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**CONSOLIDATED ANNUAL REPORT**  
**on**  
**State and Territorial**  
**Public Health Laboratories**  
**Fiscal Year 1979**

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



**CONSOLIDATED ANNUAL REPORT**  
**on**  
**State and Territorial**  
**Public Health Laboratories**  
**Fiscal Year 1979**

**April 1980**

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

ASSOCIATION OF STATE AND TERRITORIAL  
PUBLIC HEALTH LABORATORY DIRECTORS

1979 – 1980

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# Preface

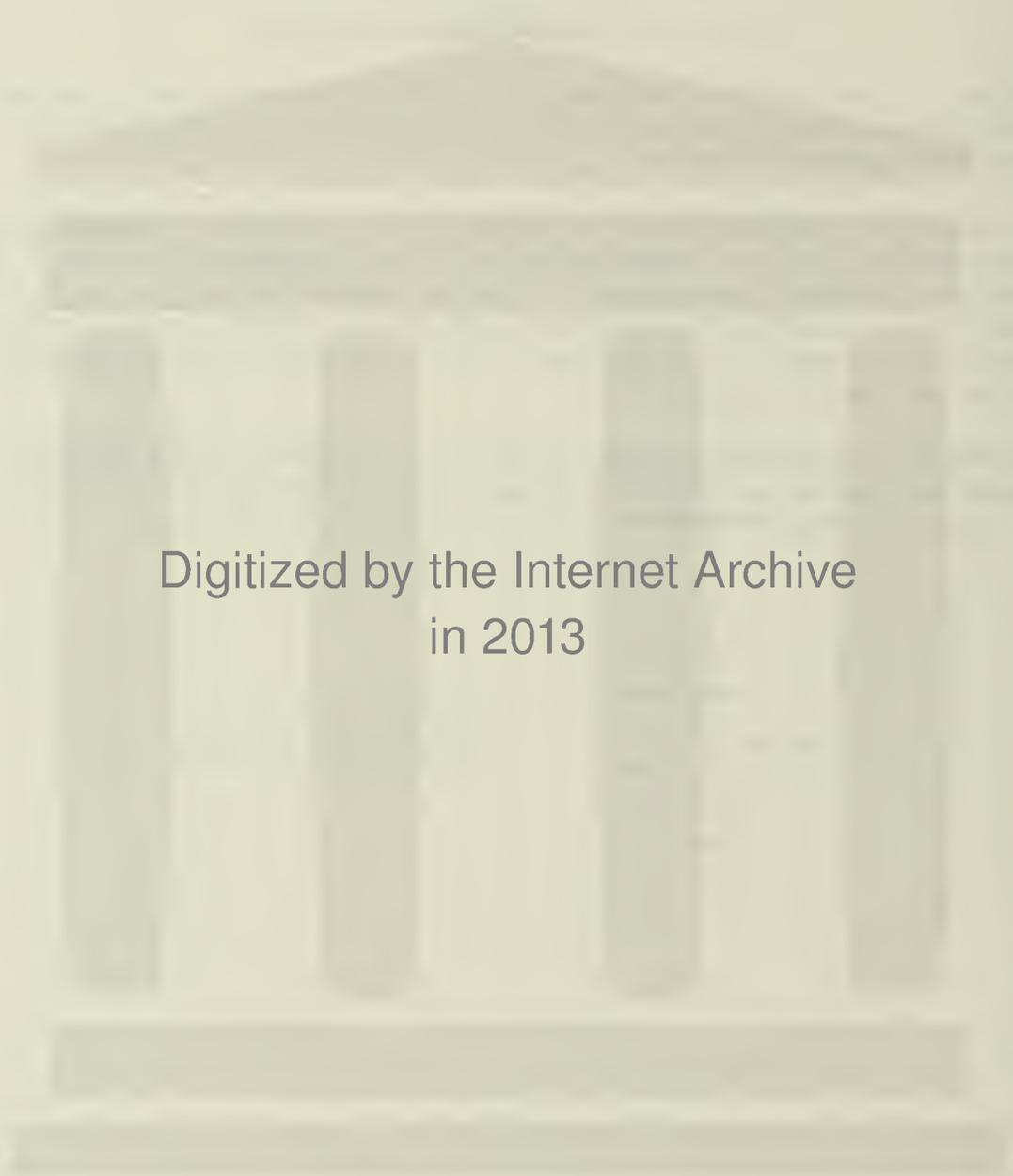
## To Readers of the Consolidated Annual Report

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.

J. Mehseu Joseph, Ph.D.  
Chairman, CAR Committee



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## INTRODUCTION

This, the sixteenth 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 Center for Disease Control, Bureau of Laboratories.

Fifty-two of the fifty-four member laboratories provided data for this edition. Alaska and New York did not report to the CAR for fiscal year 1979. Therefore, national totals found in this edition represent only fifty-two 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 1978 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 concerning current organizational structure and premarital examination laws.

