X	Sperm counts
Va.	–	–	–	–	–
W Va.	–	–	–	–	–
East South Central	–				
Ala.	–	–	–	–	–
Ky.	–	–	–	–	–
Miss.	–	–	–	–	–
Tenn.	–	–	–	–	–
West South Central	**39,084**				
Ark.	6	X	X	–	–
La.	1,982	X	X	–	–
Okla.	3,239	X	X	X	Microstix 3
Tex.	33,857	–	–	–	–
Mountain	**5,359**				
Ariz.	–	–	–	–	–
Colo.	–	–	–	–	–
Ida.	5,359	X	X	X	Sperm tests, Trichomonas, fern test
Mont.	–	–	–	–	–
Nev.	–	–	–	–	–
N.M.	–	–	–	–	–
Utah	–	–	–	–	–
Wyo.	–	–	–	–	–
Pacific	**6,227**				
Alaska	–	–	–	–	–
Cal.	–	–	–	–	–
Hawaii	6,227	–	–	–	INH
Ore.	–	–	–	–	–
Wash.	–	–	–	–	–
Territories	**7,504**				
Guam	3,484	X	X	X	Bile, ketone
P.R.	4,020	X	X	–	–
V.I.	–	–	–	–	–

Table 4-34
VII. CLINICAL CHEMISTRY
C. Inborn Errors of Metabolism Specimens

Lab & Region	Number of Specimens	Inborn Error Assays								
		PKU	Tyrosinemia	Galactosemia	MSUD	Hypothyroidism	Amino Acid Chromatography	Homocystinuria	Maternal PKU	Other
Total	**4,759,713**									
Average	135,992									
New England	**140,446**									
Conn.	80,884	X	–	X	–	X	X	–	–	Tay-Sachs
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	16,910	X	X	–	X	X	–	X	–	–
N.H.	19,099	X	–	–	–	–	–	–	–	–
R.I.	23,553	X	X	–	–	–	X	–	–	–
Vt.	–	–	–	–	–	–	–	–	–	–
Middle Atlantic	**341,159**									
N.J.	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	341,159	X	–	–	–	X	–	–	X	Plasma phenylalanine, plasma tyrosine, serum T_4, serum TSH, serum TBG
East North Central	**987,296**									
Ill.	200,950	X	–	–	–	X	–	–	–	–
Ind.	–	–	–	–	–	–	–	–	–	–
Mich.	232,538	X	–	–	–	X	–	–	–	–
Ohio	207,768	X	–	X	–	X	–	X	X	–
Wisc.	346,040	X	–	X	X	X	–	X	–	–
West North Central	**340,420**									
Ia.	30,406	X	–	X	X	X	–	–	–	–
Kans.	67,277	X	–	–	–	X	–	–	–	–
Minn.	83,355	X	–	X	–	X	–	–	–	–
Mo.	138,357	X	–	–	–	X	–	–	X	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	21,025	X	–	–	–	X	–	–	–	–
S.D.	–	–	–	–	–	–	–	–	–	–
South Atlantic	**993,399**									
Del.	–	–	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–	–
Fla.	205,883	X	–	X	X	X	–	–	–	–
Ga.	120,077	X	X	X	X	X	–	–	–	–
Md.	132,142	X	X	X	X	X	–	–	–	Fluorometric assays
N.C.	146,742	X	X	–	–	X	–	–	–	–
S.C.	111,840	X	–	–	–	X	–	–	–	–
Va.	212,826	X	X	–	–	X	–	–	–	–
W.Va.	63,889	X	–	X	–	X	X	–	–	–
East South Central	**383,163**									
Ala.	198,511	X	–	–	–	X	X	–	X	Amino acid disorders
Ky.	107,023	X	–	X	–	X	–	–	–	–
Miss.	–	–	–	–	–	–	–	–	–	–
Tenn.	77,629	X	–	–	–	X	–	–	–	–
West South Central	**1,003,083**									
Ark.	72,276	X	–	–	–	X	–	–	–	–
La.	166,404	X	–	–	–	X	–	–	–	–
Okla.	104,049	X	–	–	–	X	–	–	–	Hemoglobinopathies
Tex.	660,354	X	–	X	–	X	–	X	–	–
Mountain	**296,534**									
Ariz.	–	–	–	–	–	–	–	–	–	–
Colo.	171,403	X	–	X	X	X	–	X	–	Hemoglobinopathies by electrophoresis
Ida.	174	X	–	–	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	40,810	X	–	X	X	X	–	X	–	–
Utah	84,147	X	–	X	–	X	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific	**274,213**									
Alaska	–	–	–	–	–	–	–	–	–	–
Cal.	3,162	X	–	X	–	X	–	–	X	–
Hawaii	–	–	–	–	–	–	–	–	–	–
Ore.	162,896	X	X	X	X	X	X	X	–	–
Wash.	108,155	X	–	–	–	X	–	–	–	–
Territories	**–**									
Guam	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–

Table 4-35
VII. CLINICAL CHEMISTRY
D. Multiphasic Screening Specimens

Lab & Region	Number of Specimens	Procedures Used			
		Single or Discrete Analyzer	2 Channel Analyzer	3-6 Channel Analyzer	7-12 Channel Analyzer
Total	**85,218**				
Average	10,652				
New England	**1,246**				
Conn.	1,246	X	–	X	–
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	–	–	–	–	–
R.I.	–	–	–	–	–
Vt.	–	–	–	–	–
Middle Atlantic	–				
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	–	–	–	–	–
East North Central	–				
Ill.	–	–	–	–	–
Ind.	–	–	–	–	–
Mich.	–	–	–	–	–
Ohio	–	–	–	–	–
Wisc.	–	–	–	–	–
West North Central	–				
Ia.	–	–	–	–	–
Kans.	–	–	–	–	–
Minn.	–	–	–	–	–
Mo.	–	–	–	–	–
Nebr.	–	–	–	–	–
N.D.	–	–	–	–	–
S.D.	–	–	–	–	–
South Atlantic	**70,794**				
Del.	–	–	–	–	–
D.C.	–	–	–	–	–
Fla.	29,295	X	–	–	–
Ga.	–	–	–	–	–
Md.	–	–	–	–	–
N.C.	32,463	–	–	X	X
S.C.	6,445	X	–	–	–
Va.	622	–	X	–	–
W Va.	1,969	–	–	–	X
East South Central	**8,967**				
Ala.	–	–	–	–	–
Ky.	–	–	–	–	–
Miss.	8,967	–	–	X	–
Tenn.	–	–	–	–	–
West South Central	**4,211**				
Ark.	–	–	–	–	–
La.	4,211	X	–	–	–
Okla.	–	–	–	–	–
Tex.	–	–	–	–	–
Mountain	–				
Ariz.	–	–	–	–	–
Colo.	–	–	–	–	–
Ida.	–	–	–	–	–
Mont.	–	–	–	–	–
Nev.	–	–	–	–	–
N.M.	–	–	–	–	–
Utah	–	–	–	–	–
Wyo.	–	–	–	–	–
Pacific	–				
Alaska	–	–	–	–	–
Cal.	–	–	–	–	–
Hawaii	–	–	–	–	–
Ore.	–	–	–	–	–
Wash.	–	–	–	–	–
Territories	–				
Guam	–	–	–	–	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-36
VII. CLINICAL CHEMISTRY
E. Other Specimens

Lab	Number of Specimens	Type — Procedures Used
Total	**124,356**	
Average	24,871	
Cal.	–	Cholinesterase — enzyme assay
Del.	2,575	Stool — Hemoccult
Ga.	744	Blood — atomic absorption, lead
Miss.	8,967	Electrolytes — flame photometer and chloride meter
S.C.	8	Stool — occult blood
Tex.	112,062	–

Table 4-37
VIII. PATHOLOGY

Lab & Region	Total Pathology Specimens	Exfoliative Cytology Specimens	Cytogenetic Specimens	Other Pathology Specimens	
				Number of Specimens	Types
Total	**476,020**	**472,900**	**2,706**	**414**	
Average	39,668	52,544	902	138	
New England	–	–	–	–	
Conn.	–	–	–	–	–
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	–	–	–	–	–
R.I.	–	–	–	–	–
Vt.	–	–	–	–	–
Middle Atlantic	–	–	–	–	
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	–	–	–	–	–
East North Central	**86,373**	**84,231**	**2,053**	**89**	
Ill.	–	–	–	–	–
Ind.	–	–	–	–	–
Mich.	–	–	–	–	–
Ohio	–	–	–	–	–
Wisc.	86,373	84,231	2,053	89	Buccal smears
West North Central	**160**	–	**160**	–	
Ia.	–	–	–	–	–
Kans.	–	–	–	–	–
Minn.	160	–	160	–	–
Mo.	–	–	–	–	–
Nebr.	–	–	–	–	–
N.D.	–	–	–	–	–
S.D.	–	–	–	–	–
South Atlantic	**344,908**	**344,770**	–	**138**	
Del.	41,055	41,055	–	–	–
D.C.	14,573	14,573	–	–	–
Fla.	–	–	–	–	–
Ga.	–	–	–	–	–
Md.	63,294	63,294	–	–	–
N.C.	174,155	174,155	–	–	–
S.C.	–	–	–	–	–
Va.	–	–	–	–	–
W.Va.	51,831	51,693	–	138	Oral, breast, sputum
East South Central	**18,883**	**18,696**	–	**187**	
Ala.	18,696	18,696	–	–	–
Ky.	187	–	–	187	Autopsies
Miss.	–	–	–	–	–
Tenn.	–	–	–	–	–
West South Central	–	–	–	–	
Ark.	–	–	–	–	–
La.	–	–	–	–	–
Okla.	–	–	–	–	–
Tex.	–	–	–	–	–
Mountain	**24,024**	**23,531**	**493**	–	
Ariz.	–	–	–	–	–
Colo.	–	–	–	–	–
Ida.	493	–	493	–	–
Mont.	–	–	–	–	–
Nev.	–	–	–	–	–
N.M.	23,531	23,531	–	–	–
Utah	–	–	–	–	–
Wyo.	–	–	–	–	–
Pacific	–	–	–	–	–
Alaska	–	–	–	–	–
Cal.	–	–	–	–	–
Hawaii	–	–	–	–	–
Ore.	–	–	–	–	–
Wash.	–	–	–	–	–
Territories	**1,672**	**1,672**	–	–	
Guam	1,672	1,672	–	–	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-38
IX. ENVIRONMENTAL MICROBIOLOGY
SUMMARY OF SAMPLES BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Environmental Microbiology	A	B	C	D
		Water Samples	Dairy Product Samples	Food and Beverage Samples	Other Micro. Samples
Total	**2,150,520**	**1,816,678**	**290,133**	**35,456**	**8,253**
Average	45,756	41,288	8,290	865	516
New England	**77,326**	**61,461**	**8,503**	**5,722**	**1,640**
Conn.	14,928	9,545	4,652	666	65
Mass.	–	–	–	–	–
Me.	17,232	16,856	–	–	376
N.H.	2,085	14	1,717	354	–
R.I.	18,443	11,580	2,134	4,682	47
Vt.	24,638	23,466	–	20	1,152
Middle Atlantic	**9,282**	**6,571**	**2,493**	**193**	**25**
N.J.	9,158	6,550	2,493	115	–
N.Y.	–	–	–	–	–
Pa.	124	21	–	78	25
East North Central	**314,169**	**286,375**	**23,240**	**4,554**	–
Ill.	38,110	27,856	9,240	1,014	–
Ind.	64,871	55,909	6,620	2,342	–
Mich.	102,116	95,469	5,747	900	–
Ohio	47,095	45,164	1,633	298	–
Wisc.	61,977	61,977	–	–	–
West North Central	**229,417**	**212,225**	**11,139**	**4,600**	**1,453**
Ia.	37,946	37,256	690	–	–
Kans.	55,051	55,051	–	–	–
Minn.	–	–	–	–	–
Mo.	99,871	93,140	2,522	4,209	–
Nebr.	–	–	–	–	–
N.D.	15,383	9,274	4,402	254	1,453
S.D.	21,166	17,504	3,525	137	–
South Atlantic	**502,952**	**445,153**	**50,714**	**5,580**	**1,505**
Del.	13,201	11,810	1,328	63	–
D.C.	711	160	148	403	–
Fla.	226,988	221,378	4,518	1,092	–
Ga.	111	–	–	111	–
Md.	83,215	68,535	11,931	1,856	893
N.C.	59,282	58,931	–	351	–
S.C.	11,579	–	10,660	919	–
Va.	71,033	55,797	13,923	701	612
W.Va.	36,832	28,542	8,206	84	–
East South Central	**256,486**	**182,876**	**72,803**	**807**	–
Ala.	102,896	78,175	24,374	347	–
Ky.	12,066	2,644	9,333	89	–
Miss.	76,521	58,781	17,604	136	–
Tenn.	65,003	43,276	21,492	235	–
West South Central	**597,019**	**490,691**	**97,353**	**8,269**	**706**
Ark.	81,127	56,022	24,800	305	–
La.	112,899	77,544	32,808	1,841	706
Okla.	44,544	35,254	9,290	–	–
Tex.	358,449	321,871	30,455	6,123	–
Mountain	**129,189**	**105,270**	**20,769**	**2,548**	**602**
Ariz.	14,208	6,667	6,821	720	–
Colo.	33,989	25,691	8,005	293	–
Ida.	23,854	20,874	2,769	144	67
Mont.	10,059	10,037	–	22	–
Nev.	–	–	–	–	–
N.M.	16,410	11,790	3,174	946	500
Utah	19,490	19,032	–	423	35
Wyo.	11,179	11,179	–	–	–
Pacific	**34,462**	**26,056**	**3,043**	**3,041**	**2,322**
Alaska	1,626	1,504	22	100	–
Cal.	5,937	4,593	220	870	254
Hawaii	10,618	6,460	2,801	190	1,167
Ore.	9,487	9,262	–	164	61
Wash.	6,794	4,237	–	1,717	840
Territories	**218**	–	**76**	**142**	–
Guam	218	–	76	142	–
P.R.	–	–	–	–	–
V.I.	–	–	–	–	–

Table 4-39
IX. ENVIRONMENTAL MICROBIOLOGY
A. Water Samples

Lab & Region	Number of Samples	Type & Procedure											
		Potable			Non-Potable			Swimming Pools			Sewage & Waste		
		Membrane Filter	Multiple Tube	Other	Membrane Filter	Multiple Tube	Other	Membrane Filter	Multiple Tube	Other	Membrane Filter	Multiple Tube	Other
TOTAL	**1,816,678**												
Average	41,288												
New England	**61,461**												
Conn.	9,545	X	X	X	X	X	X	X	–	X	–	X	–
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	16,856	X	X	X	X	X	X	X	X	X	X	X	X
N.H.	14	–	–	–	–	X	–	–	–	–	–	–	–
R.I.	11,580	X	X	–	–	X	–	–	–	X	–	X	–
Vt.	23,466	–	–	–	–	–	–	–	–	–	–	–	–
Middle Atlantic	**6,571**												
N.J.	6,550	X	–	–	–	X	–	X	–	–	–	X	–
N.Y	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	21	X	–	–	–	–	–	–	–	–	–	–	–
East North Central	**286,375**												
Ill.	27,856	X	X	–	X	X	–	X	X	–	–	X	–
Ind.	55,909	X	X	–	X	–	–	–	X	X	X	–	–
Mich.	95,469	X	–	–	X	–	–	X	–	–	X	–	–
Ohio	45,164	X	X	–	X	X	X	–	–	X	–	–	X
Wisc.	61,977	X	X	–	X	–	–	X	–	–	–	X	–
West North Central	**212,225**												
Ia.	37,256	X	X	–	X	X	–	–	X	–		–	–
Kans.	55,051	X	–	–	X	–	–	X	–	–	X	–	–
Minn.	–	–	–	–	–	–	–	–	–	–	–	–	–
Mo.	93,140	X	–	–	X	–	X	X	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	9,274	X	X	–	X	X	X	X	X	X	X	X	X
S.D.	17,504	X	X	–	X	X	–	X	X	–	X	X	–
South Atlantic	**445,153**												
Del.	11,810	X	X	–	–	X	–	X	X	–	–	–	–
D.C.	160	X	–	–	–	–	–	X	–	–	–	–	–
Fla.	221,378	X	X	–	X	X	–	X	X	–	X	X	–
Ga.	–	–	–	–	–	–	–	–	–	–	–	–	–
Md.	68,535	X	X	–	–	X	–	–	X	–	–	X	–
N.C.	58,931	X	X	X	X	X	X	X	X	–	–	X	–
S.C.	–	–	–	–	–	–	–	–	–	–	–	–	–
Va.	55,797	X	X	–	X	X	–	X	X	–	X	X	–
W. Va.	28,542	X	X	–	X	X	–	X	X	–	X	X	–
East South Central	**182,876**												
Ala.	78,175	X	–	–	X	X	–	–	–	–	–	–	–
Ky.	2,644	X	X	X	X	–	–	–	–	–	–	–	–
Miss.	58,781	X	X	–	–	X	–	–	–	–	–	–	–
Tenn.	43,276	X	–	–	X	–	–	X	–	–	–	–	–
West South Central	**490,691**												
Ark.	56,022	X	–	–	X	–	–	X	–	–	–	–	–
La.	77,544	X	X	–	–	X	–	–	–	–	–	X	–
Okla.	35,254	X	X	–	X	–	–	–	–	–	X	–	–
Tex.	321,871	X	X	–	–	–	–	–	–	–	–	–	–
Mountain	**105,270**												
Anz.	6,667	X	X	X	X	X	X	X	X	X	X	X	X
Colo.	25,691	X	X	–	X	X	–	X	X	–	–	X	–
Ida.	20,874	X	–	X	X	X	X	X	X	–	X	X	–
Mont.	10,037	X	X	–	X	X	–	X	X	–	X	X	–
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	11,790	X	X	X	X	X	X	X	X	–	X	X	–
Utah	19,032	X	X	–	X	X	–	X	–	X	X	–	X
Wyo.	11,179	–	X	–	–	–	–	–	–	–	–	–	–
Pacific	**26,056**												
Alaska	1,504	–	X	–	–	X	–	–	X	–	–	X	–
Cal.	4,593	X	X	–	–	X	–	X	X	–	–	X	–
Hawaii	6,460	X	X	–	X	X	–	–	–	–	X	X	–
Ore.	9,262	–	X	–	–	X	–	–	X	–	–	X	–
Wash.	4,237	–	X	–	–	X	–	–	X	X	–	X	–
Territories													
Guam	–	–	–	–	–	–	–	–	–	–	–	–	–
P.R.	–	X	–	–	–	X	–	X	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 4-40
IX. ENVIRONMENTAL MICROBIOLOGY
B. DAIRY PRODUCT SAMPLES

Lab & Region	Number of Samples	Types of Samples					
		Milk and Cream	Ice Cream	Cheese	Other Dairy Products	Frozen Desserts	Other
Total	**290,133**						
Average	8,290						
New England	**8,503**						
Conn.	4,652	X	X	X	X	X	Plant equipment, empty containers
Mass.	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–
N.H.	1,717	X	X	X	X	–	–
R.I.	2,134	X	X	X	X	X	–
Vt.	–	–	–	–	–	–	–
Middle Atlantic	**2,493**						
N.J.	2,493	X	X	–	X	–	DMSCC inhibitors
N.Y.	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–
East North Central	**23,240**						
Ill.	9,240	X	X	X	X	–	–
Ind.	6,620	X	X	X	X	X	–
Mich.	5,747	X	X	X	X	–	–
Ohio	1,633	X	X	X	X	–	–
Wisc.	–	–	–	–	–	–	–
West North Central	**11,139**						
Ia.	690	X	–	–	X	–	–
Kans.	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–
Mo.	2,522	X	X	X	X	–	–
Nebr.	–	–	–	–	–	–	–
N.D.	4,402	X	X	–	X	X	–
S.D.	3,525	X	X	X	X	X	–
South Atlantic	**50,714**						
Del.	1,328	X	X	–	X	–	–
D.C.	148	X	X	–	–	X	–
Fla.	4,518	X	X	–	–	X	–
Ga.	–	–	–	–	–	–	–
Md.	11,931	X	X	X	X	X	–
N.C.	–	–	–	–	–	–	–
S.C.	10,660	X	X	–	X	X	–
Va.	13,923	X	X	–	X	X	Cultured products, yogurt, cottage cheese, milk shakes, counter freezes, milk cartons
W.Va.	8,206	X	–	–	X	–	–
East South Central	**72,803**						
Ala.	24,374	X	X	–	X	X	Cartons and non-dairy imitation products
Ky.	9,333	X	X	X	X	X	–
Miss.	17,604	X	–	–	X	–	–
Tenn.	21,492	–	–	–	–	–	–
West South Central	**97,353**						
Ark.	24,800	X	X	X	X	X	–
La.	32,808	X	X	X	X	X	Raw milk, milk containers
Okla.	9,290	X	–	–	–	–	–
Tex.	30,455	X	X	–	X	X	–
Mountain	**20,769**						
Ariz.	6,821	X	X	–	X	X	–
Colo.	8,005	X	X	X	X	–	–
Ida.	2,769	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–
N.M.	3,174	X	–	X	X	X	Milk product containers
Utah	–	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–
Pacific	**3,043**						
Alaska	22	–	X	–	X	–	–
Cal.	220	X	–	–	–	–	–
Hawaii	2,801	X	X	–	X	X	–
Ore.	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–
Territories	**76**						
Guam	76	X	–	–	–	–	–
P.R.	–	X	X	–	X	X	Containers
V.I.	–	–	–	–	–	–	–

Table 4-41
IX. ENVIRONMENTAL MICROBIOLOGY
C. Food and Beverage Samples

Lab & Region	Number of Samples	Types of Samples			
		Food Quality	Food-Associated Disease Outbreaks	Seafood	Environmental
Total	**35,456**				
Average	865				
New England	**5,722**				
Conn.	666	X	X	X	X
Mass.	–	–	–	–	–
Me.	–	–	–	–	–
N.H.	354	X	X	X	–
R.I.	4,682	X	X	X	X
Vt.	20	–	X	–	–
Middle Atlantic	**193**				
N.J.	115	X	X	X	X
N.Y.	–	–	–	–	–
Pa.	78	–	X	–	X
East North Central	**4,554**				
Ill.	1,014	X	X	–	X
Ind.	2,342	X	X	X	X
Mich.	900	–	X	–	X
Ohio	298	–	X	–	–
Wisc.	–	–	–	–	–
West North Central	**4,600**				
Ia.	–	–	–	–	–
Kans.	–	–	–	–	–
Minn.	–	–	–	–	–
Mo.	4,209	–	–	–	–
Nebr.	–	–	–	–	–
N.D.	254	–	–	–	–
S.D.	137	–	X	–	–
South Atlantic	**5,580**				
Del.	63	X	X	X	–
D.C.	403	X	X	–	–
Fla.	1,092	X	X	X	X
Ga.	111	–	X	–	X
Md.	1,856	X	X	X	X
N.C.	351	–	X	X	X
S.C.	919	–	X	–	X
Va.	701	–	–	–	–
W Va.	84	–	X	–	–
East South Central	**807**				
Ala.	347	–	X	X	–
Ky.	89	X	X	–	X
Miss.	136	–	X	X	X
Tenn.	235	–	X	–	X
West South Central	**8,269**				
Ark.	305	X	X	–	–
La.	1,841	X	X	X	X
Okla.	–	–	–	–	–
Tex.	6,123	X	X	X	X
Mountain	**2,548**				
Anz.	720	X	X	–	–
Colo.	293	X	X	X	–
Ida.	144	–	–	–	–
Mont.	22	X	X	–	–
Nev.	–	–	–	–	–
N.M.	946	X	X	X	X
Utah	423	X	X	–	X
Wyo.	–	–	–	–	–
Pacific	**3,041**				
Alaska	100	X	X	X	X
Cal.	870	X	X	X	X
Hawaii	190	X	X	X	X
Ore.	164	–	X	X	–
Wash.	1,717	X	X	X	X
Territories	**142**				
Guam	142	X	X	X	X
P R.	–	X	X	–	X
V.I.	–	–	–	–	–

Table 4-42
IX. ENVIRONMENTAL MICROBIOLOGY
D. Other Samples

Lab & Region	Number of Samples	Types of Samples
Total	**8,253**	
Average	516	
New England	**1,640**	
Conn.	65	Shellfish
Mass.	–	–
Me.	376	Microscopic physical analysis
N.H.	–	–
R.I.	47	P.S.P. (red tide toxin assay)
Vt.	1,152	Water from sources associated with Legionellosis (cooling towers, whirlpools etc.)
Middle Atlantic	**25**	
N.J.	–	–
N.Y.	–	–
Pa.	25	Botulism toxin by mouse neutralization
East North Central	**–**	**–**
Ill.	–	–
Ind.	–	–
Mich.	–	–
Ohio	–	–
Wisc.	–	–
West North Central	**1,453**	
Ia.	–	–
Kans.	–	–
Minn.	–	–
Mo.	–	–
Nebr.	–	–
N.D.	1,453	Sterility tests, autoclave test strips
S.D.	–	–
South Atlantic	**1,505**	
Del.	–	–
D.C.	–	–
Fla.	–	–
Ga.	–	–
Md.	893	Kidney dialysis, environmental samples, identification of meat samples
N.C.	–	–
S.C.	–	–
Va.	612	antibiotics, disinfectants
W.Va.	–	–
East South Central	**–**	
Ala.	–	–
Ky.	–	–
Miss.	–	Filth samples
Tenn.	–	–
West South Central	**706**	
Ark.	–	–
La.	706	Oyster, water, sediment, sewerage, oyster waters, plankton, shrimp, crabs, crawfish, rabbit feces, bird feces, nutria feces, cow manure—screened for cholera. Raw oysters—routinely checked total coliform
Okla.	–	–
Tex.	–	–
Mountain	**602**	
Anz.	–	–
Colo.	–	–
Ida.	67	Environmental biology, Aufwuchs, plankton, Benthic invertabrata, macrophyton and zoon
Mont.	–	–
Nev.	–	–
N.M.	500	Veterinary diagnostic microbiology, species identification, animal feeds, muds, soils, plants, infant botulism
Utah	35	Samples associated with infant botulism cases (house dust, honey, cereal.)
Wyo.	–	–
Pacific	**2,322**	
Alaska	–	–
Cal.	254	Drug quality, drug surveillance, food surveillance
Hawaii	1,167	Salmonella survey in pork products and establishments
Ore.	61	Paralytic shellfish poisoning
Wash.	840	Biological sterilization monitors, laboratory water-suitability, iron bactena or algae identification
Territories	**–**	
Guam	–	–
P.R.	–	–
V.I.	–	–

Table 4-43
X. ENVIRONMENTAL CHEMISTRY
SAMPLES BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Environmental Chemistry Samples	A Water Samples	B Dairy Product and Food Samples	C Pesticide Samples	D Air Pollution Samples	E Radiological Samples	F Other Samples
Total	**873,800**	**436,073**	**122,017**	**39,231**	**224,336**	**37,847**	**14,296**
Average	20,805	11,475	4,693	1,308	11,807	1,456	894
New England	**116,527**	**57,693**	**5,964**	**1,360**	**46,991**	**3,497**	**1,022**
Conn.	26,841	14,874	3,619	202	6,378	746	1,022
Mass.	–	–	–	–	–	–	–
Me.	22,282	19,467	–	561	–	2,254	–
N.H.	–	–	–	–	–	–	–
R.I.	50,430	6,381	2,345	594	40,613	497	–
Vt.	16,974	16,971	–	3	–	–	–
Middle Atlantic	**11,286**	**7,156**	**2,068**	**1,295**	–	**7**	**760**
N.J.	11,272	7,149	2,068	1,295	–	–	760
N.Y.	–	–	–	–	–	–	–
Pa.	14	7	–	–	–	7	–
East North Central	**122,784**	**80,156**	**11,595**	**10,243**	**14,476**	**5,113**	**1,201**
Ill.	9,149	2,467	2,269	2,169	–	2,244	–
Ind.	31,445	16,356	9,326	5,763	–	–	–
Mich.	32,522	32,522	–	–	–	–	–
Ohio	20,039	9,639	–	1,169	7,760	270	1,201
Wisc.	29,629	19,172	–	1,142	6,716	2,599	–
West North Central	**190,691**	**90,288**	**9,014**	**2,239**	**80,201**	**6,182**	**2,767**
Ia.	126,276	43,572	467	1,292	76,436	4,509	–
Kans.	17,144	13,037	69	433	1,928	740	937
Minn.	–	–	–	–	–	–	–
Mo.	10,641	5,308	4,953	–	–	380	–
Nebr.	–	–	–	–	–	–	–
N.D.	9,900	8,000	–	150	1,500	250	–
S.D.	26,730	20,371	3,525	364	337	303	1,830
South Atlantic	**141,878**	**78,299**	**27,600**	**14,231**	**9,785**	**8,778**	**3,185**
Del.	5,346	4,637	–	378	–	331	–
D.C.	1,220	–	506	–	–	–	714
Fla.	5,008	4,749	117	136	–	–	6
Ga.	–	–	–	–	–	–	–
Md.	50,035	24,497	10,906	5,352	5,352	2,109	1,819
N.C.	22,330	20,329	–	224	–	1,777	–
S.C.	13,031	–	10,562	1,823	–	–	646
Va.	44,908	24,087	5,509	6,318	4,433	4,561	–
W.Va.	–	–	–	–	–	–	–
East South Central	**59,842**	**52,719**	**382**	**1,225**	**4,225**	**1,291**	–
Ala.	619	619	–	–	–	–	–
Ky.	9,224	8,371	382	471	–	–	–
Miss.	2,891	2,891	–	–	–	–	–
Tenn.	47,108	40,838	–	754	4,225	1,291	–
West South Central	**89,848**	**31,889**	**50,005**	**1,642**	–	**4,896**	**1,416**
Ark.	22,541	–	21,600	–	–	941	–
La.	33,567	7,523	23,781	892	–	555	816
Okla.	15,140	11,166	3,974	–	–	–	–
Tex.	18,600	13,200	650	750	–	3,400	600
Mountain	**61,882**	**21,763**	**2,858**	**2,721**	**28,325**	**3,660**	**2,555**
Ariz.	5,978	1,104	1,259	1,148	1,917	–	550
Colo.	19,070	3,210	1,550	870	12,265	1,175	–
Ida.	3,834	3,347	–	–	140	347	–
Mont.	9,103	2,039	49	74	6,941	–	–
Nev.	–	–	–	–	–	–	–
N.M.	14,542	5,658	–	47	6,215	804	1,818
Utah	9,355	6,405	–	582	847	1,334	187
Wyo.	–	–	–	–	–	–	–
Pacific	**68,422**	**11,668**	**6,333**	**4,275**	**40,333**	**4,423**	**1,390**
Alaska	597	–	–	–	–	–	597
Cal.	22,296	7,097	4,214	2,983	4,613	2,596	793
Hawaii	40,937	1,892	2,033	1,292	35,720	–	–
Ore.	–	–	–	–	–	–	–
Wash.	4,592	2,679	86	–	–	1,827	–
Territories	**10,640**	**4,442**	**6,198**	–	–	–	–
Guam	–	–	–	–	–	–	–
P.R.	10,640	4,442	6,198	–	–	–	–
V.I.	–	–	–	–	–	–	–

Table 4-44
X. ENVIRONMENTAL CHEMISTRY
A. WATER SAMPLES AND B. DAIRY PRODUCTS AND FOOD SAMPLES

Lab & Region	A. Water Samples					B. Dairy Products and Food Samples		
	Number of Samples	Types				Number of Samples	Types	
		Potable	Non-Potable	Swimming Pools	Sewage and Waste		Milk and Cream	Foods
Total	**436,073**					**122,017**		
Average	11,475					4,693		
New England	**57,693**					**5,964**		
Conn.	14,874	X	X	X	X	3,619	X	X
Mass.	–	–	–	–	–	–	–	–
Me.	19,467	X	X	X	X	–	–	–
N.H.	–	–	–	–	–	–	–	–
R.I.	6,381	X	X	X	X	2,345	X	X
Vt.	16,971	X	–	–	–	–	–	–
Middle Atlantic	**7,156**					**2,068**		
N.J.	7,149	X	X	–	X	2,068	X	X
N.Y.	–	–	–	–	–	–	–	–
Pa.	7	–	–	–	–	–	–	–
East North Central	**80,156**					**11,595**		
Ill.	2,467	X	X	X	X	2,269	–	–
Ind.	16,356	X	X	–	X	9,326	–	–
Mich	32,522	X	X	–	X	–	–	–
Ohio	9,639	X	X	–	X	–	–	–
Wisc.	19,172	X	X	X	X	–	–	–
West North Central	**90,288**					**9,014**		
Ia.	43,572	X	X	–	X	467	X	X
Kans.	13,037	X	X	X	X	69	–	X
Minn.	–	–	–	–	–	–	–	–
Mo.	5,308	X	X	X	X	4,953	X	X
Nebr.	–	–	–	–	–	–	–	–
N D.	8,000	X	X	–	X	–	–	–
S.D.	20,371	X	X	X	X	3,525	X	–
South Atlantic	**78,299**					**27,600**		
Del.	4,637	X	–	–	–	–	–	–
D.C.	–	–	–	–	–	506	–	–
Fla.	4,749	X	X	–	–	117	X	X
Ga.	–	–	–	–	–	–	–	–
Md.	24,497	X	X	X	X	10,906	X	X
N.C.	20,329	X	X	X	X	–	–	–
S.C.	–	–	–	–	–	10,562	X	–
Va.	24,087	X	X	–	–	5,509	X	–
W.Va.	–	–	–	–	–	–	–	–
East South Central	**52,719**					**382**		
Ala.	619	X	–	–	–	–	–	–
Ky.	8,371	X	X	–	–	382	X	X
Miss.	2,891	X	X	–	–	–	–	–
Tenn.	40,838	X	X	–	X	–	–	–
West South Central	**31,889**					**50,005**		
Ark.	–	–	–	–	–	21,600	X	X
La.	7,523	X	X	–	X	23,781	X	X
Okla.	11,166	X	X	–	X	3,974	X	X
Tex.	13,200	X	X	X	X	650	X	X
Mountain	**21,763**					**2,858**		
Ariz.	1,104	X	X	X	X	1,259	X	X
Colo.	3,210	X	X	–	X	1,550	X	X
Ida.	3,347	X	X	–	X	–	–	–
Mont.	2,039	X	X	–	X	49	–	X
Nev.	–	–	–	–	–	–	–	–
N.M.	5,658	X	X	X	X	–	–	–
Utah	6,405	X	X	–	X	–	–	–
Wyo.	–	–	–	–	–	–	–	–
Pacific	**11,668**					**6,333**		
Alaska	–	–	–	–	–	–	–	–
Cal.	7,097	X	X	X	X	4,214	X	X
Hawaii	1,892	X	X	–	X	2,033	X	X
Ore.	–	–	–	–	–	–	–	–
Wash.	2,679	–	–	–	–	86	–	–
Territories	**4,442**					**6,198**		
Guam	–	–	–	–	–	–	–	–
P.R.	4,442	X	–	–	–	6,198	X	X
V.I.	–	–	–	–	–	–	–	–

Table 4-45
X. ENVIRONMENTAL CHEMISTRY
C. Pesticide Samples

Lab & Region	Number of Samples	Types				Other
		Human Source	Water	Milk	Foods	
Total	**39,231**					
Average	1,308					
New England	**1,360**					
Conn.	202	–	X	X	–	Shellfish, sediments
Mass.	–	–	–	–	–	–
Me.	561	X	X	–	X	Foliage, forest residue, etc.
N.H.	–	–	–	–	–	–
R.I.	594	–	X	X	X	–
Vt.	3	–	X	–	–	–
Middle Atlantic	**1,295**					
N.J.	1,295	X	X	X	X	Fish, shellfish
N.Y.	–	–	–	–	–	–
Pa.	–	–	–	–	–	–
East North Central	**10,243**					
Ill.	2,169	–	X	X	X	Soil, vegetation
Ind.	5,763	–	X	X	X	–
Mich.	–	–	–	–	–	–
Ohio	1,169	–	X	–	X	–
Wisc.	1,142	–	X	–	–	Landfills, solid and hazardous wastes, environmental sample (natural resource)
West North Central	**2,239**					
Ia.	1,292	X	X	–	–	Soil, fish, air, oil, animal feed
Kans.	433	–	X	–	X	Soils, sediments, air, vegetation, oils
Minn.	–	–	–	–	–	–
Mo.	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–
N.D.	150	X	X	X	–	Soil, vegetation, wildlife
S.D.	364	–	X	X	X	Formulations
South Atlantic	**14,231**					
Del.	378	–	X	–	–	–
D.C.	–	–	–	–	–	–
Fla.	136	X	X	–	X	–
Ga.	–	–	–	–	–	–
Md.	5,352	–	X	X	–	Seafood, fruits and vegetables
N.C.	224	–	X	–	–	–
S.C.	1,823	X	X	X	X	Vegetation, pharmaceuticals, miscellaneous consumer products
Va.	6,318	–	X	X	X	Shellfish, soil, vegetables, animal tissue
W.Va.	–	–	–	–	–	–
East South Central	**1,225**					
Ala.	–	–	–	–	–	–
Ky.	471	–	X	X	X	–
Miss.	–	–	–	–	–	–
Tenn.	754	–	X	–	X	–
West South Central	**1,642**					
Ark.	–	–	–	–	–	–
La.	892	–	X	X	X	–
Okla.	–	–	–	–	–	–
Tex.	750	–	X	X	X	–
Mountain	**2,721**					
Ariz.	1,148	–	X	X	X	Fish
Colo.	870	X	X	X	X	–
Ida.	–	–	–	–	–	–
Mont.	74	–	–	–	X	–
Nev.	–	–	–	–	–	–
N.M.	47	–	X	X	–	Soils
Utah	582	X	X	X	X	Industrial effluent
Wyo.	–	–	–	–	–	–
Pacific	**4,275**					
Alaska	–	–	–	–	–	–
Cal.	2,983	X	X	X	X	Sediments, air, bulk
Hawaii	1,292	–	X	X	X	–
Ore.	–	–	–	–	–	–
Wash.	–	–	–	–	–	–
Territories	**–**					
Guam	–	–	–	–	–	–
P.R.	–	–	–	–	–	–
V.I.	–	–	–	–	–	–

Table 4-46
X. ENVIRONMENTAL CHEMISTRY
D. Air Pollution Samples

Lab & Region	Number of Samples	Types of Activity							
		Discrete Sampling Stations							Number of Continuous Sampling Stations
		Number of Stations	Particulate				Gaseous	Other	
			Solids	Metals	Organics	Other			
Total	**224,336**								
Average	11,807								
New England	**46,991**								
Conn.	6,378	54	X	X	X	–	X	–	13
Mass.	–	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–	–
N.H.	–	–	–	–	–	–	–	–	–
R.I.	40,613	13	X	X	–	–	X	–	5
Vt.	–	–	–	–	–	–	–	–	–
Middle Atlantic	–								
N.J.	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	–	–
East North Central	**14,476**								
Ill.	–	–	–	–	–	–	–	–	–
Ind.	–	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–	–
Ohio	7,760	60	–	X	X	–	–	–	–
Wisc.	6,716	85	X	X	–	X	–	–	5
West North Central	**80,201**								
Ia.	76,436	45	X	X	–	–	X	–	9
Kans.	1,928	36	X	X	–	X	–	–	–
Minn.	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	1,500	26	X	X	–	–	–	–	5
S.D.	337	–	X	–	–	–	X	–	–
South Atlantic	**9,785**								
Del.	–	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–	–
Md.	5,352	80	X	X	X	X	X	X	26
N.C.	–	–	–	–	–	–	–	–	–
S.C.	–	–	–	–	–	–	–	–	–
Va.	4,433	80	X	X	–	–	–	–	–
W.Va.	–	–	–	–	–	–	–	–	–
East South Central	**4,225**								
Ala.	–	–	–	–	–	–	–	–	–
Ky.	–	–	–	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	–	–
Tenn.	4,225	48	–	X	–	–	–	X	6
West South Central	–								
Ark.	–	–	–	–	–	–	–	–	–
La.	–	–	–	–	–	–	–	–	–
Okla.	–	–	–	–	–	–	–	–	–
Tex.	–	–	–	–	–	–	–	–	–
Mountain	**28,325**								
Ariz.	1,917	–	X	X	X	X	X	X	–
Colo.	12,265	74	X	X	X	–	X	–	4
Ida.	140	22	X	–	–	–	–	–	6
Mont.	6,941	88	X	X	–	X	X	X	11
Nev.	–	–	–	–	–	–	–	–	–
N.M.	6,215	66	X	X	–	X	X	–	–
Utah	847	5	–	X	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–
Pacific	**40,333**								
Alaska	–	–	–	–	–	–	–	–	–
Cal.	4,613	50	X	X	X	–	X	X	–
Hawaii	35,720	12	X	X	X	–	X	–	8
Ore.	–	–	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–	–	–
Territories	–								
Guam	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 4-47
X. ENVIRONMENTAL CHEMISTRY
E. Radiological Analysis

Lab & Region	Number of Samples	Types of Samples							
		Air	Water	Milk	Food	Silt	Soil	Wipes from Instruments	Other
Total	**37,847**								
Average	1,456								
New England	**3,497**								
Conn.	746	X	X	X	X	X	X	X	Shellfish, fish, sewage, seawater, sediment, tissue, charcoal filters.
Mass.	–	–	–	–	–	–	–	–	–
Me.	2,254	X	X	X	X	–	–	X	TLD's
N.H.	–	–	–	–	–	–	–	–	–
R.I.	497	X	X	–	–	–	–	X	–
Vt.	–	–	–	–	–	–	–	–	–
Middle Atlantic	**7**								
N.J.	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	7	–	–	–	–	–	–	–	Goldnngs
East North Central	**5,113**								
Ill.	2,244	X	X	X	X	–	X	X	–
Ind.	–	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–	–
Ohio	270	–	X	X	–	–	–	–	–
Wisc.	2,599	X	X	X	X	X	X	–	–
West North Central	**6,182**								
Ia.	4,509	X	X	X	–	–	X	X	–
Kans.	740	X	X	X	–	–	X	X	Hospital effluents, precipitations, vegetation
Minn.	–	–	–	–	–	–	–	–	–
Mo.	380	X	X	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	250	X	X	–	–	–	X	X	–
S.D.	303	X	X	–	–	–	–	–	–
South Atlantic	**8,778**								
Del.	331	–	X	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–	–
Md.	2,109	X	X	X	X	X	X	X	–
N.C.	1,777	X	X	X	X	X	X	X	–
S.C.	–	–	–	–	–	–	–	–	–
Va.	4,561	X	X	X	X	X	X	X	Shellfish
W Va.	–	–	–	–	–	–	–	–	–
East South Central	**1,291**								
Ala.	–	–	–	–	–	–	–	–	–
Ky.	–	–	–	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	–	–
Tenn.	1,291	X	X	X	X	–	X	X	Sediment
West South Central	**4,896**								
Ark.	941	–	X	X	–	–	X	X	Vegetation, fish, charcoal cartridge
La.	555	–	X	–	–	–	–	–	–
Okla.	–	–	–	–	–	–	–	–	–
Tex.	3,400	X	X	X	X	X	X	X	–
Mountain	**3,660**								
Ariz.	–	–	–	–	–	–	–	–	–
Colo.	1,175	X	X	X	–	X	X	–	–
Ida.	347	–	X	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–
N.M.	804	–	X	–	–	–	–	–	–
Utah	1,334	X	X	–	–	–	–	–	–
Wyo.	–	–	–	–	–	–	–	–	–
Pacific	**4,423**								
Alaska	–	–	–	–	–	–	–	–	–
Cal.	2,596	X	X	X	X	X	X	X	Benthic and pelagic organisms
Hawaii	–	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–	–
Wash.	1,827	X	X	X	X	X	X	X	T.L. dosimeters
Territories	–								
Guam	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 4-48
X. ENVIRONMENTAL CHEMISTRY
F. Other Samples

Lab	Number of Samples	Types of Samples
Total	14,296	
Average	894	
Alaska	597	PSP
Ariz.	550	Hazardous waste, asbestos, heavy metals
Cal.	793	Drugs, air monitoring instrument calibration
Conn.	1,022	Quality control samples - USEPA, insulation - toxic waste, landfill (soils water), chemical spills, impingers, charcoal air tubes
D.C.	714	–
Fla.	6	Bedding samples
Kans.	937	Analytical quality control, priority pollutants, pet hydrocarbons, trihalomethanes
La.	816	Water - trihalomethanes, aspirin, sand, caustic agents, cosmetics, sediments, mud, cat food, pollen
Md.	1,819	Bedding and upholstery, mass spectroscopy
N.J.	760	Fish, shellfish, birds
N.M.	1,818	Heavy metals
Ohio	1,201	Organics and special problems, hazardous materials
S.C.	646	Gasoline, asbestos
S.D.	1,830	Feeds and fertilizers formulations
Tex.	600	Sediment, miscellaneous
Utah	187	Industrial hygiene

Table 4-49
XI. OCCUPATIONAL SAFETY AND HEALTH

Lab & Region	Total Occup. Safety and Health Samples	Number of Environmental Samples	Number of Biological Samples
Total	**75,757**	**71,622**	**4,135**
Average	3,157	2,984	414
New England	**5,332**	**3,180**	**2,152**
Conn.	2,443	291	2,152
Mass.	–	–	–
Me.	196	196	–
N.H.	–	–	–
R.I.	1,979	1,979	–
Vt.	714	714	–
Middle Atlantic	**3,167**	**3,167**	–
N.J.	3,160	3,160	–
N.Y.	–	–	–
Pa.	7	7	–
East North Central	**23,210**	**22,752**	**458**
Ill.	–	–	–
Ind.	–	–	–
Mich.	–	–	–
Ohio	2,411	2,082	329
Wisc.	20,799	20,670	129
West North Central	**12,762**	**12,479**	**283**
Ia.	12,028	11,760	268
Kans.	704	704	–
Minn.	–	–	–
Mo.	–	–	–
Nebr.	–	–	–
N.D.	30	15	15
S.D.	–	–	–
South Atlantic	**14,899**	**14,054**	**845**
Del.	–	–	–
D.C.	–	–	–
Fla.	1,346	504	842
Ga.	–	–	–
Md.	4,771	4,768	3
N.C.	4,556	4,556	–
S.C.	1,857	1,857	–
Va.	2,369	2,369	–
W.Va.	–	–	–
East South Central	**2,232**	**2,232**	–
Ala.	–	–	–
Ky.	2,232	2,232	–
Miss.	–	–	–
Tenn.	–	–	–
West South Central	**2,200**	**2,200**	–
Ark.	–	–	–
La.	–	–	–
Okla.	–	–	–
Tex.	2,200	2,200	–
Mountain	**2,552**	**2,236**	**316**
Ariz.	637	637	–
Colo.	–	–	–
Ida.	–	–	–
Mont.	403	237	166
Nev.	–	–	–
N.M.	243	243	–
Utah	1,269	1,119	150
Wyo.	–	–	–
Pacific	**9,403**	**9,322**	**81**
Alaska	–	–	–
Cal.	9,340	9,259	81
Hawaii	–	–	–
Ore.	–	–	–
Wash.	63	63	–
Territories	–	–	–
Guam	–	–	–
P.R.	–	–	–
V.I.	–	–	–

Table 4-50
XII. TOXICOLOGY
SAMPLES BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Toxicology Samples	A	B
		Physical Samples	Biological Samples
Total	**688,071**	**71,977**	**616,094**
Average	19,113	2,768	18,120
New England	**128,597**	**57,894**	**70,703**
Conn.	88,219	51,863	36,356
Mass.	–	–	–
Me.	6,658	544	6,114
N.H.	532	235	297
R.I.	27,698	5,064	22,634
Vt.	5,490	188	5,302
Middle Atlantic	**130,555**	**389**	**130,166**
N.J.	128,656	389	128,267
N.Y.	–	–	–
Pa.	1,899	–	1,899
East North Central	**57,228**	**1,211**	**56,017**
Ill.	17,453	290	17,163
Ind.	2	1	1
Mich.	–	–	–
Ohio	19,051	860	18,191
Wisc.	20,722	60	20,662
West North Central	**9,463**	**1,009**	**8,454**
Ia.	–	–	–
Kans.	4,135	496	3,639
Minn.	–	–	–
Mo.	488	488	–
Nebr.	–	–	–
N.D.	70	25	45
S.D.	4,770	–	4,770
South Atlantic	**205,870**	**1,088**	**204,782**
Del.	6,773	–	6,773
D.C.	42,080	–	42,080
Fla.	25,317	76	25,241
Ga.	–	–	–
Md.	57,709	601	57,108
N.C.	14,479	–	14,479
S.C.	52,007	411	51,596
Va.	7,505	–	7,505
W.Va.	–	–	–
East South Central	**3,779**	**692**	**3,087**
Ala.	–	–	–
Ky.	3,779	692	3,087
Miss.	–	–	–
Tenn.	–	–	–
West South Central	**72,923**	**310**	**72,613**
Ark.	12,657	30	12,627
La.	33,037	–	33,037
Okla.	–	–	–
Tex.	27,229	280	26,949
Mountain	**72,514**	**5,097**	**67,417**
Ariz.	–	–	–
Colo.	41,800	293	41,507
Ida.	4,411	3,199	1,212
Mont.	32	3	29
Nev.	–	–	–
N.M.	9,757	–	9,757
Utah	6,251	1,602	4,649
Wyo.	10,263	–	10,263
Pacific	**6,490**	**4,287**	**2,203**
Alaska	–	–	–
Cal.	4,124	1,984	2,140
Hawaii	2,300	2,300	–
Ore.	–	–	–
Wash.	66	3	63
Territories	**652**	–	**652**
Guam	–	–	–
P.R.	652	–	652
V.I.	–	–	–

Table 4-51
XII. TOXICOLOGY
A. PHYSICAL SAMPLES (F-Forensic, O-Other)

Lab	Number of Samples	Types of Samples										
		Liquids for Alcohol	Pesticides	PCB's	Plant and Plant Material	Drugs and Narcotics	Articles for Blood Stains	Paint — Comparison	Paint — Lead	Fibers and Hairs	Gunpowder Residues	Other
Total	**71,977**											
Average	2,768											
Ark.	30	–	–	–	–	–	–	–	–		–	O
Cal.	1,984	O	O	O	–	O	–	–	O		–	–
Colo.	293	–	O	O	–	F/O	–	–	–	–	–	–
Conn.	51,863	F	–	–	F	F	F	F	–	F	F	F—Sand, concrete, clay, fire accelerants, clothing for seminal stains, other volatiles
Fla.	76	–	O	O	–	O	–	–	O	–	–	–
Hawaii	2,300	–	O	–	F/O	F/O	–	–	–	–	–	
Ida.	3,199	F	O	O	F	F	F	F	–	F	F	PCP (water), pesticides (soil and vegetables
Ill.	290	F/O	–	–	F/O	F/O	–	–		–	–	F/O—Foodstuffs
Ind.	1	–	–				–	–	–			–
Kans.	496	F	–	–	–	–	–	F	–		–	–
Ky.	692	F/O	F/O	F/O	F	F			O		–	–
Me.	544	F	F	F	–	–	–	–	–			Asbestos, hydrocarbons (arson)
Md.	601	–	–	–	F	F	–	–	–		–	–
Mo.	488	–	–	–	–	–	–	–	O	–	–	–
Mont.	3	–		O			–	–	–	–	–	–
N.H.	235	–		–				–	–	–		Asbestos in bulk insulation, air quality of compressed air, free formaldehyde in foam insulation
N.J.	389	–	–					–	O		–	–
N.D.	25	–	O	O				–	O			
Ohio	860	F/O	–	–		F/O						
R.I.	5,064	F/O	–	O	F	F/O	F		–		–	F/O—Tear gas, liquids, and materials containing dangerous substances, poisons, street drug diluents
S.C.	411	O			O	O	–		O	O		–
Tex.	280	–	O	O	O				O			–
Utah	1,602	F			F	F	–					
Vt.	188	F			–	–						Formaldehyde, pottery
Wash.	3	–	–	–	–	–			O			Ceramics—lead, cadmium
Wisc.	60	–	–		O	O			O			arsenic (hair and nails)

Table 4-52
XII. TOXICOLOGY
B. Biological Samples (F-Forensic, O-Other)

Lab & Region	Number of Samples	1. Blood							
		Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides	Other
Total	**616,094**								
Average	18,120								
New England	**70,703**								
Conn.	36,356	F	F	F	O	F	–	–	F—Carboxyhemoglobin, halides, typing
Mass.	–	–	–	–	–	–	–	–	–
Me.	6,114	F	F	F	F/O	F	F	F/O	–
N.H.	297	F	F	F	O	F/O	F	–	F O—Lead in animal blood, carboxyhemoglobin
R.I.	22,634	F/O	F/O	F/O	F/O	F/O	F/O	–	–
Vt.	5,302	F	–	–	–	–	–	–	–
Middle Atlantic	**130,166**								
N.J.	128,267	–	–	–	O	O	–	O	O—Erythrocyte protoporphyrin
N.Y.	–	–	–	–	–	–	–	–	–
Pa.	1,899	F	O	O	O	–	–	–	Erythrocyte protoporphyrin
East North Central	**56,017**								
Ill.	17,163	F/O	F/O	F/O	F/O	F/O	F/O	F/O	O—Erythrocyte protoporphyrin
Ind.	1	–	–	–	O	–	–	–	–
Mich.	–	–	–	–	–	–	–	–	–
Ohio	18,191	F/O	F/O	F/O	F/O	–	–	–	–
Wisc.	20,662	F/O	O	F/O	O	O	O	–	O—Erythrocyte protoporphyrin
West North Central	**8,454**								
Ia.	–	–	–	–	–	–	–	–	–
Kans.	3,639	F	F	F	O	O	F	–	–
Minn.	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	O	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–
N.D.	45	–	–	–	O	O	–	–	–
S.D.	4,770	O	–	O	–	–	–	–	–
South Atlantic	**204,782**								
Del.	6,773	–	–	–	O	–	–	–	Erythrocyte protoporphyrin
D.C.	42,080	O	–	–	O	–	–	–	–
Fla.	25,241	O	O	O	O	O	O	O	–
Ga.	–	–	–	–	–	–	–	–	–
Md.	57,108	–	–	–	–	–	–	–	–
N.C.	14,479	–	–	–	O	–	–	–	–
S.C.	51,596	O	O	O	O	O	–	–	–
Va.	7,505	–	–	–	O	–	–	–	–
W.Va.	–	–	–	–	–	–	–	–	–
East South Central	**3,087**								
Ala.	–	–	–	–	–	–	–	–	–
Ky.	3,087	F	F	F	F	F	–	–	–
Miss.	–	–	–	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–	–	–
West South Central	**72,613**								
Ark.	12,627	O	–	O	O	O	–	–	–
La.	33,037	–	–	–	O	–	–	–	–
Okla.	–	–	–	–	–	–	–	–	–
Tex.	26,949	–	–	–	O	–	–	–	–
Mountain	**67,417**								
Anz.	–	–	–	–	–	–	–	–	–
Colo.	41,507	F	–	F	–	–	–	–	F—Carbon Monoxide
Ida.	1,212	F	–	F	–	O	–	O	PCP
Mont.	29	–	–	–	O	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–
N.M.	9,757	F	O	O	O	O	–	–	–
Utah	4,649	F	F	F	–	–	F	–	–
Wyo.	10,263	F/O	–	F/O	O	O	–	–	–
Pacific	**2,203**								
Alaska	–	–	–	–	–	–	–	–	–
Cal.	2,140	–	–	–	O	–	–	O	–
Hawaii	–	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–	–
Wash.	63	–	–	–	O	–	–	–	–
Territories	**652**								
Guam	–	–	–	–	–	–	–	–	–
P.R.	652	O	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–

Table 4-53
XII. TOXICOLOGY
B. Biological Samples (F-Forensic, O-Other)

Lab & Region	2. Urine								3. Body Tissues							
	Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides	Other	Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides	Other
New England																
Conn.	F	F	F	O	F/O	–	–	–	F	F	F	–	F	–	–	–
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	F/O	F/O	F/O	F/O	F/O	F/O	F/O	–	F	F	F	–	F	F	F/O	–
N.H.	F	F	F	O	F/O	F	–	O-Coproporphyrin	F	F	F	–	F	F	–	–
R.I.	F/O	F	F/O	O	F/O	F/O	–	–	F	F	F/O	–	F/O	F	–	–
Vt.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Middle Atlantic																
N.J.	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–
East North Central																
Ill.	F/O	F/O	F/O	–	F/O	F/O	F/O	–	F	F	F	–	F	F	F	–
Ind.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ohio	F/O	F/O	F/O	F/O	–	–	–	–	F/O	F/O	F/O	–	–	–	–	–
Wisc.	F/O	O	F/O	O	O	O	–	–	–	–	O	–	O	O	–	–
West North Central																
Ia.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Kans.	F/O	F/O	F/O	–	–	–	–	–	F/O	F/O	F/O	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
S.D.	–	–	O	–	–	–	–	–	–	–	O	–	O	–	–	–
South Atlantic																
Del.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
D.C.	O	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–
Fla.	–	–	O	–	O	–	–	–	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Md.	–	–	–	–	–	–	–	Lithium	–	–	–	–	–	–	–	–
N.C.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
S.C.	O	O	O	O	O	–	–	–	–	–	–	–	–	–	–	–
Va.	–	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–
W.Va.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
East South Central																
Ala.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ky.	–	F	F	–	F	F	–	–	F	F	F	F	F	F	–	–
Miss.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
West South Central																
Ark.	O	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–
La.	–	–	O	–	–	–	–	–	–	–	–	–	–	–	–	–
Okla.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Tex.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mountain																
Anz.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Colo.	F	–	F	–	–	–	–	–	–	–	–	–	–	–	–	–
Ida.	F	–	F	–	–	–	O	–	–	–	–	–	–	–	O	–
Mont.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	F	–	–	–	–	–	F	–	F	–	F	F	–	–
Utah	F	–	F	–	–	F	–	–	F	F	F	–	–	F	–	–
Wyo.	F/O	–	F/O	–	–	–	–	–	F/O	–	F/O	–	–	–	–	–
Pacific																
Alaska	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cal.	–	–	O	O	O	–	–	Mutagenic screening	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–	Tritium	–	–	–	–	–	–	–	–
Territories																
Guam	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 4-54
XII. TOXICOLOGY
B. Biological Samples (F-Forensic, O-Other)

Lab & Region	4. Body Fluids								5. Breath		6. Other
	Ethyl Alcohol	Other Volatiles	Drugs and Narcotics	Lead	Other Metallic Poisons	Other Poisons	Insecticides	Other	Volatiles	Other	
New England											
Conn.	F	–	F	–	–	–	–	–	F	–	O—Childhood lead poisoning
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	F/O	F/O	F/O	–	F/O	F/O	F/O	–	F	–	–
N.H.	F	F	F	–	F	F	–	–	–	–	–
R.I.	F/O	F/O	F/O	–	F/O	F/O	–	–	–	–	F—Vaginal swabs and smears
Vt.	–	–	–	–	–	–	–	–	–	F—Ethyl alcohol	–
Middle Atlantic											
N.J.	–	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	–	–	–	–
East North Central											
Ill.	F	F	F	–	F	F	F	–	–	–	–
Ind.	–	–	–	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–	–	–	–
Ohio	F/O	F/O	F/O	–	–	–	–	–	–	–	–
Wisc.	O	O	O	–	–	O	–	–	–	–	–
West North Central											
Ia.	–	–	–	–	–	–	–	–	–	–	–
Kans.	F/O	F/O	F/O	–	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	O	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–	–	–	–
S.D.	–	–	–	–	–	–	–	–	O	–	–
South Atlantic											
Del.	–	–	–	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–	–	–	–
Md.	–	–	–	–	–	–	–	–	–	–	–
N.C.	–	–	–	–	–	–	–	–	–	–	–
S.C.	O	O	O	–	–	O	–	–	–	–	–
Va.	–	–	–	–	–	–	–	–	–	–	–
W.Va.	–	–	–	–	–	–	–	–	–	–	–
East South Central											
Ala.	–	–	–	–	–	–	–	–	–	–	–
Ky.	F	F	F	F	F	F	F	–	–	–	
Miss.	–	–	–	–	–	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–	–	–	–	–
West South Central											
Ark.	–	–	O	–	–	–	–	–	–	–	–
La.	–	–	–	–	–	–	–	–	–	–	–
Okla.	–	–	–	–	–	–	–	–	–	–	–
Tex.	–	–	–	–	–	–	–	–	–	–	–
Mountain											
Anz.	–	–	–	–	–	–	–	–	–	–	–
Colo.	–	–	–	–	–	–	–	–	–	–	–
Ida.	–	–	–	–	–	–	–	–	–	F—Blood alcohol	–
Mont.	–	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	F	F	F	F	F	F	F	F-Cyanide, strychnine	–	F—Ethyl alcohol	–
Utah	–	–	F	–	–	–	–	–	–	–	–
Wyo.	F/O	–	F/O	–	–	–	–	–	–	–	–
Pacific											
Alaska	–	–	–	–	–	–	–	–	–	–	–
Cal.	–	–	–	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–	–	–	–
Ore.	–	–	–	–	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–	–	–	–	–
Territories											
Guam	–	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–

Table 4-55
XIII. LABORATORY IMPROVEMENT PROGRAM
SUMMARY BY LABORATORY CATEGORY

Lab & Region	Number of Professional/ Technical and Non-Technical Positions in LIP	A	B	C	D	E
		Clinical	Public Health	Dairy and Food	Water	Other
Total	**226.4**	**15,362**	**538**	**373**	**2,178**	
Average	5.4	427	13	16	75	
New England	**14.5**	**284**	**118**	**27**	**122**	
Conn.	10.0	175	116	24	77	X
Mass.	–	–	–	–	–	–
Me.	2.5	53	1	–	27	–
N.H.	–	–	–	–	–	–
R.I.	2.0	56	–	2	13	–
Vt.	–	–	1	1	5	–
Middle Atlantic	**37.0**	**2,511**	**21**	**–**	**–**	
N.J.	20.0	511	18	–	–	–
N.Y.	–	–	–	–	–	–
Pa.	17.0	2,000	3	–	–	X
East North Central	**37.5**	**2,254**	**61**	**138**	**559**	
Ill.	8.0	1,800	13	–	–	–
Ind.	2.5	–	6	–	–	X
Mich.	8.0	454	13	–	–	–
Ohio	8.0	–	10	20	440	X
Wisc.	11.0	–	19	118	119	–
West North Central	**14.7**	**1,375**	**19**	**34**	**47**	
Ia.	3.0	350	5	27	31	–
Kans.	1.5	200	1	–	–	X
Minn.	7.0	695	5	–	–	–
Mo.	2.0	–	–	–	–	–
Nebr.	–	–	–	–	–	–
N.D.	1.0	63	5	7	16	–
S.D.	0.2	67	3	–	–	–
South Atlantic	**38.45**	**1,376**	**33**	**60**	**378**	
Del.	0.45	24	1	1	8	–
D.C.	2.0	52	1	–	–	–
Fla.	10.0	816	14	–	200	X
Ga.	–	–	–	–	–	–
Md.	3.5	157	9	23	72	X
N.C.	11.0	–	–	–	–	X
S.C.	3.0	113	7	15	–	X
Va.	5.5	–	–	18	76	–
W.Va.	3.0	214	1	3	22	–
East South Central	**11.7**	**1,675**	**22**	**76**	**305**	
Ala.	0.7	211	5	5	18	X
Ky.	4.0	1,117	8	33	25	–
Miss.	–	200	4	–	13	–
Tenn.	7.0	147	5	38	249	X
West South Central	**6.75**	**185**	**18**	**–**	**–**	
Ark.	2.0	185	4	–	–	–
La.	1.75	–	7	–	–	X
Okla.	1.0	–	7	–	–	–
Tex.	2.0	–	–	–	–	X
Mountain	**20.45**	**841**	**37**	**24**	**210**	
Anz.	8.0	140	12	–	50	–
Colo.	–	110	8	5	38	–
Ida.	2.5	205	5	11	32	–
Mont.	0.25	225	3	4	26	X
Nev.	–	–	–	–	–	–
N.M.	2.7	110	3	4	64	–
Utah	6.0	–	5	–	–	–
Wyo.	1.0	51	1	–	–	–
Pacific	**45.35**	**4,259**	**70**	**10**	**546**	
Alaska	1.45	50	3	2	15	–
Cal.	31.0	3,580	40	–	459	–
Hawaii	0.5	62	4	4	8	–
Ore.	2.65	207	3	4	27	X
Wash.	9.75	360	20	–	37	X
Territories	**–**	**602**	**11**	**4**	**11**	
Guam	–	6	1	2	3	–
P.R.	–	596	10	2	8	–
V.I.	–	–	–	–	–	–

Table 4-56
XIII. LABORATORY IMPROVEMENT PROGRAM
A. Clinical Laboratories

Lab & Region	1. No. Labs in State	2. No. Labs Lic./Reg./App./ Cert. by State	3. No. by LIP			4. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Lic./Permit/App.	Reg.	Cert.	
Total	**15,362**	**10,669**	**8,409**	**2,875**	**1,582**	
Average	427	274	255	575	99	
New England	**284**	**312**	**283**	**35**	**39**	
Conn.	175	209	209	–	–	–
Mass.	–	–	–	–	–	–
Me.	53	12	5	–	7	–
N.H.	–	–	–	–	–	Bureau of Health Facilities Administration.
R.I.	56	56	56	–	32	–
Vt.	–	35	13	35	–	–
Middle Atlantic	**2,511**	**1,096**	**1,096**	–	**177**	–
N.J.	511	511	511	–	–	–
N.Y.	–	–	–	–	–	–
Pa.	2,000	585	585	–	177	–
East North Central	**2,254**	**1,707**	**1,575**	**45**	**300**	
Ill.	1,800	260	599	–	–	–
Ind.	–	152	153	–	2	–
Mich.	454	454	407	45	2	–
Ohio	–	425	–	–	296	–
Wisc.	–	416	416	–	–	Section of Laboratory Certification, Bureau of Prevention, Wisconsin Division of Health.
West North Central	**1,375**	**436**	**112**	–	**324**	
Ia.	350	98	98	–	–	–
Kans.	200	200	160	–	40	–
Minn.	695	–	–	–	–	Division of Health Systems, Minnesota Department of Health (Medicare and CLIA-1967 only).
Mo.	–	324	–	–	324	–
Nebr.	–	–	–	–	–	–
N.D.	63	14	14	–	–	Division of Health Facilities, State Health Department regulates labs participating in Medicare. State Health lab regulates labs doing premarital blood testing, milk and water testing.
S.D.	67	–	–	–	–	Division of Public Health, South Dakota Department of Health.
South Atlantic	**1,376**	**723**	**610**	**816**	**359**	
Del.	24	12	12	–	–	–
D.C.	52	53	53	–	11	Office of License and Certification.
Fla.	816	–	–	816	259	Office of Licensure and Certification, Department of Health and Rehabilitative Services.
Ga.	–	–	–	–	–	Laboratory Liscensure and Development Section, Office of Regulatory Service.
Md.	157	181	181	–	89	–
N.C.	–	–	–	–	–	Division of Facility Services, Dept. of Human Resources.
S.C.	113	113	–	–	–	Bureau of Licensing and Certification, Department of Health and Environmental Control.
Va.	–	179	179	–	–	Department of Health for all areas except: waters, milk, commercial Blood Banks, and syphilis serology.
W. Va.	214	185	185	–	–	Health Facilities Evalution Program of the West Virginia Department of Health.
East South Central	**1,675**	**578**	**438**	–	**40**	
Ala.	211	99	99	–	–	Bureau of Licensure and Certification in the Health Department is responsible for activities other than the premantal program and milk and water certification.
Ky.	1,117	192	192	–	–	The Division for Licensure and Regulation is responsible for certifying laboratories in accordance with the Kentucky Medical Laboratory Act. Laboratory Services approves laboratories for the performance of prenatal tests for syphilis.
Miss.	200	140	–	–	–	Mississippi Health Care Commission.
Tenn.	147	147	147	–	40	–

Table 4-56
XIII. LABORATORY IMPROVEMENT PROGRAM
A. Clinical Laboratories — Continued

Lab & Region	1. No. Labs in State	2. No. Labs Lic./Reg./App./ Cert. by State	3. No. by LIP			4. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Lic./Permit/App.	Reg.	Cert.	
West South Central	**185**	**322**	**1,475**	–	–	
Ark.	185	120	116	–	–	Division of Health Facilities, Arkansas Department of Health.
La.	–	–	–	–	–	Office of Licensure and Certification is responsible for certification of clinical laboratories.
Okla.	–	202	13	–	–	–
Tex.	–	–	1,346	–	–	Bureau of Licensing and Certification, Texas Department of Health.
Mountain	**841**	**698**	**484**	–	**172**	
Anz.	140	140	62	–	–	–
Colo.	110	8	64	–	–	–
Ida.	205	205	205	–	110	–
Mont.	225	130	–	–	–	Hospital and Medical Facilities Division of the Department.
Nev.	–	–	–	–	–	–
N.M.	110	110	110	–	–	–
Utah	–	62	–	–	62	–
Wyo.	51	43	43	–	–	–
Pacific	**4,259**	**4,201**	**2,336**	**1,979**	**171**	
Alaska	50	30	–	–	20	Health Facilities and Planning, Dept. of Health and Social Services.
Cal.	3,580	3,600	1,980	1,620	20	–
Hawaii	62	4	49	–	–	–
Oregon	207	207	207	–	–	–
Wash.	360	360	100	359	131	–
Territories	**602**	**596**	–	–	–	
Guam	6	–	–	–	–	–
P.R.	596	596	–	–	–	—
V.I.	–	–	–	–	–	–

Table 4-56
XIII. LABORATORY IMPROVEMENT PROGRAM
A. Clinical Laboratories — Continued

Lab & Region	Activity of Laboratory Improvement Program Staff																			
	5. Proficiency Testing													6. Field Visits						7.	8.
					Immunology									LIP Programs			Other Programs				
	Diag. Bact.	Mycology	Parasitology	Virology	Syphilis Serology	Non-Syphilis Serology	Hematology	Clin. Chemistry	Pathology	Env. Microbiology	Env. Chemistry	Dairy/Food	Other	Lic./Permit/App.	Cert.	Other	Lic./Permit/App.	Cert.	Other	Training	Consultation
New England																					
Conn.	X	X	X	X	X	X	X	X	–	–	–	–	–	X	X	–	X	X	X	X	X
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X	–	X	X	X	X	X
N.H.	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	–
R.I.	X	–	X	–	X	X	X	X	–	X	X	–	–	X	X	–	X	X	–	X	X
Vt.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	X	–	–	–	X	X
Middle Atlantic																					
N.J.	X	X	X	–	X	X	X	X	–	–	–	–	–	X	X	X	X	X	–	X	X
N.Y	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	X	X	X	X	X	X	X	X	–	–	–	–	–	X	–	–	X	X	–	X	X
East North Central																					
Ill.	–	–	–	–	X	–	–	–	–	–	–	–	Blood Alcohol, Blood Lead, Quantitive Phenylalanine	X	–	–	X	X	–	X	X
Ind.	–	–	–	–	X	–	–	–	–	–	X	–	–	X	–	–	–	–	–	X	X
Mich.	–	–	–	–	–	–	–	–	–	–	–	–	PKU	X	X	–	–	X	–	–	–
Ohio	X	X	–	–	X	X	X	X	–	X	–	X	–	–	X	–	X	–	–	–	X
Wisc.	X	X	X	X	X	X	X	X	–	–	–	X	–	X	–	–	X	–	–	X	X
West North Central																					
Ia.	X	X	X	–	X	X	X	X	–	X	–	–	PKU	X	–	–	X	–	–	X	X
Kans.	X	X	X	X	X	X	X	X	–	–	–	–	–	X	–	–	X	–	–	X	X
Minn.	X	X	X	–	X	X	X	X	–	–	–	–	Urinalysis, Blood Banking	–	–	–	–	–	–	X	X
Mo.	–	–	–	–	X	–	–	–	–	–	–	X	–	–	X	–	–	X	–	X	X
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–	-	–	–	–	–	–	–	–
N.D.	–	–	–	–	X	–	–	–	–	X	X	–	–	–	X	X	–	–	–	X	X
S.D.	–	–	–	–	X	–	–	–	–	–	–	X	–	–	–	–	–	–	–	–	–
South Atlantic																					
Del.	–	–	–	–	X	–	–	–	–	–	–	–	–	X	–	–	X	X	–	X	X
D.C.	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	X	X	X	–	X	X
Fla.	–	–	–	–	X	–	–	–	–	–	X	–	Blood Alcohol	–	–	–	–	–	–	X	–
Ga.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Md.	X	X	X	X	X	X	X	X	X	–	–	–	X	X	X	–	X	X	–	X	X
N.C.	X	X	X	–	X	–	–	–	–	–	–	X	–	–	–	–	–	–	–	X	X
S.C.	X	X	X	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Va.	–	–	–	–	X	–	–	–	–	–	–	–	–	X	–	–	–	–	–	X	X
W.Va.	X	–	X	–	X	–	X	X	–	–	–	–	–	X	–	–	–	–	–	X	X
East South Central																					
Ala.	–	–	–	–	X	–	–	–	–	–	–	–	–	X	–	–	X	–	–	X	X
Ky.	X	–	–	–	X	–	X	X	–	–	–	–	–	–	–	–	–	–	–	X	X
Miss.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Tenn.	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	X
West South Central																					
Ark.	X	X	X	–	X	–	–	–	–	–	–	–	–	X	–	–	–	–	–	X	X
La.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Okla.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	X	X	–	–	–	X	X
Tex.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Mountain																					
Anz.	X	X	X	X	X	X	–	–	–	X	X	–	–	X	–	–	–	X	X	X	X
Colo.	X	–	–	–	X	X	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Ida.	X	–	–	–	X	–	X	X	–	–	X	–	–	X	X	–	–	X	–	X	X
Mont.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	–	–	X	–	–	–	–	–	–	–	–	X	X	–	X	X	–	X	X
Utah	X	–	X	–	X	X	–	–	–	–	–	–	–	–	X	–	–	X	–	X	X
Wyo.	X	–	X	–	X	X	X	X	–	–	–	–	–	X	–	–	–	–	–	X	X
Pacific																					
Alaska	X	X	X	X	X	X	–	–	–	X	X	X	–	–	X	–	X	–	–	X	X
Cal.	X	X	X	–	X	X	X	X	–	–	–	–	–	X	–	–	X	X	–	X	X
Hawaii	–	–	–	–	X	–	–	–	–	X	X	–	–	X	–	–	–	X	–	X	X
Ore.	–	–	–	–	X	–	–	–	–	–	–	–	Blood Alcohol	X	–	–	–	X	X	X	X
Wash.	–	–	X	–	X	–	–	–	–	–	X	–	–	–	X	–	–	X	–	X	–
Territories																					
Guam	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
P.R.	X	X	X	–	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–	X	X
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Table 4-57
XIII. LABORATORY IMPROVEMENT PROGRAM
B. Public Health Laboratories

Lab & Region	1. No. Labs in State	2. No. Labs Lic./Reg./App. Cert. By State	3. No. by LIP			4. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Lic./Permit/App.	Reg.	Cert.	
Total	538	400	231	81	144	
Average	13	13	11	20	12	
New England	118	117	71	47	—	
Mass.	—	—	—	—	—	—
R.I.	—	—	—	—	—	—
Conn.	116	116	70	46	—	—
Me.	1	—	—	—	—	—
N.H.	—	—	—	—	—	—
Vt.	1	1	1	1	—	—
Middle Atlantic	21	20	20	—	1	
N.J.	18	18	18	—	—	—
N.Y.	—	—	—	—	—	—
Pa.	3	2	2	—	1	—
East North Central	61	50	40	—	16	
Ill.	13	9	9	—	—	—
Ind.	6	1	1	—	6	Div. of Medical Care Administration certifies Medicare Medicaid laboratories.
Mich.	13	11	11	—	—	—
Ohio	10	10	—	—	10	—
Wisc.	19	19	19	—	—	—
West North Central	19	15	5	—	6	
Ia.	5	2	—	—	—	—
Kans.	1	1	—	—	—	—
Minn.	5	—	—	—	—	Div. of Health Systems, Minn. Dept. of Health (Medicare and CLIA — 1967 only).
Mo.	—	6	—	—	6	—
Nebr.	—	—	—	—	—	—
N.D.	5	5	5	—	—	Div. of Health Facilities.
S.D.	3	1	—	—	—	Division of Public Health, S.D. Department of Health
South Atlantic	33	10	19	14	8	
Del.	1	—	—	—	—	—
D.C.	1	—	—	—	—	—
Fla.	14	—	—	14	8	Office of Licensure and Certification. Dept. of Health and Rehabilitative Services.
Ga.	—	—	—	—	—	—
Md.	9	9	9	—	—	—
N.C.	—	—	—	—	—	Division of Facility Services, Dept. of Human Resources.
S.C.	7	1	—	—	—	Bureau of Licensing and Certification, Department of Health and Environmental Control.
Va.	—	—	10	—	—	Dept. of Health for all areas except: water, milk, commercial blood banks, and syphilis serology.
W.Va.	1	—	—	—	—	Health Facilities Evaluation Program of the W. Virginia Department of Health.
East South Central	22	37	10	—	13	
Ala.	5	26	3	—	8	Bureau of Licensure and Certification in the Health Dept. is responsible for activities other than the premantal program and milk and water certification.
Ky.	8	3	3	—	—	The Div. of Licensure and Regulation is responsible for certifying laboratories in accordance with the Ky. Medical Laboratory Act. Laboratory Services approves laboratories for the performance of prenatal tests for syphilis.
Miss.	4	4	—	—	—	Mississippi Health Care Commission.
Tenn.	5	4	4	—	5	—

Table 4-57
XIII. LABORATORY IMPROVEMENT PROGRAM
B. Public Health Laboratories — Continued

Lab & Region	1. No. Labs in State	2. No. Labs Lic./Reg./App. Cert. By State	3. No. by LIP			4. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Lic./Permit/App.	Reg.	Cert.	
West South Central	18	22	23	—	7	
Ark.	4	—	—	—	—	Division of Health Facilities.
La.	7	15	—	—	7	Office of Licensure and Certification is responsible for certification of clinical laboratories.
Okla.	7	7	—	—	—	—
Tex.	—	—	23	—	—	Bureau of Licensing and Certification, Texas Dept. of Health.
Mountain	37	53	28	—	32	
Anz.	12	12	12	—	—	—
Colo.	8	8	8	—	—	—
Ida.	5	5	5	—	5	—
Mont.	3	1	—	—	—	Hospital and Medical Facilities Division of the Department.
Nev.	—	—	—	—	—	—
N.M.	3	—	3	—	—	—
Utah	5	27	—	—	27	—
Wyo.	1	—	—	—	—	—
Pacific	70	66	15	20	61	
Alaska	3	—	—	—	—	Health Facilities and Planning, Dept. of Health and Social Services.
Cal.	40	40	—	—	40	—
Hawaii	4	4	4	—	—	—
Ore.	3	3	3	—	—	—
Wash.	20	19	8	20	21	—
Territories	11	10	—	—	—	
Guam	1	—	—	—	—	—
P.R.	10	10	—	—	—	—
V.I.	—	—	—	—	—	—

Table 4-57
XIII. LABORATORY IMPROVEMENT PROGRAM
B. Public Health Laboratories — Continued

Lab & Region	Activity of Laboratory Improvement Program Staff																						
	5. Proficiency Testing													6. Field Visits						7.	8.
					Immunology									LIP Programs			Other Programs				
	Diag. Bact.	Mycology	Parasitology	Virology	Syphilis Serology	Non-Syphilis Serology	Hematology	Clinical Chemistry	Pathology	Env. Microbiology	Env. Chemistry	Dairy/Food	Other	Lic./Permit/ App.	Cert.	Other	Lic./Permit/ App.	Cert.	Other	Trng	Consu
New England																					
Conn.	X	X	X	X	X	X	X	X	–	X	X	X	–	X	–	–	–	–	–	X	X
Mass.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X	–	–
N.H.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
R.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Vt.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–
Middle Atlantic																					
N.J.	X	X	X	–	X	X	X	X	–	–	–	–	–	X	–	X	X	–	–	X	X
N.Y.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	X	–	X	–	X	X	X	X	–	–	–	–	–	X	–	–	–	X	–	X	X
East North Central																					
Ill.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Ind.	–	–	–	–	X	–	–	–	–	X	–	X	–	–	X	–	–	–	–	X	X
Mich.	–	–	–	–	–	–	–	–	–	–	–	–	PKU	X	–	–	–	–	–	–	–
Ohio	X	X	–	–	X	X	X	X	–	X	–	X	–	–	X	–	X	–	–	–	X
Wisc.	X	X	X	X	X	X	X	X	–	–	–	X	–	X	–	–	X	–	–	X	X
West North Central																					
Ia.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Kans.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–
Minn.	X	X	X	–	X	X	X	X	–	–	–	X	–	–	–	–	–	–	–	X	X
Mo.	–	–	–	–	X	–	–	–	–	–	–	X	–	–	X	–	–	X	–	X	X
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	X	–	–	–	–	X	X	X	–	–	X	X	–	–	–	X	X
S.D.	–	–	–	–	X	–	–	–	–	–	–	X	–	–	–	–	–	–	–	–	–
South Atlantic																					
Del.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
D.C.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fla.	–	–	–	X	X	–	–	–	–	–	X	–	–	–	–	–	–	–	–	X	–
Ga.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Md.	X	X	X	X	X	X	X	X	X	–	–	–	X	X	–	–	–	–	–	X	X
N.C.	X	X	X	–	X	–	X	–	–	X	–	X	–	–	–	–	–	–	–	X	X
S.C.	X	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Va.	–	–	–	–	X	–	–	–	–	–	–	X	–	X	–	–	–	–	–	X	X
W.Va.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
East South Central																					
Ala.	–	–	–	X	X	–	–	–	–	X	–	X	–	X	X	–	–	–	–	X	X
Ky.	X	–	–	–	X	–	X	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Miss.	–	–	–	–	–	–	–	–	–	X	–	–	–	–	–	–	–	–	–	X	X
Tenn.	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	X
West South Central																					
Ark.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–
La.	–	–	–	X	–	–	X	–	–	X	–	–	–	–	X	X	–	–	–	X	X
Okla.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	X	X	–	–	–	–	–
Tex.	X	X	X	–	X	–	–	–	–	–	–	X	–	X	–	–	–	–	–	X	X
Mountain																					
Ariz.	X	X	X	X	X	X	–	–	–	–	X	–	–	X	–	–	–	X	X	X	X
Colo.	X	–	–	–	X	X	–	–	–	X	X	X	–	X	–	–	–	–	–	X	X
Ida.	X	–	X	–	X	X	X	–	–	X	X	X	–	X	X	–	–	X	–	X	X
Mont.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	X
Nev.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Utah	–	–	–	–	–	–	–	–	–	X	X	–	–	–	X	–	–	X	–	X	X
Wyo.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Pacific																					
Alaska	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Cal.	X	X	X	–	X	X	X	X	–	–	–	–	–	–	X	–	–	X	–	X	
Hawaii	–	–	–	–	X	–	–	–	–	X	–	–	–	X	–	–	–	–	–	X	
Ore.	–	–	–	–	X	–	–	–	–	–	–	–	–	X	–	–	–	–	–	X	
Wash.	–	–	X	–	X	–	–	–	–	–	X	–	–	–	X	–	–	X	–	X	
Territories																					
Guam	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
P.R.	X	X	–	–	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–	–	
V.I.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Table 4-58
XIII. LABORATORY IMPROVEMENT PROGRAM
C. Dairy and Food Laboratories

Lab & Region	1. No. Labs in State	2. No. Labs Lic./Reg./App. Cert. By State	3. No. by LIP			4. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
			Lic./Permit/App.	Reg.	Cert.	
Total	**373**	**390**	**184**	**14**	**218**	
Average	16	16	23	7	12	
New England	**27**	**26**	**26**	–	**2**	
Conn.	24	24	24	–	–	–
Mass.	–	–	–	–	–	–
Me.	–	–	–	–	–	Department of Agriculture.
N.H.	–	–	–	–	–	–
R.I.	2	2	2	–	2	–
Vt.	1	–	–	–	–	Department of Agriculture.
Middle Atlantic	–	–	–	–	–	
N.J.	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–
Pa.	–	–	–	–	–	Department of Agriculture.
East North Central	**138**	**191**	**138**	–	**53**	
Ill.	–	33	–	–	33	–
Ind.	–	20	–	–	20	–
Mich.	–	–	–	–	–	Michigan Department of Agriculture.
Ohio	20	20	20	–	–	–
Wisc.	118	118	118	–	–	–
West North Central	**34**	**42**	–	–	**15**	
Ia.	27	27	–	–	–	Iowa Department of Agriculture.
Kans.	–	–	–	–	–	Department of Agriculture.
Minn.	–	–	–	–	–	–
Mo.	–	10	–	–	10	–
Nebr.	–	–	–	–	–	–
N.D.	7	5	–	–	5	–
S.D.	–	–	–	–	–	–
South Atlantic	**60**	**47**	–	**11**	**64**	
Del.	1	–	–	–	–	–
D.C.	–	–	–	–	–	–
Fla.	–	–	–	–	–	Department of Agriculture, State of Florida.
Ga.	–	–	–	–	–	–
Md.	23	15	–	–	15	–
N.C.	–	–	–	–	30	–
S.C.	15	11	–	11	–	–
Va.	18	18	–	–	16	Program in cooperation with Department of Agriculture and Consumer Services.
W Va.	3	3	–	–	3	–
East South Central	**76**	**58**	**3**	–	**36**	
Ala.	5	5	–	–	3	–
Ky.	33	23	–	–	23	–
Miss.	–	3	3	–	–	–
Tenn.	38	27	–	–	10	Milk laboratories certified by Tennessee Department of Public Health, and the Department of Agriculture.
West South Central	–	**27**	–	–	**27**	
Ark.	–	–	–	–	–	–
La.	–	6	–	–	6	–
Okla.	–	–	–	–	–	–
Tex.	–	21	–	–	21	–
Mountain	**24**	**20**	**11**	–	**19**	
Anz.	–	–	–	–	–	Dairy Commission Office.
Colo.	5	5	–	–	5	–
Ida.	11	11	11	–	11	–
Mont.	4	–	–	–	–	State Department of Livestock has only dairy testing laboratory in the State; State Dept. of Health labs and Agriculture test food.
Nev.	–	–	–	–	–	–
N.M.	4	4	–	–	3	State Laboratory Dept. main facility is surveyed by FDA.
Utah	–	–	–	–	–	Utah State Department of Agriculture.
Wyo.	–	–	–	–	–	–
Pacific	**10**	**4**	**4**	–	–	
Alaska	2	–	–	–	–	FDA.
Cal.	–	–	–	–	–	–
Hawaii	4	4	4	–	–	–
Ore.	4	–	–	–	–	Department of Agriculture.
Wash.	–	–	–	–	–	Department of Agriculture.
Territories	**4**	**2**	**2**	**3**	**2**	
Guam	2	–	–	–	–	–
P.R.	2	2	2	3	2	–
V.I.	–	–	–	–	–	–

Table 4-58
XIII. LABORATORY IMPROVEMENT PROGRAM
C. Dairy and Food Laboratories — Continued

Lab & Region	Activity of Laboratory Improvement Staff							
	5. Proficiency Testing	6. Field Visits					7. Training	8. Consult.
		LIP Program			Other Program			
		Lic./Permit/App.	Cert.	Other	Lic./Permit/App.	Cert.		
New England								
Conn.	X	X	–	–	–	–	X	X
Mass.	–	–	–	–	–	–	–	–
Me.	X	–	–	–	–	–	–	–
N.H	–	–	–	–	–	–	–	–
R.I.	X	X	X	–	–	–	X	X
Vt.	–	–	–	–	–	–	–	–
Middle Atlantic								
N.J.	X	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	–
East North Central								
Ill.	X	–	X	–	–	–	X	X
Ind.	X	–	X	–	–	–	X	X
Mich.	–	–	–	–	–	–	–	–
Ohio	–	X	–	–	–	–	–	X
Wisc.	X	X	–	–	–	–	X	X
West North Central								
Ia.	–	–	–	–	–	–	–	–
Kans.	–	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	X	X
Mo.	X	–	X	–	–	–	X	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	X	–	X	–	–	–	X	X
S.D.	–	–	–	–	–	–	–	–
South Atlantic								
Del.	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	X	–	X	–
Fla.	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–
Md.	X	–	X	–	–	–	X	X
N.C.	X	–	X	–	–	–	X	X
S.C.	X	–	X	–	–	–	X	X
Va.	X	X	–	X	–	–	–	X
W.Va.	X	–	X	–	–	–	X	X
East South Central								
Ala.	X	–	X	–	–	–	X	X
Ky	–	–	X	–	–	–	X	X
Miss.	–	–	–	–	–	–	–	X
Tenn.	X	–	–	–	–	X	X	X
West South Central								
Ark.	–	–	–	–	–	–	–	–
La.	–	–	–	–	–	–	X	X
Okla.	–	–	–	–	–	–	–	–
Tex.	X	X	–	X	–	–	X	X
Mountain								
Ariz.	–	–	–	–	–	–	–	–
Colo.	X	–	X	–	–	–	–	–
Ida.	X	X	X	–	X	X	X	X
Mont.	–	–	–	–	–	–	–	–
Nev	–	–	–	–	–	–	–	–
N.M.	X	X	–	–	–	–	X	X
Utah	X	–	X	–	–	X	X	X
Wyo.	X	X	–	–	–	–	X	X
Pacific								
Alaska	–	–	–	–	–	–	–	–
Cal.	–	–	–	–	–	–	–	–
Hawaii	–	X	–	–	X	–	X	X
Ore.	–	–	–	–	–	–	X	X
Wash.	–	–	–	–	–	–	–	–
Territories								
Guam	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 4-59
XIII. LABORATORY IMPROVEMENT PROGRAM
D. Water Laboratories

Lab & Region	1. No. Labs in State	2. No. Water Labs in State			3. Other Agency or Department Responsible for Licensing, Registering, Approving, Certifying Laboratories
		Lic./Permit/App.	Reg.	Cert.	
Total	**2,178**	**1,530**	**37**	**1,044**	
Average	75	90	37	43.5	
New England	**122**	**116**	–	**108**	
Conn.	77	77	–	77	–
Mass.	–	–	–	–	–
Me.	27	26	–	26	Laboratory Improvement Program for the Division of Health Engineering.
N.H.	–	–	–	–	–
R.I.	13	13	–	–	–
Vt.	5	–	–	5	–
Middle Atlantic	–	–	–	–	
N.J.	–	–	–	–	–
N.Y.	–	–	–	–	–
Pa.	–	–	–	–	Department of Environmental Resources.
East North Central	**559**	**559**	–	**129**	
Ill.	–	–	–	71	–
Ind.	–	–	–	58	–
Mich.	–	–	–	–	Division of Water Supply, Bureau of Environmental and Occupational Health, M.D.P.H.
Ohio	440	440	–	–	–
Wisc.	119	119	–	–	–
West North Central	**47**	**31**	–	**164**	
Ia.	31	31	–	–	–
Kans.	–	–	–	126	–
Minn.	–	–	–	–	–
Mo.	–	–	–	28	–
Nebr.	–	–	–	–	–
N.D.	16	–	–	10	–
S.D.	–	–	–	–	–
South Atlantic	**378**	**26**	–	**289**	
Del.	8	4	–	–	–
D.C.	–	–	–	–	–
Fla.	200	–	–	163	–
Ga.	–	–	–	–	–
Md.	72	–	–	30	–
N.C.	–	–	–	–	–
S.C.	–	–	–	–	–
Va.	76	–	–	76	–
W.Va.	22	22	–	20	–
East South Central	**305**	**184**	–	**96**	
Ala.	18	–	–	18	–
Ky.	25	–	–	–	Department for Natural Resources.
Miss.	13	–	–	13	–
Tenn.	249	184	–	65	–
West South Central	–	**4**		**80**	
Ark.	–	4	–	–	–
La.	–	–	–	15	–
Okla.	–	–	–	–	–
Tex.	–	–	–	65	–
Mountain	**210**	**91**	–	**125**	
Ariz.	50	–	–	50	–
Colo.	38	–	–	38	–
Ida.	32	10	–	10	–
Mont.	26	17	–	–	–
Nev.	–	–	–	–	–
N.M.	64	64	–	–	–
Utah	–	–	–	27	–
Wyo.	–	–	–	–	–
Pacific	**546**	**511**	**37**	**45**	
Alaska	15	15	–	–	–
Cal.	459	459	–	–	–
Hawaii	8	–	–	8	–
Ore.	27	37	–	–	–
Wash.	37	–	37	37	–
Territories	**11**	**8**	–	**8**	
Guam	3	–	–	–	Guam Environmental Protection Agency, Public Utility Agency of Guam Laboratory.
P.R.	8	8	–	8	–
V.I.	–	–	–	–	–

Table 4-59
XIII. LABORATORY IMPROVEMENT PROGRAM
D. Water Laboratories — Continued

Lab & Region	4. No. Water Testing Laboratories in Laboratory Improvement Program											
	Licensed/Granted Permits/Approved				Registered				Certified			
	Microbiology	Chemistry	Microbiology & Chemistry	Total	Microbiology	Chemistry	Microbiology & Chemistry	Total	Microbiology	Chemistry	Microbiology & Chemistry	Total
Total	**488**	**440**	**429**	**1,357**	**10**	**12**	**55**	**77**	**707**	**193**	**194**	**1,094**
Average	38	73	54	90	10	12	55	77	28	15	14	44
New England	**34**	**13**	**69**	**116**	**10**	**12**	**55**	**77**	**8**	**1**	**22**	**31**
Conn.	10	12	55	77	10	12	55	77	–	–	–	–
Mass.	–	–	–	–	–	–	–	–	–	–	–	–
Me.	14	1	11	26	–	–	–	–	4	1	21	26
N.H.	–	–	–	–	–	–	–	–	–	–	–	–
R.I.	10	–	3	13	–	–	–	–	–	–	–	–
Vt.	–	–	–	–	–	–	–	–	4	–	1	5
Middle Atlantic	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
N.J.	–	–	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	–	–	–	–	–
East North Central	**299**	**260**	**–**	**559**	**–**	**–**	**–**	**–**	**129**	**–**	**–**	**129**
Ill.	–	–	–	–	–	–	–	–	71	–	–	71
Ind.	–	–	–	–	–	–	–		58	–	–	58
Mich.	–	–	–	–	–	–	–	–	–	–	–	–
Ohio	180	260	–	440	–	–	–	–	–	–	–	–
Wisc.	119	–	–	119	–	–	–	–	–	–	–	–
West North Central	**17**	**2**	**12**	**31**	**–**	**–**	**–**	**–**	**42**	**112**	**13**	**167**
Ia.	17	2	12	31	–	–	–	–	–	–	–	–
Kans	–	–	–	–	–	–	–	–	4	109	13	126
Minn.	–	–	–	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	–	–	28	–	–	28
Nebr.	–	–	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	–	–	–	–	10	3	–	13
S.D	–	–	–	–	–	–	–	–	–	–	–	–
South Atlantic	**5**	**–**	**1**	**6**	**–**	**–**	**–**	**–**	**287**	**25**	**103**	**415**
Del.	3	–	1	4	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–	80	19	64	163
Ga.	–	–	–	–	–	–	–	–	–	–	–	–
Md.	–	–	–	–	–	–	–	–	26	1	3	30
N.C.	–	–	–	–	–	–	–	–	104	4	18	126
S.C.	–	–	–	–	–	–	–	–	–	–	–	–
Va.	–	–	–	–	–	–	–	–	57	1	18	76
W Va.	2	–	–	2	–	–	–	–	20	–	–	20
East South Central	**–**	**56**	**–**	**56**	**–**	**–**	**–**	**–**	**43**	**10**	**4**	**57**
Ala.	–	–	–	–	–	–	–	–	6	–	–	6
Ky.	–	–	–	–	–	–	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	–	12	–	1	13
Tenn.	–	56	–	56	–	–	–	–	25	10	3	38
West South Central	**4**	**–**	**–**	**4**	**–**	**–**	**–**	**–**	**80**	**–**	**–**	**80**
Ark.	4	–	–	4	–	–	–	–	–	–	–	–
La.	–	–	–	–	–	–	–	–	15	–	–	15
Okla.	–	–	–	–	–	–	–	–	–	–	–	–
Tex.	–	–	–	–	–	–	–	–	65	–	–	65
Mountain	**43**	**5**	**33**	**81**	**–**	**–**	**–**	**–**	**68**	**38**	**41**	**147**
Ariz.	–	–	–	–	–	–	–	–	23	7	20	50
Colo.	–	–	–	–	–	–	–	–	18	14	6	38
Ida.	–	–	–	–	–	–	–	–	22	10	–	32
Mont.	8	5	4	17	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–	–
N.M.	35	–	29	64	–	–	–	–	–	–	–	–
Utah	–	–	–	–	–	–	–	–	5	7	15	27
Wyo.	–	–	–	–	–	–	–	–	–	–	–	–
Pacific	**78**	**104**	**314**	**496**	**–**	**–**	**–**	**–**	**42**	**7**	**11**	**60**
Alaska	–	–	–	–	–	–	–	–	15	–	–	15
Cal.	41	104	314	459	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–	4	–	4	8
Ore.	37	–	–	37	–	–	–	–	–	–	–	–
Wash.	–	–	–	–	–	–	–	–	23	7	7	37
Territories	**8**	**–**	**–**	**8**	**–**	**–**	**–**	**–**	**8**	**–**	**–**	**8**
Guam	–	–	–	–	–	–	–	–	–	–	–	–
P.R.	8	–	–	8	–	–	–	–	8	–	–	8
V.I.	–	–	–	–	–	–	–	–	–	–	–	–

Table 4-59
XIII. LABORATORY IMPROVEMENT PROGRAM
D. Water Laboratories — Continued

Lab & Region	Activity of Laboratory Improvement Program Staff									
	5. Proficiency Testing		6. Field Visits						7. Trng.	8. Consult.
			LIP Program			Other Program				
	Water Microbiology	Water Chemistry	Lic./Permit/ App.	Cert.	Other	Lic./Permit/ App.	Cert.	Other		
New England										
Conn.	X	X	X	–	–	–	–	–	X	X
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	–	X	X	X	–	–	–	–	X	X
N.H.	–	–	–	–	–	–	–	–	–	–
R.I.	–	–	X	–	–	–	–	–	X	X
Vt.	–	–	–	X	–	–	–	–	X	X
Middle Atlantic										
N.J.	–	–	–	X	–	–	–	–	X	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	–	–	–
East North Central										
Ill.	–	–	–	X	–	–	–	–	X	X
Ind.	–	–	–	–	–	–	–	–	–	X
Mich.	–	–	–	–	–	–	–	–	–	–
Ohio	–	X	X	–	–	–	–	–	X	X
Wisc.	–	–	X	–	–	–	–	–	X	X
West North Central										
Ia.	X	X	X	–	–	–	–	–	X	X
Kans.	–	X	–	X	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	X	–	X	X
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	X	X	–	X	–	–	–	–	X	–
S.D.	–	–	–	–	–	–	–	–	–	–
South Atlantic										
Del.	–	–	X	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–	–	–
Fla.	–	X	–	X	–	–	–	–	X	–
Ga.	–	–	–	–	–	–	–	–	–	–
Md.	X	X	–	X	–	–	–	–	X	X
N.C.	X	–	–	X	–	–	–	–	X	X
S.C.	–	–	–	–	–	–	–	–	–	–
Va.	–	X	–	X	–	–	–	–	X	X
W.Va.	–	–	–	X	X	–	–	–	X	X
East South Central										
Ala.	–	–	–	X	–	–	–	–	X	X
Ky.	–	–	–	–	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	–	–	–
Tenn.	–	X	–	X	–	–	X	–	X	–
West South Central										
Ark.	–	–	X	–	–	–	–	–	–	–
La.	X	–	–	X	–	–	–	–	X	X
Okla.	–	–	–	–	–	–	–	–	–	–
Tex.	–	–	–	X	–	–	–	–	X	X
Mountain										
Ariz.	X	X	X	X	–	–	–	–	X	X
Colo.	X	X	–	X	–	–	–	–	–	X
Ida.	X	X	X	X	–	–	–	–	X	X
Mont.	–	X	X	–	X	–	–	–	X	X
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	X	–	–	–	–	–	X	X
Utah	X	X	–	X	–	–	–	–	X	X
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific										
Alaska	–	–	–	X	–	–	–	–	X	X
Cal.	X	X	X	–	X	–	–	X	X	X
Hawaii	X	X	–	X	–	–	X	–	X	X
Ore.	X	–	X	–	–	–	–	–	X	X
Wash.	–	X	–	X	–	–	–	–	X	X
Territories										
Guam	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	X	X	–	–	–	–	X	X
V.I.	–	–	–	–	–	–	–	–	–	–

Table 4-60
XIII. LABORATORY IMPROVEMENT PROGRAM
E. Other Laboratory Programs

Lab	Program Activity
Ala	Safety — program was initiated to protect the employees of the laboratory Preventive maintenance — program was designed to prolong the life of the equipment currently in use by scheduled preventiv maintenance and to provide for shorter and less frequent downtimes. Quality control — program was initiated to ensure the highest quality of products in our laboratory system. Training programs are provided for our personnel as well as personnel outside our laboratory system.
Conn.	Recombinant DNA registration and inspections. Prepare and administer examinations to approve laboratory directors for dai food, and water. NPDES approval, inspection, and proficiency testing.
Fla.	Implied Consent —permits issued to 2,150 alcohol breath test (law enforcement) technicians; 2,114 to breath testing instructo and 74 to chemists for blood alcohol analysts. Field staff made 1,072 site visits to certify 2,234 breath testing machines. Wor shops and seminars: Microbiology, Current Methods, TB, GC, Parasitology, Arboviral, Campylobacter, Stress Managemer Use of Microscope, TB Workshop, Water Microbiology, Serology Update, Structuring Laboratory Training Programs, Safe PPNG.
Ind.	All laboratories in the Bureau participate in proficiency testing programs sponsored by various Federal agencies and pro- fessional organizations: (a) Dairy and Food Microbiology (b) Food Chemistry, (c) Meat Chemistry, (d) Clinical Microbiolog (e) Virology, (f) Serology, (g) Blood Lead.
Kans.	Breath alcohol-training and certification of breath alcohol operators.
La.	Hematology proficiency testing for all pansh health units (approximately 100 units), also training and consultation. Rabies (slides) proficiency testing for state laboratories.
Md.	Approval and audit samples for laboratories involved in the bacteriological examination of shellfish and crabmeat.
Mont.	Registration of clinical laboratory personnel in the state.
N.C.	Quarterly newsletter. Quality control for culture media — gonorrhea control. Stock bacterial cultures — maintenance and distribution. Audio - visual training materials for loan.
Ohio	Mycology, Hemoglobin, Clinical Chemistry, Urinalysis, General Bacteriology, Blood Group and Type, Differential Slide, Ente Bacteriology, Parasitology, Nonsyphilis Serology, Syphilis Serology, Alcohol Testing Program.
Ore.	Blood alcohol program (approximately 50 individuals are certified to perform tests in Oregon).
Pa.	Development, modification, and/or comparison of methodologies useful to the clinical laboratory. Selective evaluation of ne systems, kits, or modified technologies.
S.C.	Provide training in public health areas for students in schools of medical technology (MLT & MT programs) and for gradua students in School of Public Health at State University.
Tenn.	Microbiology bench training at Nashville Reference and Branch Laboratories. Consultations on new, and enlarging of existin facilities. Written critiques on performance evaluation samples administered by EPA twice yearly for chemistry laboratorie
Tex.	Distribution of self-instructional courses (CDC Updates & TDH). Teleconference network coordinator.
Wash.	Hemoglobin quality control — unknown specimens with computer analysis. Parasitology—study sets.

Table 4-61
XIV. BIOLOGICS, REAGENTS, AND MEDIA PRODUCED FOR DISTRIBUTION

Lab	Number FTE's	Biologics		Reagents	Media	Materials Produced for Distribution
		Human Use	Lab Use			
Ala.	<0.1	—	—	—	X	1,052 Rodac plates, modified Thayer-Martin plates for GC screening, buffered glycerol, 10% formalin, sample bottles for bacteriological examination of water, TB bottles.
Ariz.	5.0	—	X	X	X	API saline blanks, blood agar plates, bile esculin agar slants, chocolate agar plates, CDC chopped meat broth, Christensen's urea agar, Nitrocefin-tubed, hemoglobin reagent, .05 ferric chloride, .10 formalin solution, PVA solution (fixation) GN broth, PEA agar plates, EMP plates, Hanks solution, KOH reagent, methyl red indicator, d-Naphthol reagent, HE, HIA plates, HIA stock slants, QC broths (Indole-Nitrate, MR-UB,PA) phenylalanine agar slants, MAC plates, Mueller Hinton agar, MUFC broth, MFC agar, SIM, KFS agar, buffered rinse water, charcoal agar slants, thioglycolate broth, tryptic soy broth, TSI agar slants, urea agar slants.
Cal.	0.5	—	—	X	—	Biologics — rabies infected mouse brain for IF quality control, positive control sera for various viral CF tests. Reagents — fluorescein - conjugated antibody preparations for: rabies, Varicella-Zoster, *Chlamydia trachomatis* (L-1), Febrile antigens: *Brucella abortus*, *Salmonella paratyphi* A and B, *Salmonella typhi* "H" and "O", *Francisella tularense*. Immune sera: *Brucella abortus*, *Salmonella paratyphi* A and B, *Salmonella typhi* "H" and "O", *Francisella tularense*.
Conn.	2.5	—	—	X	X	VDRL antigen and buffered saline, serum controls, group A streptococcus conjugate, group A streptococcus office culture kits.
D.C.	—	X	X	—	—	—
Ga.	4.0	—	—	—	—	Improved Thayer-Martin plates.
Ill.	1.5	—	—	X	X	Reagents- alcohol calibration standards for state-wide distribution in breath-testing equipment.
Ia.	3.0	—	—	X	X	The Media Production Unit serves the various diagnostic and environmental microbiology units of the Laboratory and provides media at cost to laboratories in the University hospitals and clinics and to various research laboratories in the College of Medicine. A wide array of items is produced ranging from primary plating and enrichment media to specific media for biochemical identification of almost anything that can be cultured.
La.	0.8	—	—	—	X	Modified Thayer-Martin media.
Mich.	—	X	—	—	—	Human blood derivatives: immune serum globulin, normal serum albumin. Bacterial vaccines: anthrax vaccine, diphtheria toxoid adsorbed, diphtheria antitoxin, diphtheria and tetanus toxoids adsorbed, diphtheria and tetanus toxoids and pertussis vaccine adsorbed, pertussis vaccine adsorbed, tetanus toxoid adsorbed, tetanus and diphtheria toxoids adsorbed. Clinical trials: antihemophilic factor, Factorix, C-1 Inactivator, rabies vaccine, adsorbed.
Minn.	0.50	—	—	—	X	Modified Thayer-Martin plates for GC screening program.
Mo.	2.0	—	—	—	X	Total media required in the V.D. project in Missouri Statewide Culture Screening Program.
N.D.	1.0	—	—	X	X	Modified Thayer-Martin,JEMBEC plates, Amies transport medium, nitrate spot testing reagents and standards.
Ohio	4.0	—	—	X	X	Primary Martin-Lewis plates for distribution to local public health clinics.
Okla.	4.0	—	—	X	X	Approximately 185 microbiological media and 112 reagents.
Pa.	4.0	—	—	X	X	Parasitology kits (Formalin and PVA); throat washing kits (TPB with 0.5% gelatin); stool kits (buffered glycerol); stool kits for virology (containing antibiotics); lyophilized cultures (bacteria, molds, yeasts); soluble ferric synophosphate.
S.C.	3.0	—	X	X	X	3,286 liters media, 4,535 liters reagents, 50 media formulations, 20 stain and reagent formulations.
S.D.	0.1	—	—	—	X	JEMBEC plates.
Tenn.	6.0	—	X	—	—	Isovitalex, Thayer-Martin plates, VCN, Gonopak, Jones-Kendrick.
Wash.	2.0	—	—	X	X	—
W.Va.	4.0	—	—	X	X	Modified chocolate agar plates (Transgrow), water sample containers with dechlorinating agent, tuberculosis specimen containers with bacterial suppressant, enteric specimen container with buffered glycerol solution, parasite specimen containers containing PVA or formalin for preserving suspect organisms in feces.
Wisc.	4.5	—	—	—	X	—

Table 4-62
XV. RESEARCH AND DEVELOPMENT
A. Basic Research

Lab	Titles of Research Projects	Funding Support				
		Number of Positions	Federal Grant	Contract	State Funds	Other Funds
Ala.	IWGMT — Open-ended Study of Slowly Growing Mycobacteria.	–	–	–	–	–
	CDC Primary Drug Resistance Study	–	–	–	–	–
Cal.	Sampling and Analytical Problems in Air Pollution	1.8	101,391	–	–	–
	Fundamental and Applied Studies of Particulate Surfaces	1.0	49,225	–	–	–
	Validation of Samplers	1.0	52,110	–	–	–
	Study of Cytomegalovirus	3.2	107,792	–	–	–
	Lymphocyte Antibody Traffic in CNS	2.5	96,140	–	–	–
	Inactivation of Viruses for Vaccines	1.75	–	97,403	–	–
	Cancer Virus Studies	5.8	–	154,687	–	–
	Studies on the Cytopathogen from Amebae of the Genus Naegleria	1.2	75,000	–	–	–
Fla.	Naegleria Activity in Central Florida Lakes	4.0	–	X	48,000	90,669
	S.W. Wastewater Treatment Plant Project	4.0	–	X	23,533	44,855
Ga.	Identification of Unusual Pathogenic Bacteria	–	–	–	X	–
	Fluorochrome vs. Ziehl-Neelson	–	–	–	X	–
Ia.	Method development for identification & quantification of hydrocarbons in coal liquefaction plants.	0.25	–	X	–	–
	Determination of the stability of M-Amyl Ketone	0.2	X	–	–	–
La.	*Vibrio cholerae*	–	–	–	2,000	–
Wisc.	Oak Ridge National Laboratories	4.0	X	–	–	–

Table 4-63
XV. RESEARCH AND DEVELOPMENT
B. Applied Research

Lab	Titles of Research Projects	Funding Support				
		Number of Positions	Federal Grant	Contract	State Funds	Other Funds
Cal.	Monitoring Mutagens in Air	1.25	–	60,000	–	–
	Visibility Reduction	1.7	–	89,150	–	–
	Dry Deposition of Acids	1.3	–	79,757	–	–
Ga.	Freeze Preservation — Bacteria	–	–	–	X	–
	Rubacell vs. Rubascan	–	–	–	X	–
	Freeze Preservation — Fungi	–	–	–	X	–
Ia.	Legionella Identification	0.25	–	–	X	–
	Arbovirus Surveillance	0.25	–	–	X	–
La.	Automation of TORCH Screening for Newborn in Louisiana	–	–	–	64,000	–
Mich.	Brucellosis Contract	1.9	–	64,904	–	–
	PBB Contract	6.8	–	231,327	–	–
	Red Cross Agreement	2.8	–	–	–	105,087
	Laboratory Training Contract	–	–	2,219	–	–
	PCB Contract	9.8	272,798	–	–	–
	Chemical Risk	3.0	87,075	–	–	–
	Interferon Contract	0.9	–	–	–	–
	Legionella Contract	2.1	–	80,295	–	–
Pa.	Environmental Study of Legionella	0.75	–	–	X	–
	Evaluation of Commercial Products	0.5	–	–	X	–
Wisc.	Implementing Controlled Substance Analysis in Wisconsin's Implied Consent Program	2.0	X	–	–	–

Table 4-64
XV. RESEARCH AND DEVELOPMENT
C. Technical Development

Lab	Titles of Research Projects	Funding Support				
		Number of Positions	Federal Grant	Contract	State Funds	Other Funds
Cal.	Water Virology Laboratory	2.8	116,605	—	—	—
	Detection of Virus and Antibodies	2.75	117,591	—	—	—
	Coxsackie Viruses in Chronic Disease: Antigenic Variation	2.45	87,163	—	—	—
Ga.	CPC Study	—	—	—	X	—
Ida.	Genetics Services Improvement Project	0.9	25,248	—	—	—
N.C.	Development of Serological Test for Rocky Mountain Spotted Fever — Contract with Duke University Medical Center	1.0	X	19,503	—	—
Pa.	Value of 4% NaOH Digest 1 conc. on Immunofluorescence of *Legionella pneumophila*	0.5	—	—	X	—
	Virus-specific IgM Detection	0.25	—	—	X	—
	Salmonella Immobilization in Foods	0.25	—	—	X	—
Tex.	All culture isolation of arbovirus	0.15	—	—	X	—
	Improved media components	0.1	—	—	X	—
	BacTec Drug Testing	0.1	—	—	X	—

SECTION V
SPECIAL QUESTIONS

Table 5-1
LABORATORY ORGANIZATIONAL STRUCTURE

Lab	Date of Current Organizational Chart		Did Organizational Structure Change During FY 1982	Description of Organizational Change
	State Health Department	State Laboratory		
Ala.	10/01/82	10/05/82	X	A new division created to process specimens generated in Maternal and Child Health Clinics- Rh, rubella, and STD.
Alaska	10/01/82	12/01/82	X	Slight internal changes.
Ariz.	05/01/82	12/01/82	X	Air/Water Quality Units combined.
Ark.	12/01/79	12/19/79	–	–
Cal.	–	–	–	–
Colo.	07/01/77	1977	–	–
Conn.	06/01/79	06/30/80	–	–
Del.	–	07/01/81	–	–
D.C.	02/21/80	05/01/80	–	–
Fla.	–	–	–	–
Ga.	04/16/82	04/01/82	X	Addition of STD Control Unit and Tuberculosis Control Unit to Laboratory Section; re-named Laboratory/Communicable Disease Control/Adult Health Section.
Guam	05/23/80	10/22/82	X	Change in Public Health Laboratory.
Hawaii	07/01/82	07/01/82	–	–
Ida.	07/01/82	07/01/82	–	–
Ill.	09/15/80	11/30/80	–	–
Ind.	11/01/82	08/01/82	X	The Bureau of Health Institutions Standards has been added to the Health Department Organizational chart. No basic changes have been made in the organization of the Bureau of Laboratories.
Iowa	–	07/01/80	–	–
Kans.	06/01/82	07/01/82	–	–
Ky.	06/16/82	06/16/82	X	The Laboratory was reorganized from four Branches to two Branches. The Medical Examiner Branch was transferred to the Department of Justice. The Microbiology & Immunology-Serology Branches were combined into one Microbiology Branch. Many changes at Section level were made.
La.	09/01/82	04/01/82	X	–
Me.	07/01/80	07/01/80	–	–
Md.	07/14/80	01/12/79	–	–
Mass.	1979	07/01/80	–	–
Mich.	06/07/82	10/01/82	X	Bureaus have been converted into Administrations, with realignment of responsibilities; Environmental Epidemiology moved from Laboratory to Environmental Center; realignment of divisions under two deputy chiefs in Administration office.
Minn.	07/01/82	01/01/82	–	Change in Department organization.
Miss.	1982	04/01/82	–	–
Mo.	08/01/82	06/01/82	X	Metabolic disease unit added to central laboratory.
Mont.	06/30/81	06/30/81	–	–
Nebr.	09/01/76	01/01/80	–	–
Nev.	07/01/81	07/01/81	–	–
N.H.	04/27/82	06/13/73	X	–
N.J.	03/19/79	09/02/81	–	–
N.M.	08/01/82	10/13/82	–	Biochemistry Section of Chemistry Bureau divided into Organics, Alcohol, & Drug Section. Supply Section transferred from Fiscal Office to Program Support Bureau.
N.Y.	–	–	–	–
N.C.	12/01/82	12/01/82	–	–
N.D.	01/01/82	01/01/82	X	The Division of Development, Training and Consultation has been renamed Environmental Bacteriology and Certification, but will continue its emphasis in Development, Training and Consultation.

Table 5-1
LABORATORY ORGANIZATIONAL STRUCTURE — Continued

Lab	Date of Current Organizational Chart		Did Organizational Structure Change During FY 1982	Description of Organizational Change
	State Health Department	State Laboratory		
Ohio	08/01/80	03/16/82	X	Minor changes in positions; overall structure remains the same.
Okla.	12/16/82	07/01/81	–	Health Department Organizational structure has changed. The laboratory organizational structure remains as previously
Ore.	03/01/82	04/01/82	X	Creation of a "Laboratory Operations" section to include specimen receiving, data processing and clerical sections under one supervisor.
Pa.	07/01/81	07/01/81	–	–
P.R	–	–	–	–
R.I.	06/01/82	06/01/82	–	–
S.C.	08/28/81	07/01/82	X	Records have been moved from Scientific Services to Financial Manager. Two Division names changed. District Labs moved from Assistant Chief to Division of Clinical Laboratories.
S.D.	10/01/81	10/01/81	X	The Laboratory has moved to a program in the Secretariate. The State Chemist was moved from the Bureau of Administration to the State Health Laboratory. Licensure and certification activities were moved to the new Division of Public Health.
Tenn.	09/01/81	07/01/81	–	–
Tex.	06/01/82	09/01/81	X	Centralization of clerical staff in conjunction with central receipt and reporting.
Utah	08/01/82	09/01/82	–	–
Vt.	1982	1982	–	–
Va.	1981	1980	–	–
V.I.	–	–	–	–
Wash.	07/15/82	07/15/82	–	–
W.Va.	01/01/81	01/01/81	–	–
Wisc.	08/01/81	08/01/81	X	Effective July 1, 1981, the OSHA program was transferred from the Division of Health, Department of Health and Social Services.
Wyo.	1969	1969	–	–

Table 5-2
PREMARITAL EXAMINATION LAWS

NOTE: Answers are given in the body of the chart. Longer explanations and exceptions or qualifications are given under indicated footnote headings.

STATES AND TERRITORIES	Effective Year of Law or Latest Revision	Minimum Age Legal M	Minimum Age Legal F(a)	Minimum Age With Consent M	Minimum Age With Consent F(a)	Certificate Required May Be From (b)	Valid Period in Days	Waiting Period Exceptions (c)	Conditions of Waiver (d)	Physical Exam Required—Qualifications (e)	Kind of Serology Required—Qualifications (f)	Serology Test for Other Disease (g)	Accepted From Other Than State Approved Labs (h)	Provision for Free Test—Qualifications (i)	Provision for Free Physical Exam	Premarital Forms of Other States Accepted—Qualifications (j)	Test Results Filed With State Health Department—Qualifications (k)
Alabama	1975	21	18	17	14	(1-3)	30	—	—	Yes	(1,4,5)	—	(1-5,8,11)	Yes(3)	Yes	Yes(1)	Yes(1)
Alaska	1953	18	18(1)	16	16	(1-3)	30	3 days	(2,5)	Yes	(1)	(4)	(1-4,5a)	Yes	—	Yes(1)	Yes
Arizona	1972	18	18	18	16	(1-2)	30	—	(6)	Yes	(1)	—	(1-5)	—	—	Yes(1)	Yes
Arkansas	1953	18	18	17	16	(1-3,6)	30	—	—	Yes	(4)	—	(1-5,8)	—	—	Yes(2)	Yes
California	1970	18	18	(11)		(1,2)	30	—	—	Yes(3)	(4)	(7)	(1,2a,3,5,8)	—	—	Yes	Yes
Colorado	1979	18	18	16	16	(1-3,5)	—	—	—	—	—	(8)	(1-5,8-11)	—	—	Yes	—
Connecticut	1980	18	18	16	16	(1-3,5)	35	4 days	(6)	Yes(1)	(1)	(8)	(1-5,8,10)	—	—	Yes(3)	Yes(1)
Delaware	1947	18	18	18	16	(1-3)	30	1 day(2)	(2)	Yes	(1)	—	(1,3,6)	Yes	Yes	Yes(1)	Yes
Dist. of Columbia	1967	18	18	16	16	(1-3)	No limit	5 days	—	—	(1)	—	(1-5,8-11,14)	Yes	—	Yes	—
Florida	1978	18	18	18	16	(1)	60	3 days	(1)	—	(1)	—	(1-5)	Yes	—	—	—
Georgia	1978	18	18	16	16	(1)	30	—(4)	(1)	—(2)	(1)	(9,10)	(1-5,13)	Yes	Yes	Yes(1)	—
Guam	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hawaii	1979	18	18	16	16	(1-3)	30	—	—	Yes(4)	(1,4)	(10)	(1,3-5)	Yes	Yes	Yes	Yes(3)
Idaho	1979	18	18	16	16	(1-3,5)	—	—(1)	(4)	—	—	(7)	(1-5,8-11)	—	—	Yes	Yes
Illinois	1949	18	18(10)	16	16	(1)	15	3 days	(1,7,8)	Yes	(1)	—	(1,3,4,6,9,10,12)	—	—	—	Yes(1)
Indiana	1981	18	18	17	17(3)	(1-3,5)	30	3 days	(6)	Yes	(4)	(8)	(1-5,8-9)	—	—	—	—
Iowa	1975	18	18	16	16	(1-6)	20	3 days	(4)	—	(1)	—	(1,3,4,8,9)	—	—	Yes(1)	—
Kansas	1981	18	18	17	17(5)	—	No Limit	—	—	—	—	—	(7)	—	—	—	—
Kentucky	1982	18	18	(12)		—	—	—	—	—	—	—	—	—	—	—	—
Louisiana	1975	18	18	(6)	16	(2,4)	30	3 days	(6)	Yes(5)	(3)	(4)	(7)	Yes	Yes	—	—
Maine	No Law	18	18	18	18	—	30	—	—	—	—	—	(1-4,6)	Yes	—	—	—
Maryland	No Law	21	18	18	16	—	—	2 days	—	—	—	—	—	—	—	—	—
Massachusetts	1974	18	18	(11)		(1-3,5,6)	30	3 days	(1,3,8)	Yes	(1)	—	(1-6,9,10)	Yes	—	Yes(1)	—
Michigan	1978	18	18	18	16	(1-3,5)	30	3 days	(6)	Yes	(1)	(3)	(1,3,4,6,8-10)	Yes	—	—	—
Minnesota	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mississippi	1957	21	21	17	15	(1-4)	30	3 days	(2,6)	Yes(1)	(1)	—	(1-5)	Yes	Yes	Yes(1)	Yes
Missouri	1980	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Montana	1981	18	18	16	16(4)	(1-3,5)	20	—	—	—	(4)	(7)	(1-5,8-11)	Yes	—	Yes(1)	—
Nebraska	1978	19	19	17	17	(1)	30	2 days	(1,3,7)	Yes	(1)	(8)	(1,3-5)	Yes	—	Yes(1,3)	Yes
Nevada	No Law	18	18	16	16	—	—	—	—	—	—	—	—	—	—	—	—
New Hampshire	1981	18	18	14	13	—	—	—	—	—	—	—	—	—	—	—	—
New Jersey	1953	18	18	16	16(9)	(1-3)	30	3 days	(6)	—	(4)	—	(1,3-5)	—	—	Yes(4)	Yes
New Mexico	1979	21	18	18	16	(1-3,5)	30	—	—	Yes	(1)	—	(1-5,8-11)	Yes	—	Yes	Yes(1)
New York	1938	21	18	16	14	(1-3)	30	3 days	(6)	Yes	(1)	—	(1-5)	—	—	Yes(1)	Yes
North Carolina	1981	18	18	16	16(7)	(1-3)	30	—	—	Yes	(3)	(4-6)	(7)	—	Yes	Yes(5)	Yes
North Dakota	1971	18	18	16	16	(1-3,5,6)	30	—	—	—	(4)	(7)	(1-5,8-11)	Yes	—	Yes	—
Ohio	No Law	18	18	18	16	—	—	5 days	(6)	—	—	—	—	—	—	—	—
Oklahoma	1975	18	18	16	16(2)	(4,6,7)	30	—(1)	(6)	—	(1,4)	—	(1-5,8,9,11)	Yes	—	—	—
Oregon	1981	18	18	17	17	—	30	3 days	(6)	—	—	—	—	Yes(2)	—	—	—
Pennsylvania	1975	18	18	16	16	(1-3,5)	30	3 days(3)	(5)	Yes	(1)	—	(1-6)	Yes	—	Yes(1)	Yes(2)
Puerto Rico	No Law	21	21	18	18	(4)	10	—	—	Yes	(3)	—	(7)	—	—	—	—
Rhode Island	1975	18	18	18	16	(1-3,5)	40	—	—	Yes	(1)	(1,8)	(1,3,5)	Yes	Yes	Yes(6)	Yes
South Carolina	No Law	—	—	—	—	—	—	1 day	—	—	—	—	—	—	—	—	—
South Dakota	1977	18	18	16	16(13)	(1)	20	—	—	—	(4)	—	(1,2,5a)	Yes	—	Yes	—
Tennessee	1950	18	18	16	14	(1)	30	—(1)	(1)	Yes	(1)	(1)	(1,3,4)	Yes	Yes	Yes(1)	Yes
Texas	1977	18	18	14	14	(1)	21	—	—	Yes	(4)	(4)	(1,5)	Yes	—	—	Yes(1)
Utah	1981	18	18	14	14	—	—	—	—	—	—	—	—	—	—	—	—
Vermont	1951	21	18	18	16	(1-3,6)	30	5 days	(1,3)	—	(1)	—	(1-6)	Yes	—	Yes	Yes
Virginia	1979	18	18	16	16	(1-3)	60	—	(9)	Yes(1)	(1)	—	(1-5)	—	—	—	Yes
Virgin Islands	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Washington	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
West Virginia	1952	18	18	18	18(8)	(4)	30	3 days	(4)	Yes	(4)	—	(1-4,8,9)	Yes	—	—	—
Wisconsin	1981	18	18	16	16	—	20	5 days	—	—	—	—	(7)	—	—	—	—
Wyoming	1941	19	19	16	16	(1-3)	30	—	(1,3)	Yes	(1)	(3)	(1-5)	Yes	—	—	Yes

FOOTNOTES — TABLE 5-2

(a) MINIMUM AGE:

(1) Legal-Heanng before Judge, M (14-16), F (14-16).
(2) Requirements may be vaned by order of the Judge of the County Court.
(3) With Consent—(15 for pregnant female or mother with court order).
(4) Judicial approval required if either party aged 16 or 17. The court must require both to take marriage counseling of at least 2 sessions 10 days apart with a designated counselor.
(5) With Consent—(Consent of 1 parent).
(6) With Consent—(Permission of parents & Juvenile Court).
(7) With Consent—(Female more than 12 years of age who is pregnant or has given birth).
(8) With Consent—(May be waived by judge if girl is pregnant).
(9) Under age 16—Judicial consent must be approved by judge of Superior Court
(10) In Cook County.
(11) With Consent—Subject to judicial review if under 18.
(12) Under 18 must have consent.
(13) In case of pregnancy and with parental consent individuals under 16 may be married without premantal examination.

(b) CERTIFICATES REQUIREO FROM:

(1) Any licensed physician.
(2) Medical officers of the Armed Forces.
(3) Medical officers of the Public Health Service.
(4) State licensed physician only.
(5) Any licensed osteopath.
(6) State licensed osteopath.
(7) State licensed chiropracter.

(c) EXCEPTIONS:

(1) If not of age. 3 days.
(2) Non-residents—4 days.
(3) Unusual condition as to make marriage advisable.
(4) None, if both are 18 or over, 3 days if either is 16 or 17.

(d) CONDITIONS OF WAIVER:

(1) Pregnancy or to legitimize a child.
(2) Emergency defined by State Board of Health or a judge.
(3) Impending death.
(4) Judge may waive in case of emergency or extraordinary circumstances.
(5) Religious objections.
(6) Good cause as defined by a judge.
(7) No danger to either party.
(8) Infected applicants must take treatment.
(9) Only in pregnancy of minor.
(10) Rubella section—if physician documents the criteria for the waiver.

(e) QUALIFICATIONS:

(1) If serology is positive or doubtful.
(2) Physician must sign statement that he has counselled female regarding her immunity against Rubella.
(3) Physician must determine that patient is free of infectious syphilis.
(4) May be waived by order of a circuit court judge.
(5) Statement from physician saying person free of all veneral diseases.

(f) KIND OF SEROLOGY REQUIRED:

(1) Serological test for syphilis listed in PHS Publication #411 (1969) or later revision may be used.
(2) Serological test for syphilis listed in PHS Publication #411 (1969) or later revision may be used, also test for immunity against rubella.
(3) Physician must certify applicant free of VD.
(4) Any test approved by State Board of Health or State Department of Health.
(5) Probate judge may waive requirements if emergency exists:
a. pregnancy
b. impending death
c. other causes as may be defined by the State Board of Health

(g) TESTS FOR OTHER DISEASE:

(1) Physical inspection for gonorrhea.
(2) Must be free from communicable disease in an infectious form.
(3) Must be certified free from gonorrhea and chancroid also;
(4) Must be certified free from all venereal diseases.
(5) Tuberculosis.
(6) Mental competence.
(7) Rubella test for female applicants (N.D.—Not mandated by law).
(8) Tests for Rubella on females under age 50 and capable of bearing children.
(9) Sickle cell test must be offered and counseling provided to all applicants.
(10) Rubella test on all females capable of pregnancy.

(h) SEROLOGY ACCEPTED FROM OTHER THAN STATE APPROVED LABORATORIES:

(1) Department of Health Laboratories of other States.
(2) Branch laboratories of other State Health Departments.
a. If State has comparable premarital blood test law.
(3) Laboratories of the Armed Forces.
(4) Public Health Service Laboratories.
(5) Laboratories approved by other State Health Departments.
a. If State has comparable premarital blood test law.
b. Provided respective State Department of Health, or Bureau of Laboratories (Division) certifies that such laboratory is currently on their official approved list.
(6) New York City and District of Columbia.
(7) Serology is not State required.
(8) District of Columbia.
(9) Laboratories of U.S. Territorial Health Departments.
(10) Laboratories of Official Provincial Health Departments of Canada.
(11) Laboratories of U.S. Veterans Administration Medical Center.
(12) Baltimore, Maryland Health Department.
(13) Provided documentation furnished that sickle cell test and rubella test requirements met.
(14) Foreign labs if certified by U.S. Embassy in that country.

(i) QUALIFICATIONS:

(1) Yes, for Armed Forces, indigents, temporary non-residents only.
(2) Will test if submitted for out-of-state marriage requirements.
(3) Charge of $10.00 for rubella tests required for applicants of other states.

(j) QUALIFICATONS:

(1) If other State has comparable premarital law.
(2) At discretion of county clerks if form similar to Arkansas form.
(3) Premarital forms of other states will be accepted only if the other state has a comparable premarital law on test for rubella.
(4) If laboratory is State approved and if form is signed by physician and applicant.
(5) If accompanied by qualifying statement as regards note G, 4-5.
(6) If form is from other State laboratories or other State approved laboratories (not physician laboratories form).

(k) QUALIFICATIONS:

(1) If positive.
(2) If positive test performed by State laboratory.
(3) Except out of state laboratories.

REVISION

This chart has been checked for accuracy to July 1983. Persons noting errors or suggesting revisions are urged to write (citing references) to: Director, Venereal Disease Control Division, Centers for Dise Control, Atlanta, Georgia 30333.

Table 5-3
UTILIZATION OF PRESENT FACILITIES

Lab & Region	Professional and Technical Space				Laboratory Support Services Space			
	Gross Sq. Feet Central Lab.	Gross Sq. Feet Branch Lab. (if applicable)	Net Sq. Feet Central Lab.	Net Sq. Feet Branch Lab. (if applicable)	Gross Sq. Feet Central Lab.	Gross Sq. Feet Branch Lab. (if applicable)	Net Sq. Feet Central Lab.	Net Sq. Feet Branch Lab. (if applicable)
New England								
Conn.	49,537	–	34,676	–	18,791	–	13,154	–
Mass.	–	–	–	–	–	–	–	–
Me.	–	–	8,999	–	–	–	12,827	–
N.H.	–	–	5,220	–	–	–	3,753	–
R.I.	–	–	18,040	–	–	–	3,138	–
Vt.	5,150	–	4,950	–	1,450	–	1,250	–
Middle Atlantic								
N.J.	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	16,100	–	15,500	–	13,500	–	10,500	–
East North Central								
Ill.	18,000	13,331	15,700	8,571	16,862	4,866	14,126	3,204
Ind.	18,048	–	15,824	–	4,736	–	4,480	–
Mich.	–	–	35,876	–	–	–	23,744	–
Ohio	–	–	18,472	5,438	–	–	11,191	1,758
Wisc.	33,332	5,554	25,422	4,549	20,293	2,089	14,130	1,696
West North Central								
Ia.	23,780	5,941	14,268	4,159	17,667	795	10,600	557
Kans.	16,220	–	12,150	–	4,400	–	3,100	–
Minn.	21,889	–	9,565	–	8,683	–	5,816	–
Mo.	18,482	9,980	12,935	8,900	18,684	–	15,812	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	4,350	–	4,000	–	2,358	–	2,200	–
S.D.	5,600	–	3,400	–	4,000	–	2,400	–
South Atlantic								
Del.	10,035	–	4,283	–	–	–	2,364	–
D.C.	–	–	12,000	–	–	–	1,500	–
Fla.	46,712	91,454	12,374	40,282	–	–	10,855	24,855
Ga.	–	–	15,273	6,408	–	–	3,136	4,059
Md.	78,200	–	59,165	–	8,518	–	6,667	–
N.C.	29,000	400	17,725	400	20,000	9,800	10,991	7,400
S.C.	34,218	–	22,200	–	22,204	–	12,300	–
Va.	–	–	–	–	–	–	–	–
W.Va.	7,506	700	7,457	650	3,535	–	2,843	–
East South Central								
Ala.	13,909	13,711	9,170	11,484	21,760	6,186	14,346	5,085
Ky.	–	–	14,263	–	–	–	5,163	–
Miss.	–	–	–	–	–	–	–	–
Tenn.	8,740	–	6,740	8,206	9,101	–	7,069	4,923
West South Central								
Ark.	–	–	24,400	–	–	–	8,687	–
La.	25,000	16,300	24,500	13,600	4,300	10,500	4,000	8,900
Okla.	8,882	–	–	–	6,800	–	–	–
Tex.	65,066	–	27,402	–	–	–	12,838	–
Mountain								
Ariz.	–	–	11,652	1,740	–	–	6,827	870
Colo.	–	–	–	–	–	–	–	–
Ida.	–	5,054	12,592	3,724	–	–	5,944	768
Mont.	7,737	–	6,027	–	6,557	–	4,436	–
Nev.	–	–	–	–	–	–	–	–
N.M.	–	–	19,685	4,435	–	–	9,755	120
Utah	26,441	–	13,580	–	7,607	–	3,932	–
Wyo.	–	–	–	–	–	–	–	–
Pacific								
Alaska	–	7,741	–	7,134	–	6,014	–	5,549
Cal.	–	–	–	–	–	–	–	–
Hawaii	12,080	5,650	10,800	5,000	2,800	400	2,200	400
Ore.	10,460	–	8,263	–	11,048	–	7,456	–
Wash.	–	–	9,387	2,290	–	–	5,486	1,063
Territories								
Guam	3,424	264	3,154	264	975	35	975	35
P.R.	–	–	20,968	–	–	–	5,449	–
V.I.	–	–	–	–	–	–	–	–

Table 5-3
UTILIZATION OF PRESENT FACILITIES — Continued

Lab & Region	Administrative and Clerical Space				Total Space Available			
	Gross Sq. Feet Central Lab.	Gross Sq. Feet Branch Lab. (if applicable)	Net Sq. Feet Central Lab.	Net Sq. Feet Branch Lab. (if applicable)	Gross Sq. Feet Central Lab.	Gross Sq. Feet Branch Lab. (if applicable)	Net Sq. Feet Central Lab.	Net Sq. Feet Branch Lab. (if applicable)
New England								
Conn.	8,269	–	5,788	–	76,597	–	53,618	–
Mass	–	–	–	–	–	–	–	–
Me	–	–	1,655	–	25,110	–	23,481	–
N.H.	–	–	2,568	–	–	–	11,541	–
R.I.	–	–	3,441	–	45,000	–	24,619	–
Vt.	1,200	–	1,200	–	7,800	–	7,400	–
Middle Atlantic								
N.J.	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–
Pa.	7,900	–	5,800	–	37,500	–	31,800	–
East North Central								
Ill.	9,000	2,672	7,798	2,093	43,862	20,869	37,624	13,868
Ind.	2,088	–	2,088	–	24,872	–	22,392	–
Mich.	–	–	5,732	–	–	–	71,481	–
Ohio	–	–	7,321	888	80,898	9,740	36,984	8,084
Wisc.	12,709	3,837	8,592	2,892	66,334	11,480	48,144	9,137
West North Central								
Ia.	9,650	3,176	5,790	2,660	51,097	9,912	30,658	7,376
Kans.	4,050	–	3,100	–	24,670	–	18,350	–
Minn.	3,209	–	2,688	–	33,781	–	18,069	–
Mo.	7,426	–	–	–	44,592	9,980	28,747	8,900
Nebr.	–	–	–	–	–	–	–	–
N.D.	1,292	–	1,100	–	8,000	–	7,300	–
S.D.	1,000	–	600	–	10,600	–	6,400	–
South Atlantic								
Del.	2,612	–	2,158	–	12,647	–	8,805	–
D.C.	–	–	1,500	–	–	–	28,500	–
Fla.	–	–	5,061	8,532	46,712	91,454	28,290	73,669
Ga.	–	–	4,909	963	–	–	23,318	11,430
Md.	16,872	–	9,100	–	103,590	–	74,932	–
N.C.	10,064	–	5,525	–	59,064	10,200	34,241	7,800
S.C.	9,737	–	5,400	–	66,159	–	39,900	–
Va.	–	–	–	–	–	–	–	–
W.Va.	10,806	–	4,745	–	21,847	700	15,045	650
East South Central								
Ala.	5,691	3,519	3,752	3,028	5,691	23,416	50,684	19,597
Ky.	–	–	3,266	–	–	–	22,692	–
Miss.	–	–	–	–	19,060	–	11,355	–
Tenn.	4,297	–	4,297	3,283	22,138	–	18,106	16,412
West South Central								
Ark.	–	–	2,124	–	–	–	35,211	–
La.	3,600	5,600	3,200	4,450	32,900	32,400	31,700	26,950
Okla.	1,016	–	–	–	16,698	–	–	–
Tex.	–	–	6,389	–	–	–	46,629	–
Mountain								
Ariz.	–	–	5,527	490	–	–	24,006	3,100
Colo.	–	–	–	–	–	–	–	–
Ida.	–	–	6,870	562	–	5,054	25,406	5,054
Mont.	1,947	–	1,405	–	16,241	–	11,868	–
Nev.	–	–	–	–	–	–	–	–
N.M.	–	–	7,805	200	–	–	37,245	4,755
Utah	2,174	–	1,117	–	36,222	–	18,629	–
Wyo.	–	–	–	–	–	–	–	–
Pacific								
Alaska	441	3,437	400	3,171	441	17,192	400	15,854
Cal.	–	–	–	–	–	–	–	–
Hawaii	1,000	200	1,000	200	15,880	6,250	14,000	5,600
Ore.	5,540	–	3,610	–	27,048	–	19,329	–
Wash.	–	–	5,537	1,547	–	–	20,410	4,900
Territories								
Guam	320	–	320	–	4,719	299	4,449	299
P.R.	–	–	–	–	–	–	26,417	–
V.I.	–	–	–	–	–	–	–	–

Table 5-4
LABORATORY FACILITY PLANNING AND ENERGY CONSERVATION

Lab & Region	Year Laboratory Completed	Facilities Shared by Labs Not Under SPHL'S Supervision	Laboratories Sharing Space with SPHL	New Laboratory Facility Planning							
				Planning in Progress	Planning Anticipated	Funds Provided For Planning	Funds Provided For Const.	Date Construction To Begin	Cost of Construction	Architect Selected	Estimated Gross Square Feet
New England											
Conn.	1967	–	–	X	X	X	X	Begun 3/81	8,200,000	X	45,000
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	1969	–	–	–	–	–	–	–	–	–	–
N.H.	1973	X	Radiology Lab, Hazardous Waste Lab, Dental Lab	–	–	–	–	–	–	–	–
R.I.	1978	–	–	–	–	–	–	–	–	–	–
Vt.	1953	–	–	–	–	–	–	–	–	–	–
Middle Atlantic											
N.J.	1965	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	1976	–	–	–	–	–	–	–	–	–	–
East North Central											
Ill.	–	–	–	X	X	X	–	Fy 83	10,250,000	X	60,000
Ind.	1950	X	Air Monitoring Lab, Industrial Hygiene Lab, Radiological Health Lab, Stream Biology, Mosquito	–	–	–	–	–	–	–	–
Mich.	1925	–	–	X	X	X	–	Unknown	<2,000,000	X	16,600
Ohio	–	–	–	–	–	–	–	–	–	–	–
Wisc.	1952	X	Respiratory Research, Zoonosis Research, Enterovirus Research, (all in Dept. of Preventive Medicine)	–	X	–	–	Fy 87	6,800,000	–	43,000
West North Central											
Ia.	–	–	–	X	X	–	–	–	–	–	11,800
Kans.	1974	–	–	–	–	–	–	–	–	–	–
Minn.	1969	X	Environmental Health Labs	–	–	–	–	–	–	–	–
Mo.	1978	–	–	–	–	–	–	–	–	–	–
Nebr	–	–	–	–	–	–	–	–	–	–	–
N.D.	1968	–	–	X	X	–	–	–	3,500,000	–	20,000
S.D.	1973	–	–	–	–	–	–	–	–	–	–
South Atlantic											
Del.	1960	–	–	–	–	–	–	–	–	–	–
D.C.	1942	–	–	–	–	–	–	–	–	–	–
Fla.	1966	–	–	X	X	X	–	Fy 82-83	5,600,000	X	35,000
Ga.	1959	–	–	–	–	–	–	–	–	–	–
Md.	1974	X	Power Plant Sitting Program (Dept of Natural Resources)	–	–	–	–	–	–	–	–
N.C.	1973	–	–	–	–	–	–	–	–	–	–
S.C.	1979	X	Environmental Quality Control Labs	–	–	–	–	–	–	–	–
Va.	1970	X	Dept of Agriculture and Consumer Services	–	–	–	–	–	–	–	–
W.Va.	1954	–	–	–	X	–	–	Unknown	2,500,000	–	2,500
East South Central											
Ala.	1979	–	–	–	–	–	–	–	–	–	–
Ky.	1960	X	Water Quality Control (Dept for Natural Resources), Radiological Health Lab (Consumer Health Protection)	–	–	–	–	–	–	–	–
Miss.	1958	–	–	–	–	–	–	–	–	–	–
Tenn.	1952	X	Dept of Labor Lab	X	–	X	–	Fy 83-84	8,700,000	X	140,000
West South Central											
Ark.	1980	–	–	–	–	–	–	–	–	–	–
La.	1957	–	–	X	–	–	–	–	10,000,000	–	65,000
Okla.	1973	–	–	–	–	–	–	–	–	–	–
Tex.	1958	–	–	X	X	–	–	–	3,000,000	–	10,000
Mountain											
Ariz.	1976	–	–	–	–	–	–	–	–	–	–
Colo.	1960	–	–	–	–	–	–	–	–	–	–
Ida.	1981	X	Dept of Agriculture Lab	–	–	–	–	–	–	–	–
Mont.	1955	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	1976	X	State Medical Investigator (25% of building), Veterinary Diagnostic Services, NMDA (shares portion of SLD space)	–	X	–	–	Fy 85-86	Unknown	–	Unknown
Utah	1975	–	–	–	–	–	–	–	–	–	–
Wyo.	1974	X	Dept. of Environmental Quality, Crime Lab (Attorney General)	–	–	–	–	–	–	–	–
Pacific											
Alaska	1970	–	–	–	X	–	–	1986	13,000,000	–	20,000
Cal.	1955	–	–	–	–	–	–	–	–	–	–
Hawaii	1967	–	–	–	–	–	–	–	–	–	–
Ore.	1978	–	–	–	–	–	–	–	–	–	–
Wash.	1940	–	–	X	–	X	X	1983	9,000,000	X	60,000
Territories											
Guam	1973	–	–	X	X	X	X	Fy 83	3,000,000	X	27,600
P.R.	1959	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–

Table 5-4
LABORATORY FACILITY PLANNING AND ENERGY CONSERVATION (Cont.)

Lab & Region	New Laboratory Facility Planning							Energy Conservation Program		
	Estimated Net Space	Lab to Be Sep. Bldg.	Lab to Replace Present Lab.	Bldg. To Be An Addition	New Facility Will Contain Labs Not Under SPHL'S Supervision	Laboratories to Share New Facilities with SPHL	Alterations To Be Made	Energy Conser. Program Formed	Energy Conser. Practices Implemented	Energy Conser. Committee Established
New England										
Conn.	32,000	–	–	–	–	–	–	X	X	X
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	X	X	–
N.H.	–	–	–	–	–	–	–	X	X	–
R.I.	–	–	–	–	–	–	–	X	X	X
Vt.	–	–	–	–	–	–	–	–	–	–
Middle Atlantic										
N.J.	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	–	–	–	–	–	–	–	X	X	X
East North Central										
Ill.	45,000	X	X	–	X	I.E.P.A., Southern Illinois University Medical School.	–	X	–	–
Ind.	–	–	–	–	–	–	–	X	X	–
Mich.	10,400	–	X	X	–	–	X	X	X	–
Ohio	–	–	–	–	–	–	–	X	X	–
Wisc.	24,000	X	–	X	–	–	–	X	X	X
West North Central										
Ia.	8,300	–	–	X	–	–	–	X	X	X
Kans.	–	–	–	–	–	–	–	X	–	X
Minn.	–	–	–	–	–	–	–	–	X	–
Mo.	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	16,000	X	X	–	–	–	–	X	X	X
S.D	–	–	–	–	–	–	–	–	–	–
South Atlantic										
Del.	–	–	–	–	–	–	–	X	X	X
D.C.	–	–	–	–	–	–	–	X	X	–
Fla.	20,000	X	–	X	–	–	X	X	X	X
Ga.	–	–	–	–	–	–	–	X	X	–
Md.	–	–	–	–	–	–	–	X	X	X
N.C.	–	–	–	–	–	–	–	–	–	–
S.C.	–	–	–	–	–	–	–	X	X	X
Va.	–	–	–	–	–	–	–	–	–	–
W.Va.	2,000	X	–	X	–	–	–	–	X	–
East South Central										
Ala.	–	–	–	–	–	–	–	–	X	–
Ky.	–	–	–	–	–	–	–	–	–	–
Miss.	–	–	–	–	–	–	–	X	X	–
Tenn.	85,000	X	X	–	–	–	–	–	–	–
West South Central										
Ark.	–	–	–	–	–	–	–	–	–	–
La.	–	X	X	–	–	–	–	–	–	–
Okla.	–	–	–	–	–	–	–	X	X	–
Tex.	6,100	X	–	X	–	–	–	–	X	–
Mountain										
Anz.	–	–	–	–	–	–	–	X	X	–
Colo.	–	–	–	–	–	–	–	X	X	–
Ida.	–	–	–	–	–	–	–	X	X	–
Mont.	–	–	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	Unknown	–	–	X	X	Additional space will be provided for State Medical Investigator and Veterinary Diagnostic Services.	–	X	X	–
Utah	–	–	–	–	–	–	–	X	X	–
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific										
Alaska	15,000	X	–	–	–	–	–	–	–	–
Cal.	–	–	–	–	–	–	–	X	X	–
Hawaii	–	–	–	–	–	–	–	X	X	X
Ore.	–	–	–	–	–	–	–	X	X	X
Wash.	36,260	X	X	–	–	–	X	X	X	X
Territories										
Guam	–	–	–	X	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
A. Areas in which Laboratory Receives or Has ADP Capabilities

Lab & Region	1. Diagnostic Reporting									
	Diagnostic Bacteriology	Parasitology	Clinical Chemistry	Environmental Microbiology	Environmental Chemistry	Laboratory Improvement Program	Newborn Genetic Screening	Clinical Chemistry Calculations	Control of Instruments	Other
New England										
Conn.	–	–	–	–	–	–	X	–	–	GC MS
Mass.	–	–	–	–	–	–	–	–	–	–
Me.	–	–	–	X	–	–	–	–	X	GC MS
N.H.	–	–	–	–	–	–	–	–	–	–
R.I.	–	–	X	–	X	–	–	X	X	Serology
Vt.	–	–	–	–	–	–	–	–	–	–
Middle Atlantic										
N.J.	–	–	–	–	–	–	–	–	–	–
N.Y.	–	–	–	–	–	–	–	–	–	–
Pa.	X	X	X	X	–	X	X	X	X	–
East North Central										
Ill.	X	X	X	X	X	X	X	–	–	–
Ind.	–	–	–	–	X	X	–	–	X	–
Mich.	–	–	–	X	X	–	X	X	X	Hypothyroidism
Ohio	–	–	–	–	X	–	–	X	–	–
Wisc	–	–	X	X	X	X	X	X	X	Cytology mycobacteriology, prenatal screening, hepatitis, water chemistry, virology, sexually transmitted disease screening, organic chemistry
West North Central										
Ia.	–	–	–	X	X	–	X	–	X	–
Kans.	–	–	–	X	X	X	–	–	–	–
Minn.	–	–	–	–	–	X	–	–	–	–
Mo.	–	–	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–
N.D.	–	–	–	–	X	–	X	–	X	Virology
S.D.	–	–	–	–	–	–	–	–	–	–
South Atlantic										
Del.	–	–	–	–	–	–	–	–	–	–
D.C	–	–	–	–	–	–	–	–	–	–
Fla.	–	–	X	–			–	–		–
Ga	–	–	–	–		–	–	–		–
Md.	–	–	–	–	X	–	–	–		Hereditary disorders
N.C.	–	–	–	X	X	–	–	X	X	–
S.C	X	X	X	X	X	–	X	–	–	–
Va.	–	–	–	–	–	X	X	–	–	–
W.Va.	–	–	X	–	–	–	–	X	–	–
East South Central										
Ala.	–	–	–	–	–	–	X	–	–	–
Ky.	–	–	X	–	–	–	–	X	–	GC MS Computer for Toxicology
Miss.	–	–	X	X	X	–	–	X	–	–
Tenn.	–	–	–	–	–	X	–	–	–	–
West South Central										
Ark.	–	–	–	–	–	–	–	–	X	–
La.	–	–	–	–	–	–	X	–	X	Biologics reagents/media production and distribution
Okla.	–	–	–	–	X	–	X	–	–	–
Tex.	–	–	–	–	–	–	X	X	X	–
Mountain										
Anz.	–	–	–	–	–	–	–	–	–	–
Colo.	–	–	–	–	X	–	X	–	–	–
Ida.	–	–	–	–	–	–	–	–	–	–
Mont.	–	–	–	–	X	–	–	–	X	–
Nev.	–	–	–	–	–	–	–	–	–	–
N.M.	–	–	–	–	–	–	–	–	X	Cytopathology data entry, storage, retrieval
Utah	–	–	X	–	X	–	–	X	–	Forensic chemistry, pesticides, organic chemistry
Wyo.	–	–	–	–	–	–	–	–	–	–
Pacific										
Alaska	–	–	–	–	–	–	–	–	–	–
Cal.	X	X	X	–	–	X	X	–	X	–
Hawaii	–	–	–	–	–	–	–	–	–	–
Ore.	X	X	X	X	–	X	X	X	X	–
Wash.	X	X	–	X	X	–	X	–	–	–
Territories										
Guam	–	–	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
A. Areas in which Laboratory Receives or Has ADP Capabilities — Continued

Lab & Region	2. Laboratory Administration and Management							
	Workload Statistics	Management Information	Purchasing	Personnel Records	Supply Inventory	Expenditures	Billing for Tests (Fees)	Other
New England								
Conn.	–	–	–	–	–	–	–	–
Mass.	–	–	–	–	–	–	–	–
Me.	–	–	–	–	–	–	–	–
N.H.	–	–	–	–	–	–	–	–
R.I.	–	X	–	X	X	X	–	–
Vt.	–	–	–	–	–	–	–	–
Middle Atlantic								
N.J.	–	–	–	–	–	–	–	–
N.Y	–	–	–	–	–	–	–	–
Pa.	X	X	X	–	–	–	X	–
East North Central								
Ill.	–	X	–	X	–	X	–	Fiscal reports
Ind.	–	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–
Ohio	–	–	–	–	–	–	–	–
Wisc.	X	X	X	X	X	X	X	–
West North Central								
Ia.	X	X	X	X	–	X	X	–
Kans.	–	–	–	–	–	–	–	–
Minn.	–	–	–	–	–	–	–	–
Mo.	–	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	X	X	–	–	–	–	X	–
S.D.	–	–	–	X	–	–	–	–
South Atlantic								
Del.	–	–	–	–	–	–	–	–
D.C.	–	–	–	–	–	–	–	–
Fla	–	–	–	–	–	–	–	–
Ga.	–	–	–	–	–	–	–	–
Md.	–	–	X	X	–	–	–	–
N.C.	–	X	–	X	–	–	X	Budget tracking
S.C.	–	–	–	–	–	–	X	–
Va.	X	–	X	–	–	–	–	–
W Va.	–	–	X	X	–	–	–	–
East South Central								
Ala.	–	–	–	X	–	–	–	–
Ky.	–	–	–	–	–	–	–	–
Miss.	–	X	X	X	–	–	–	–
Tenn.	–	–	–	X	–	–	–	–
West South Central								
Ark.	–	–	–	–	–	–	–	Accounting/financial management information
La.	X	–	–	–	X	–	–	–
Okla.	X	X	X	X	–	–	X	Sample data processing
Tex.	X	X	X	X	X	X	–	–
Mountain								
Anz.	X	–	–	–	X	X	X	–
Colo.	–	–	–	–	–	–	X	–
Ida.	–	–	–	X	–	X	–	–
Mont.	–	X	–	–	–	X	X	Inventory of water suppliers sampling schedules
Nev.	–	–	–	–	–	–	–	–
N.M.	X	–	–	–	–	–	–	Training
Utah	–	–	–	–	–	–	–	–
Wyo.	X	–	–	–	–	–	–	–
Pacific								
Alaska	X	X	–	X	–	–	–	–
Cal.	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–
Ore.	X	X	X	X	X	–	–	Training
Wash.	X	–	–	–	–	–	X	Equipment preventive maintenance scheduling
Territories								
Guam	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
B. ADP Services Provided by State — Continued

Lab & Region	ADP Services Received From State Central Data Processing (CDP) Center	Expenditures For Governmental Provided CDP Services	Description of Services Received
New England			
Conn.	–	–	–
Mass.	–	–	–
Me.	–	–	–
N.H.	–	–	–
R.I.	–	–	–
Vt.	–	–	–
Middle Atlantic			
N.J.	–	–	–
N.Y.	–	–	–
Pa.	X	30,000	Lab is linked to the Health Department's mainframe. They provide us with hardware and software, as well as the support needed to maintain these items.
East North Central			
Ill.	X	30,000	–
Ind.	–	–	–
Mich.	–	–	Received service from Data Methods Section, financed by Water Supply Division, Environmental and Occupational Health Administration.
Ohio	–	–	–
Wisc.	–	–	–
West North Central			
Ia.	X	6,000	$1,500 monthly for services provided by University of Iowa Computer Center.
Kans.	–	4,306	Budget information; some data reduction and report preparation.
Minn.	–	–	–
Mo.	–	–	–
Nebr.	–	–	–
N.D.	–	–	–
S.D.	X	–	Fiscal
South Atlantic			
Del.	–	–	–
D.C.	–	–	–
Fla.	X	7,500	Clinical laboratory license personnel, record of licensed personnel.
Ga.	–	–	–
Md.	X	–	–
N.C.	–	–	–
S.C.	X	103,376	–
Va.	–	–	–
W.Va.	X	–	Computer printout sheets of appropriations and expenditures, salanes, etc.
East South Central			
Ala.	–	–	–
Ky.	–	–	–
Miss.	–	–	–
Tenn.	X	–	–
West South Central			
Ark.	–	–	–
La.	X	–	Word processing, data storage and retrieval
Okla.	X	–	–
Tex.	–	–	–
Mountain			
Ariz.	X	–	
Colo.	–	–	–
Ida.	X	–	–
Mont.	X	150	–
Nev.	–	–	–
N.M.	X	–	Financial data, central payroll
Utah	X	–	Personnel payroll, purchasing, budgeting
Wyo.	–	–	–
Pacific			
Alaska		5,000	–
Cal.	X	–	–
Hawaii	–	–	–
Ore.	X	25,661	Billing for tests, expenditures
Wash.	–	–	–
Territories			
Guam	–	–	–
P.R.	–	–	–
V.I.	–	–	–

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
C. ADP Services Received from Private Vendors

Lab & Region	ADP Services Received From Private Vendors	Expenditures For Private Vendor ADP Services	Description of Services Received
New England			
Conn.	—	—	—
Mass.	—	—	—
Me.	—	—	—
N.H.	—	—	—
R.I.	—	—	—
Vt.	—	—	—
Middle Atlantic			
N.J.	—	—	—
N.Y.	—	—	—
Pa.	—	—	—
East North Central			
Ill.	X	18,000	Lease of computer and hardware for data reduction. Generate exception reports to delineate unsatisfactory test results.
Ind.	X	3,900	"Call 370" terminal with telephone hook-up to a computer in Cleveland, Ohio. All calculations for chemistry annual and monthly reports, and the data produced from milk laboratory evaluation split samples are processed.
Mich.	—	—	—
Ohio	—	—	—
Wisc.	X	17,000	Buy time on the University's Univac 1100/82 for calculations and statistics
West North Central			
Ia.	—	—	—
Kans.	—	—	—
Minn.	—	—	—
Mo.	—	—	—
Nebr	—	—	—
N.D.	—	—	—
S.D.	—	—	—
South Atlantic			
Del	—	—	—
D.C.	—	—	—
Fla.	—	—	—
Ga.	—	—	—
Md.	—	—	—
N.C	—	—	—
S.C.	—	—	—
Va.	—	—	—
W.Va.	—	—	—
East South Central			
Ala.	—	—	—
Ky.	—	—	—
Miss.	—	—	—
Tenn.	—	—	—
West South Central			
Ark.	—	—	—
La.	X	—	Hardware and software for storage and retrieval of demographics and test results. Worklist generation, computation of positive hypothyroid results.
Okla.	X	—	Microfiche of data reports
Tex.	X	30,000	Purchase hardware (CPU, CRT, Printers) and software packages
Mountain			
Anz.	—	—	—
Colo.	—	—	—
Ida.	—	—	—
Mont	—	—	—
Nev.	—	—	—
N.M.	—	—	—
Utah	—	—	—
Wyo.	—	—	—
Pacific			
Alaska	—	—	—
Cal.	—	—	—
Hawaii	—	—	—
Ore.	X	—	—
Wash.	—	—	—
Territories			
Guam	—	—	—
P.R.	—	—	—
V.I.	—	—	—

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
D. Dedicated ADP Services — Continued

Lab & Region	Lab Has Dedicated ADP Services	Type of Hardware (Central Processing Unit)			
		Name of Unit	Mainframe	Minicomputer	Microcomputer
New England					
Conn.	—	—	—	—	—
Mass.	—	—	—	—	—
Me.	X	Hewlett Packard GC-Mass Spec.	—	X	—
N.H.	—	—	—	—	—
R.I.	X	Hewlett Packard 21 MX, Radio Shack Model 16, Data General	—	X	—
Vt.	—	—	—	—	—
Middle Atlantic					
N.J.	—	—	—	—	—
N.Y.	—	—	—	—	—
Pa.	X	Northstar Horizon	—	—	X
East North Central					
Ill.	X	Hewlett Packard	—	—	—
Ind.	X	Hewlett Packard 3353	—	X	—
Mich.	—	Honeywell Level VI and Hewlett Packard	X	X	X
Ohio	X	Interdata 732; TI 990/10, HP 3354, HP MX2, PE 10, PE PEPII, HP 9815	X	X	X
Wisc.	X	PDP-11160	—	X	—
West North Central					
Ia.	X	Datapoint 1500, Data General-Nova 3, Nuclear Data System, Spectra-Physics SP 4000, Data General-Nova 4	—	—	X
Kans.	X	PDP-11	—	—	X
Minn.	—	—	—	—	—
Mo.	—	—	—	—	—
Nebr.	—	—	—	—	—
N.D.	X	S-100, Bus-8085/8088 CPU 7 units	—	—	X
S.D.	—	—	—	—	—
South Atlantic					
Del.	—	—	—	—	—
D.C.	—	—	—	—	—
Fla.	—	—	—	—	—
Ga.	—	—	—	—	—
Md.	X	HP 9835 A (TRS 80)	—	—	X
N.C.	X	Wang VS-100	—	X	—
S.C.	—	—	—	—	—
Va.	—	—	—	—	—
W.Va.	—	—	—	—	—
East South Central					
Ala.	X	Neometrics CEM-II processors	—	—	X
Ky.	X	Wang Minicomputer 2200	—	X	—
Miss.	—	—	—	—	—
Tenn.	—	—	—	—	—
West South Central					
Ark.	X	PDP EG and G Ortec EEDSII, Finnigan 6110, Spectra Physics 4100	—	X	—
La.	X	North Star-Horizon	—	—	X
Okla.	X	Hewlitt Packard 9845B	—	X	X
Tex.	—	Hewlett Packard, North Star, Balcones	—	X	X
Mountain					
Ariz.	—	—	—	—	—
Colo.	X	Wang	—	X	—
Ida.	—	—	—	—	—
Mont.	—	Perkin-Elmer 3600	—	—	X
Nev.	—	—	—	—	—
N.M.	—	—	—	—	—
Utah	X	Commodore, Nuclear Data Radio Isotopic Analyzer, Finnigan GC/MS	—	X	X
Wyo.	—	—	—	—	—
Pacific					
Alaska	—	Lexitron 1303	—	X	—
Cal.	X	Prime 550	—	—	—
Hawaii	—	—	—	—	—
Ore.	X	Sperry Univac System 80, and Wang System 3	—	X	X
Wash.	X	Prime Computer, Inc. Model 350	—	X	—
Territories					
Guam	—	—	—	—	—
P.R.	—	—	—	—	—
V.I.	—	—	—	—	—

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
D. Dedicated ADP Services — Continued

Lab & Region	Core Size	Storage Medium			Primary Operating Language			
		Tape	Disk	Mass Storage	COBOL	FORTRAN	BASIC	Other
New England								
Conn.	—	—	—	—	—	—	—	—
Mass.	—	—	—	—	—	—	—	—
Me.	32,000	—	X	—	—	—	X	Assembly language
N.H.	—	—	—	—	—	—	—	—
R.I.	576,000	X	X	—	—	—	X	—
Vt.	—	—	—	—	—	—	—	—
Middle Atlantic								
N.J.	—	—	—	—	—	—	—	—
N.Y	—	—	—	—	—	—	—	—
Pa.	64,000	—	X	—	—	—	X	—
East North Central								
Ill.	64,000	X	X	—	—	—	X	—
Ind.	64,000	X	—	—	—	—	—	Natural
Mich.	600,000	X	X	X	—	—	X	—
Ohio	main: 280,000 micro: 164,000	—	X	—	—	X	X	HPLB
Wisc.	248,000	X	X	—	—	—	—	The main language of the unit's operating system
West North Central								
Ia.	152,000	X	X	—	—	X	—	Databus, Assembler Language
Kans.	—	—	X	—	—	X	—	—
Minn.	—	—	—	—	—	—	—	—
Mo.	—	—	—	—	—	—	—	—
Nebr	—	—	—	—	—	—	—	—
N.D.	64,000	X	X	—	—	—	—	PLI (CP/M) (MP/M)
S.D	—	—	—	—	—	—	—	—
South Atlantic								
Del.	—	—	—	—	—	—	—	—
D.C.	—	—	—	—	—	—	—	—
Fla.	—	—	—	—	—	—	—	—
Ga.	—	—	—	—	—	—	—	—
Md.	64,000	X	X	—	—	—	X	—
N.C.	512,000	X	X	—	X	X	—	—
S.C.	—	—	—	—	—	—	—	—
Va.	—	—	—	—	—	—	—	—
W.Va.	—	—	—	—	—	—	—	—
East South Central								
Ala.	64,000	—	X	—	—	—	X	—
Ky	16,000	—	X	—	—	—	X	—
Miss.	—	—	—	—	—	—	—	—
Tenn.	—	—	—	—	—	—	—	—
West South Central								
Ark.	72,000	—	X	—	—	—	X	ORACL, CLASS
La.	64,000	—	X	—	—	—	—	CPM
Okla.	186,000	X	X	—	—	—	X	—
Tex.	512,000	X	X	X	—	X	X	—
Mountain								
Ariz.	—	—	—	—	—	—	—	—
Colo.	10,000	—	X	—	—	X	—	—
Ida.	—	—	—	—	—	—	—	—
Mont.	64,000	—	X	—	—	—	X	—
Nev	—	—	—	—	—	—	—	—
N.M.	—	—	—	—	—	—	—	—
Utah	73,000	—	X	—	—	X	X	—
Wyo.	—	—	—	—	—	—	—	—
Pacific								
Alaska	—	—	X	—	—	—	X	Records Management System
Cal.	—	—	—	—	—	—	—	—
Hawaii	—	—	—	—	—	—	—	—
Ore.	512,000	X	X	—	X	X	X	—
Wash.	512,000	X	X	—	—	X	—	—
Territories								
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	—	—	—	—
V.I.	—	—	—	—	—	—	—	—

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
D. Dedicated ADP Services — Continued

Lab & Region	No. of Peripherals Supported By CPU	No. of Lab Personnel Required To Support Dedicated System	Lab Instrumentation Supported by CPU System
New England			
Conn.	—	—	—
Mass.	—	—	—
Me.	3	0.5	GC mass spectrophotometer
N.H.	—	—	—
R.I.	13	0.5	Gas chromatographs, atomic absorption, auto samplers
Vt.	—	—	—
Middle Atlantic			
N.J.	—	—	—
N.Y.	—	—	—
Pa.	4	0.25	—
East North Central			
Ill.	4	2.0	Tracor 1285 Gamma Counter
Ind.	4	1.0	Technicon II AutoAnalyzers
Mich.	4	—	Mass spectrophotometer, gas chromatography, automated chemical testing
Ohio	38	5.0	PE F40; PE F42; HP 5880A; PE CC; PE 3920; KA 150; PM AutoAanalyzer; GC/MS, three GC in Environmental Lab.
Wisc.	9	0.5	6 gas chromatographs, 2 liquid chromatographs, 1 Balance
West North Central			
Ia.	11	15.0	Tracor 222 and 560 gas chromatographs, Finnegan GC/MS, Gi Li detector
Kans.	—	—	Nuclear data 6600, Finnigan 4000, Perkin-Elmer 5000
Minn.	—	—	—
Mo.	—	—	—
Nebr.	—	—	—
N.D.	15	0.5	Atomic absorption, AutoAnalyzer, gamma spectroscopy
S.D.	—	—	—
South Atlantic			
Del.	—	—	—
D.C.	—	—	—
Fla.	—	—	—
Ga.	—	—	—
Md.	1	1.0	LKB Rackgamma gamma counters
N.C.	33	2.0	—
S.C.	—	—	—
Va.	—	—	—
W.Va.	—	—	—
East South Central			
Ala.	2	1.0	Micromedic 4/200 gamma counter
Ky.	3	—	Abbott ABA 100 Clinical Chemistry Analyzer
Miss.	—	—	—
Tenn.	—	—	—
West South Central			
Ark.	4	—	Gas chromatographs, mass spectrometer, Canberra gamma spectrometer, Tube Excited Fluorescence Analyzer III
La.	4	1.5	Gamma counter — Beckman 4000
Okla.	1	0.2	Packard gamma counter
Tex.	14	2.0	Technicon AutoAnalyzer, Gas chromatographs
Moutain			
Ariz.	—	—	—
Colo.	—	3.0	—
Ida.	—	—	—
Mont.	1	—	Inductively Coupled Plasma Emission Spectrophotometer
Nev.	—	—	—
N.M.	—	—	—
Utah	—	—	—
Wyo.	—	—	—
Pacific			
Alaska	—	1.0	—
Cal.	—	—	—
Hawaii	—	—	—
Ore.	21	4.0	Micromedic gamma counter, Gilford, Abbott Quantum II
Wash.	13	3.5	Beckman wide Beta counters, Canberra 4 gamma counter, Nuclear Data 180 gamma counter, Micromedic 4200 gamma counter, AutoLogic gamma counters
Territories			
Guam	—	—	—
P.R.	—	—	—
V.I.	—	—	—

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
E. Future Plans

Lab & Region	Anticipate Upgrading Present System	Description of Plans	Areas in Which LMCO Might Provide Assistance in Planning, Development or Upgrading of Computer Capabilities
New England			
Conn.	X	ADP System will be for billing, workload reporting and lab management.	—
Mass.	—	—	—
Me.	X	Installation of ADP for specimen tracking, reporting, billing,and associated management information.	Plans for a one week evaluation and recommendations.
N.H.	—	—	—
R.I.	X	Increase capacity of present computers.	Specimen tracking, laboratory reports, storage.
Vt.	—	—	—
Middle Atlantic			
N.J.	—	—	—
N.Y.	—	—	—
Pa.	X	Add more peripherals to use in word processing by clerical staff.	Need list of CDC data bases which could be accessed by the State Laboratory.
East North Central			
Ill.	X	—	—
Ind.	X	A system of microcomputers with central disk access and printers and/or upgrade the HP 3353 to the equivalent of a Multiuser system for data acquisition, storage, and processing for laboratory and agency reports.	CDC might be of assistance in obtaining detailed data as to what various governmental (Federal and State) agencies have and how they use computers.
Mich.	X	Update software	—
Ohio	X	Auto microfiche, auto reports, auto calibrate, auto standard/controls, inventory billing, personnel records retention, cost accounting.	"Stand alone" systems.
Wisc.	X	Replace our PDP-11/60 with vax-11/750	A standard laboratory information data base system, written in a common language (such as Fortran). Compile a document which would summarize the nature of DP activities at each of the State public health labs.
West North Central			
Ia.	X	Introduction of microcomputers in lab areas for purpose of logging in and tracking samples.	List of ADP services provided by CED, list of any available software suitable for laboratory environment.
Kans.	X	More microcomputers.	Software for records and reports, computer application, decisions on centralized versus distributed approach.
Minn.	—	—	—
Mo.	—	—	—
Nebr.	—	—	—
N.D.	X	Add specific ion, Ion chromatography, another Atomic Absorption instrument. Add ICP System. Add Neonatal screening for data base.	Expansion of data base for microbiology. Implement electronic mail between Public Health Laboratory and users for reports and queries.
S.D.	X	Plan to obtain a small microcomputer to process billings within the year.	Hope that the system under development will be completed soon.
South Atlantic			
Del.	—	—	—
D.C.	—	—	—
Fla.	—	—	—
Ga.	—	—	—
Md.	X	TRS-80 microcomputer — individual units to be placed in each division of laboratory. Later, these units will be tied together to a main computer. TRS-80 will then serve as a terminal for divisions.	Provide consultation as to system best suited to each division's operation for input-output requirements.
N.C.	X	Additional peripherals as funds for expansion of existing system become available.	Lab is currently working closely with Laboratory Management Consultation personnel.
S.C.	X	Will inprocess specimens with computer entry. Terminals to be placed in each section; technologists will enter results; computer will generate test result reports. Inventory and supply will be kept on computer.	Have used CDC manual in development of Lab's plan. Have had telephone conversations and on-site visits to Lab and to CDC.
Va.	—	—	—
W.Va.	—	—	—
East South Central			
Ala.	X	1 additional CPU, 2 CRT, 1 30mb hard disk.	Work-time units cost accounting system.
Ky.	X	Updating CPU to 32,000.	Development of software.
Miss.	—	—	—
Tenn.	—	Computerize the reporting of results, inventory control, and preventive maintenance records in the new facility.	Recommendations on the hard and software.

Table 5-5
LABORATORY AUTOMATIC DATA PROCESSING (ADP)
E. Future Plans — Continued

Lab & Region	Anticipate Upgrading Present System	Description of Plans	Areas in Which LMCO Might Provide Assistance in Planning, Development or Upgrading of Computer Capabilities
West South Central			
Ark.	—	—	Manipulating laboratory report data for program and lab use.
La.	X	Installation of a multiuser system with additional hard disc drives, CRT, and instrumentation.	Software for entering demographics, centrally tracking specimens in various lab areas, entering data, generating reports and correlating test results with demographics; software for storage and retneval of information.
Okla.	—	—	—
Tex.	X	Automation and streamlining of lab reports.	—
Mountain			
Ariz.	—	—	—
Colo.	X	Increase storage capacity to 80 megabyte disk.	—
Ida.	X	Purchase a microcomputer.	Advise regarding hardware, consultation
Mont.	—	—	Primary problem at this time is educating non-laboratory personnel in the need for laboratory-based ADP.
Nev.	—	—	—
N.M.	X	Financial management — daily transaction posting; cost allocation, output recording. Specimen data automation. Neonatal metabolic screening.	Cost allocation methodology.
Utah	X	Purchase of a Wang Word Processor.	Management applications, data reductions in inorganic chemistry.
Wyo.	—	—	—
Pacific			
Alaska	—	Positive Reporting System	All areas.
Cal.	—	—	—
Hawaii	—	—	—
Ore.	—	—	Provide package which emulate charts such as King Chart, for aid in micro-organism identification.
Wash.	X	Additional terminals. Increase hardware capacity.	Interested in any information regarding alternatives to keyboard data entry of patient history slip information and/or laboratory results.
Territories			
Guam	—	—	—
P.R.	—	—	—
V.I.	—	—	—

Table 5-6
CUTBACK MANAGEMENT

Lab & Region	Problems and Experiences in Cutback Management in the Past Year
Ala.	The Laboratory is presently in the process of drafting a bill to allow the implementation of a fee for service. Rather than employing a fee schedule for individual tests, a $6.00 handling or processing charge for all specimens submitted from the private sector has been requested.
Ariz.	Arizona state lab has continued a long standing policy of discontinuing the provision of services (microbiology and chemistry) to those individuals/agencies which represent private industry, where the service is available on state-wide basis. Resources are then realigned to provide analytical/diagnostic services to state, county and municipal disease and environmental control programs, as well as provide reference microbiology services to hospital and independent clinical laboratories.
Colo.	Fee for services instituted for several programs. Loss of 1 FTE from microbiology section with gain of 2 FTE in chemistry.
Conn.	Cutbacks in personnel continue at a rate of about 5% each year. Workload has begun to level off after several years of increase due to initiation of charges for tests. By July 1, 1983, all tests will be charged except toxicology.
Del.	Fiscal apportionments have been difficult but not unmanageable during July 1, 1981 through June 30, 1982. However, the current Fiscal Year may be different.
Fla.	The reduction in support personnel for building maintenance and other similar activities has resulted in professional scientific personnel having to absorb these functions.
Ida.	During the past two fiscal years, the staff has been reduced from 84 to 56 positions. This has resulted in the closure of two branch laboratories and the elimination of eleven testing programs. Most of these cutbacks are related to loss of federal funds (314-d, etc.) which were not replaced by the state legislature.
Ind.	For most of the year travel had to be cut back severely. The Bureau of Laboratories has been short 2 technical and 3 professional positions due to hiring freezes.
Ky.	Budget restrictions made it necessary for the Division of Laboratory Services to discontinue the following: routine VDRL testing for family planning and premarital exams; routine primary cultures for gonorrhea; all mycology services; sickle cell and other hemoglobinopathy testing.
Me.	At start of FY-82, 314-d federal monies were discontinued, resulting in loss of support for five lab personnel. These personnel were picked up under dedicated revenue (fee income) and eventually the state appropriated additional money for supplies in an amount approximately equal to that which was lost from 314-d.
Md.	As a result of a reduction in Federal funding of some laboratory programs, the Labs Administration has implemented several strategies to offset the decline in financial resources. These include restriction of cervical cancer testing to local health programs, forcing physicians in private practice to use commercial labs and initiation of a charge for laboratory supplies for special high-cost test reagents in the area of infectious diseases provided to hospitals and physicians in private practice. (Examples: hepatitis tests, AFP tests, viral serology.)
Minn.	The State Lab has been charging the University of Minnesota for TB examinations. The monies received helped cover one microbiologist position that was to be cut. Also, one microbiologist position was given up; but the Lab was able to place this person elsewhere in the Department of Health. A Senior Chemist retired this year and the monies for his position were used to prevent layoffs of other personnel in the laboratory.
Mo.	The loss of federal revenues and declining state funds resulted in serious cash flow problems. Partly as a consequence, a legislative mandate to implement laboratory fees resulted. Routine laboratory services were curtailed, specifically throat cultures for streptococcus and rubella screening. Alternate purchase practices were implemented to help offset the cash flow problems. These consisted by changing contract schedules or in some instances eliminating some contracts and making purchases on a single purchase basis.
Mont.	The Montana State public health laboratories experienced a 40% cut in personnel on July 1, 1981, coupled with a directive to maintain the current level of service as far as possible. The operating budget was not cut. By changing some labor intensive procedures, tightening up purchasing procedures to allow for procurement of time-saving consumables, and reassigning remaining personnel in operating units, all service areas were maintained with some at a reduced level. Routine microbiological screening of food was eliminated in FY '81 in preparation for the cuts. Artificially low charges for water analysis were raised to actual cost, minimizing the demand from private individuals for analysis. For 10 months the laboratory did not accept samples for private chemical analysis which due to the low cost had been very high in numbers. Generally much less personnel time is available for consultation and training for local laboratory personnel.

Table 5-6
CUTBACK MANAGEMENT — Continued

Lab & Region	Problems and Experiences in Cutback Management in the Past Year
N.H.	Eight staff members were laid off (6 professionals, 1 clerical, 1 support). Laboratories on two floors were consolidated on one floor to save on rent and indirect costs. Streptococcus and childhood lead programs were discontinued; stipulations were put on types of specimens which would be accepted in other categories.
N.D.	North Dakota's budget was cut back 5% in line with Governor's austerity program — labs are expected to function in the coming biennium (83-85) at 90% of (81-83) current budget exclusive of enhancements. Enhancements in the amount of $110,000 has been requested to increase viral capabilities.
Pa.	Fifteen positions were given up to offset a budget which did not keep pace with inflation, pay raises, and increased fringe benefits costs.
R.I.	The lab has not been forced into an actual cutback management situation. Although the budget is tight, they have been able to maintain their programs at essentially the same levels as the previous fiscal year with only minor adjustments.
S.C.	The South Carolina State Public Health Laboratory has experienced a small drop in workload, particularly from Federally-funded programs, but has been able to compensate with the following: coordinating and contracting with other state agencies for laboratory work to increase volume in areas of expertise and eliminate low-volume cost-inefficient areas; reducing duplication of equipment and personnel among the agencies; increased emphasis on billing; Medicare-Medicaid for eligible recipients; reducing personnel through attrition and cross-training of remaining personnel and combining smaller units; reducing travel expenditures.
Tex.	Reduction/Maintenance of workload dependent on available funds. FY 1984-85 Budget pending in legislative session at this time.
Wash.	Reduction in Federal EPA Funds necessitated cutback of four professional and technical positions.
W. Va.	State emergency arose in third quarter resulting in losses of remaining equipment money and some losses in current expenses; also a freeze on hiring new personnel and in granting deserved merit increases.

Table 5-7
LABORATORY SAFETY

Lab & Region	Lab Has Safety Committee-No of Members	Lab Has Safety Officer	Lab Has Safety Manual	Lab Records Lab Accidents	No. of Accidents By Category in FY 1982						Other
					Fire	Electric Shock	Cuts, Needle Pricks	Chemical	Infections	Radiological	
New England											
Conn.	8	X	X	X	–	–	39	1	–	–	Reaction to typhoid shot
Mass.	–	–	–	–	–	–	–	–	–	–	–
Me.	–	X	X	X	1	–	–	–	–	–	–
N.H.	–	–	X	X	–	–	–	–	–	–	–
R.I.	8	X	X	X	1	–	3	–	–	–	–
Vt.	–	–	X	–	–	–	1	–	–	–	–
Middle Atlantic											
N.J.	11	X	X	X	–	2	18	–	2	–	Slips and falls, lifting, bumps and bruises, aerosol exposure, animal bite, object in eye
N.Y.	–	–	–	–	–	–	–	–	–	–	–
Pa.	3	X	–	X	–	–	2	–	–	–	Hit back of left hand against corner of a cart.
East North Central											
Ill.	5	X	X	X	–	–	2	1	–	–	Fall
Ind.	10	X	X	X	–	–	3	–	–	–	Specimen splash in eye, bruised hip from falling against a barrel
Mich.	10	–	X	X	–	–	64	2	2	–	Burns, chest pain, insect bites, splash of rabies virus in face, chest strains, contusions, neck strain, sprains, back strain, skin rash, fracture
Ohio	10	X	X	X	2	–	9	2	1	–	Back sprain
Wisc.	6	–	X	X	–	–	4	–	–	–	Burn, back and neck injury from lifting, falls
West North Central											
Ia.	6	X	X	X	–	–	5	2	3	–	Fingers caught in vehicle doors, falls, air contaminated by rabies tissue
Kans.	8	X	X	X	–	–	–	–	–	–	
Minn.	6	X	X	X	1	–	5	–	1	–	Burns
Mo.	7	X	X	X	–	–	–	–	2	–	–
Nebr.	–	–	–	–	–	–	–	–	–	–	–
N.D.	5	X	–	X	–	–	2	–	–	–	Torn tendon from pull-starting lawn mower
S.D.	6	X	X	X	–	–	8	–	–	–	–
South Atlantic											
Del.	4	X	X	X	–	–	3	–	–	–	Burn, sprained finger
D.C.	X	X	X	X	–	–	2	–	1	–	–
Fla.	5	X	X	X	1	–	5	–	–	–	–
Ga.	4	X	X	X	–	–	2	1	1	–	–
Md.	–	X	X	X	1	–	11	1	1	1	Scalding, eye splashing, pencil puncture
N.C	8	X	X	X	–	–	21	1	4	1	Falls, lifting strains
S.C.	–	X	X	X	–	–	5	1	–	–	–
Va.	9	X	X	X	–	–	X	X	–	–	–
W.Va.	5	X	X	X	–	–	2	–	–	–	–
East South Central											
Ala.	6	X	X	X	1	–	17	3	5	–	–
Ky.	9	–	X	X	–	–	2	–	–	–	3 people slipped on ice outside of building, one burned eyes with ultraviolet light
Miss.	–	X	X	X	–	–	–	–	–	–	–
Tenn	4	–	X	X	–	–	1	–	–	–	Acid splash in eye
West South Central											
Ark.	11	X	–	X	–	–	–	–	–	–	–
La.	6	X	X	X	–	–	4	–	–	–	Steam burn
Okla.	6	X	–	–	–	–	–	–	–	–	Smashed fingers
Tex.	12	X	–	X	–	–	17	–	–	–	–
Mountain											
Anz.	8	X	X	X	–	–	7	–	–	–	X
Colo.	8	X	X	X	1	–	2	1	–	–	–
Ida.	10	X	X	X	–	2	3	–	–	–	Hit from a falling object
Mont.	–	–	–	X	–	–	–	–	1	–	–
Nev.	–	–	–	–	–	–	–	–	–	–	–
N.M.	5	X	X	X	–	–	3	–	–	–	Burns, splinter, bumps, splashes with potentially infectious agent
Utah	5	X	X	X	–	–	8	4	–	–	Toothchip, fall on ice, finger smashed in door, mousebite, micro-organism culture splash on clothing.
Wyo.	–	–	–	X	–	–	–	–	–	–	–
Pacific											
Alaska	6	X	X	X	–	–	3	–	–	–	–
Cal.	12	–	X	X	–	–	6	1	–	–	Thermal burns, bruises, back injury, strains
Hawaii	7	X	X	X	–	–	4	1	–	–	–
Ore.	–	X	X	X	–	–	6	1	–	–	Slip/fall on wet floor, animal bite, sprained wrist, burn, eye strain
Wash.	5	X	X	X	–	–	2	–	–	–	–
Territories											
Guam	–	–	X	X	1	–	1	–	–	–	Burn by water distiller, slipped and twisted ankle
P.R.	–	–	–	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–	–	–	–

Table 5-7
LABORATORY SAFETY — Continued

Lab & Region	Lab Has One-Pass Air System in High Hazard Areas	Lab Uses Radioactive Material (Other than RIA or Bactec Systems)	Radionuclides Used By Lab	Lab Has Radiation Safety Program
New England				
Conn.	X	X	^{131}I, ^{137}Cs, ^{60}Co, ^{22}Na, ^{133}Ba, ^{109}Cd, ^{54}Mn, ^{103}Ru, ^{65}Zn	–
Mass.	–	–	–	–
Me.	X	–	–	–
N.H.	X	–	–	–
R.I.	X	–	–	X
Vt.	X	–	–	–
Middle Atlantic				
N.J.	X	X	^{63}Ni and tritium detectors in gas chromatographs	X
N.Y.	–	–	–	–
Pa.	X	–	–	X
East North Central				
Ill.	X	–	–	–
Ind.	X	X	^{63} Ni and tritium	X
Mich.	X	–	–	X
Ohio	X	–	^{90}Sr, ^{134}Cs, ^{137}Cs, ^{226}Ra, tritium, ^{210}Po, ^{60}Co, ^{133}Ba, ^{308}U, ^{241}Am, ^{210}Pb, ^{228}Ra, ^{131}I	X
Wisc.	X	X	Standardized methods	X
West North Central				
Ia.	X	X	^{63}Ni and tritium in gas chromatograph detectors	X
Kans.	–	X	–	X
Minn.	X	–	–	X
Mo.	X	–	–	X
Nebr.	–	–	–	–
N.D.	X	X	^{226}Ra, ^{137}Cs, ^{131}I, ^{60}Co, tritium, ^{63}Ni, ^{241}Am, ^{90}Sr, ^{90}Y, ^{14}C	X
S.D.	–	–	–	X
South Atlantic				
Del.	–	X	^{238}U and ^{137}Cs	X
D.C.	X	–	–	–
Fla.	–	–	–	–
Ga.	–	–	–	X
Md.	X	X	^{90}Sr, ^{89}Sr, ^{85}Sr, tritium, $^{90}Sr/^{90}Y$, ^{88}Y, ^{65}Zn, ^{110m}Ag, ^{60}Co, ^{134}Cs, ^{137}Cs, ^{144}Ce, ^{241}Am, ^{131}I	X
N.C.	X	X	^{51}Cr, ^{60}Co, ^{65}Zn, $^{89}Sr/^{90}Sr$, $Zr/^{95}Nb$, ^{131}I, ^{134}Cs, ^{137}Cs, ^{140}Ba, ^{144}Ce, $^{226}Ra/^{228}Ra$, ^{232}Th, ^{238}U, ^{239}Pu, ^{241}Am, ^{210}Po, ^{63}Ni	X
S.C.	X	–	–	X
Va.	X	X	Standardized methods	X
W.Va.	X	–	–	X
East South Central				
Ala.	X	–	–	X
Ky.	X	–	–	–
Miss.	X	–	–	–
Tenn.	–	–	–	X
West South Central				
Ark.	X	X	Isotopes with atomic numbers 1-95 inclusive	X
La.	X	X	Alpha, beta, and gamma emitters	X
Okla.	X	–	–	X
Tex.	X	X	Standards used for calibration	–
Moutain				
Anz.	X	X	^{63}Ni (sealed source)	X
Colo.	X	–	–	X
Ida.	X	–	–	–
Mont.	–	–	–	–
Nev.	–	–	–	–
N.M.	X	X	Approximately 50 different standards for radiological analyses of water and soil	–
Utah	X	X	^{110}Ag, ^{241}Am, ^{133}Ba, ^{140}Ba, ^{7}Be, ^{207}Bi, $^{14}C^{14}$, ^{144}Ce, ^{134}Cs, ^{137}Cs, ^{57}Co, ^{60}Co, ^{51}Cr, ^{125}I, ^{129}I, ^{131}I, ^{40}K, ^{22}Na, ^{63}Ni, ^{234}Pu, ^{226}Ra, ^{228}Ra, ^{106}Ry, ^{146}Sc, ^{85}Sr, ^{89}Sr, ^{90}Sr, ^{228}Th, ^{232}Th, ^{204}Tl, tritium	X
Wyo.	X	–	–	–
Pacific				
Alaska	–	–	–	X
Cal.	X	X	^{14}C, ^{35}S, ^{51}Cr, ^{125}I, and small quantities of calibration standards	X
Hawaii	X	X	^{63}Ni for gas chromatograph detector	X
Ore.	X	–	–	X
Wash.	X	–	Isotopes with atomic numbers 1-100	X
Territories				
Guam	X	–	–	–
P.R.	–	–	–	–
V.I.	–	–	–	–

Table 5-8
TOXOPLASMOSIS

Lab & Region	Lab Performs IGM Test For Toxoplasma	Type of Test Used		Source of Reagents				No. of Specimens Tested For Toxoplasma During Year
		IFA	ELISA	Kit	Antigen	Conjugate	Control Sera	
New England								
Conn.	X	X	–	–	X	X	X	355
Mass.	–	–	–	–	–	–	–	–
Me.	X	–	–	–	–	–	–	–
N.H.	–	–	–	–	–	–	–	–
R.I.	–	–	–	X	X	X	X	–
Vt.	X	–	–	–	–	–	–	–
Middle Atlantic								
N.J.	X	X	–	X	–	–	X	15
N.Y.	–	–	–	–	–	–	–	–
Pa.	X	–	–	–	–	–	–	–
East North Central								
Ill.	–	–	–	–	–	–	–	–
Ind.	X	–	–	–	–	–	–	–
Mich.	–	–	–	–	–	–	–	–
Ohio	X	–	–	–	–	–	–	–
Wisc.	X	X	–	–	–	X	X	16,481
West North Central								
Ia.	X	X	–	X	X	X	X	6
Kans.	–	–	–	–	–	–	–	–
Minn.	X	X	–	–	X	X	–	–
Mo.	X	–	–	–	–	–	–	–
Nebr.	–	–	–	–	–	–	–	–
N.D.	X	X	–	–	X	X	X	123
S.D.	X	X	–	–	–	–	–	150
South Atlantic								
Del.	X	X	–	X	X	X	X	30
D.C.	–	–	–	–	–	–	–	–
Fla.	–	–	–	–	–	–	–	–
Ga.	X	X	–	–	X	X	X	311
Md.	X	X	–	X	X	X	X	753
N.C.	–	–	–	–	–	–	–	–
S.C.	X	X	–	X	–	–	–	34
Va.	–	–	–	–	–	–	–	–
W. Va.	–	–	–	–	–	–	–	–
East South Central								
Ala.	–	–	–	–	–	–	–	–
Ky.	X	X	–	–	X	X	X	1,558
Miss.	–	–	–	–	–	–	–	–
Tenn.	–	–	–	–	–	–	–	–
West South Central								
Ark.	–	–	–	–	–	–	–	–
La.	X	X	–	–	X	–	–	124
Okla.	–	–	–	–	–	–	–	–
Tex.	X	X	–	–	X	X	X	36
Mountain								
Anz.	–	–	–	–	–	–	–	–
Colo.	–	–	–	–	–	–	–	–
Ida.	–	–	–	–	–	–	–	–
Mont.	–	–	–	–	–	–	–	–
Nev.	–	–	–	–	–	–	–	–
N.M.	X	X	–	X	X	X	X	12
Utah	X	X	–	–	X	X	X	5-10
Wyo.	–	–	–	–	–	–	–	–
Pacific								
Alaska	X	–	X	X	–	–	–	< 500
Cal.	–	–	–	–	–	–	–	–
Hawaii	–	–	–	–	–	–	–	–
Ore.	X	X	–	–	X	X	X	1,111
Wash.	–	–	–	–	–	–	–	–
Territories								
Guam	–	–	–	–	–	–	–	–
P.R.	–	–	–	–	–	–	–	–
V.I.	–	–	–	–	–	–	–	–