## 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 1978 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 1-2 through 1-5 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, Bureau of Laboratories. Because it is compiled by CDC personnel all comments, suggestions, and correspondence on its contents should be forwarded to:

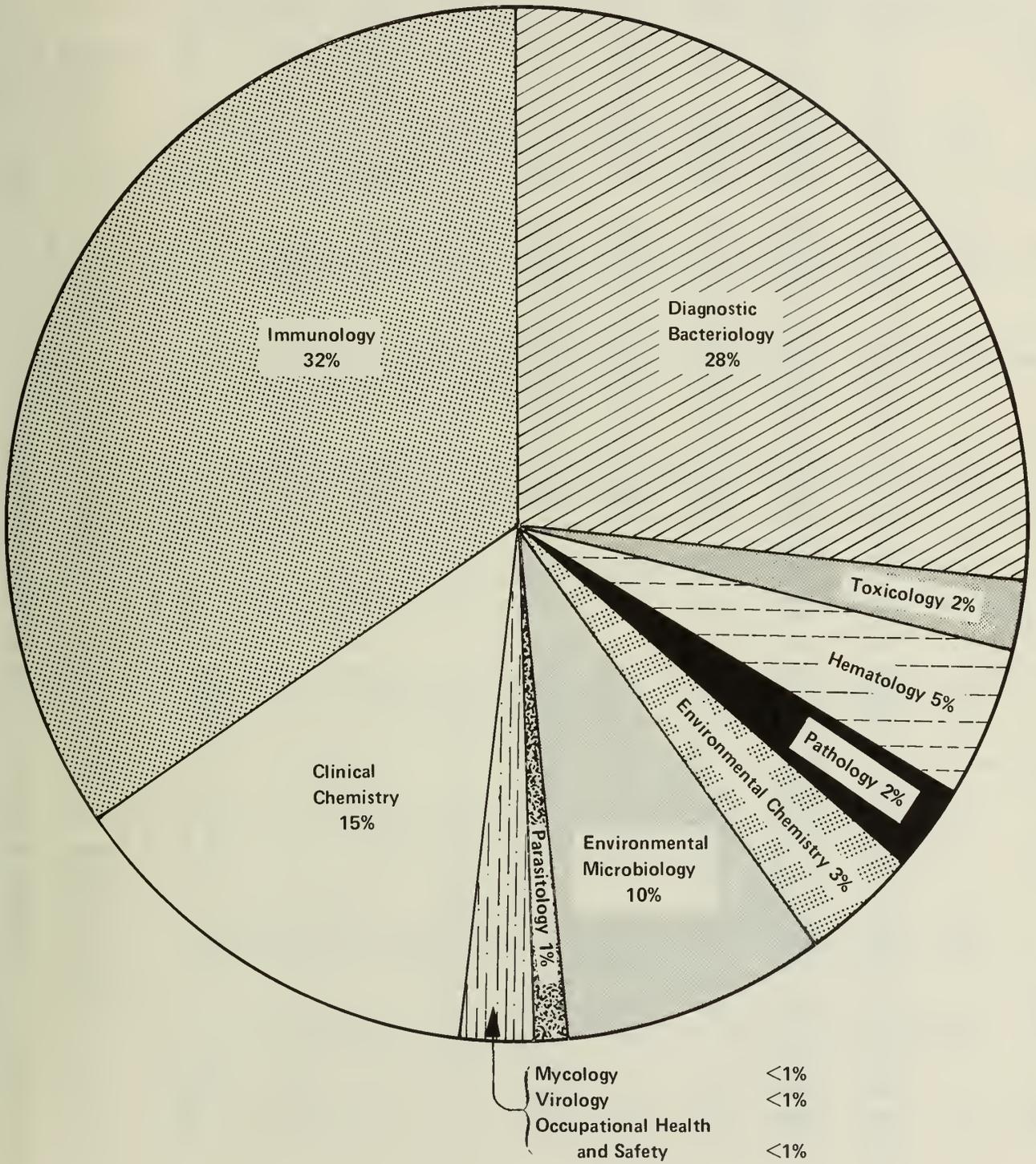
Center for Disease Control  
Attn: CAR Editor  
Laboratory Management  
Consultation Office, BL  
Chamblee 29-9  
Atlanta, Georgia 30333

**SECTION I  
SUMMARY TABLES**



Table 1-1

SPECIMENS/SAMPLES RECEIVED BY THE STATE AND TERRITORIAL PUBLIC HEALTH LABORATORIES



**Table 1-2  
SUMMARY OF LABORATORY EXPENDITURES, POSITIONS, AND SPECIMENS**

Lab. & Region	Population X 1000	Expenditures		Laboratory Personnel						Specimens	
		Total Laboratory	Expenditure Per Capita	Budgeted Positions			Budgeted Prof. & Tech. Positions			Total Lab. Specimens	Specimens Per Capita
				Budgeted Positions	Positions To Population	Expenditure Per Position	Budgeted Positions	Positions To Population	Expenditure Per Position		
<b>Total</b> .....	<b>196,167</b>	<b>115,634,338</b>	<b>0.590</b>	<b>5,674.7</b>	<b>1:34,569</b>	<b>20,377</b>	<b>3,505.3</b>	<b>1:55,963</b>	<b>32,988</b>	<b>26,847,473</b>	<b>0.137</b>
Average .....	3,923	2,312,687	—	113.5	—	—	70.1	—	—	516,298	—
<b>New England</b> .....	<b>12,244</b>	<b>12,191,173</b>	<b>0.996</b>	<b>671.5</b>	<b>1:18,234</b>	<b>18,155</b>	<b>423.5</b>	<b>1:28,911</b>	<b>28,787</b>	<b>2,169,657</b>	<b>0.177</b>
Conn. ....	3,108	3,824,259	1.231	228.0	1:13,632	16,773	163.0	1:19,067	23,462	584,894	0.188
Mass. ....	5,782	4,069,498	0.704	235.0	1:24,604	17,317	120.0	1:48,183	33,912	690,165	0.119
Me. ....	1,085	1,139,386	1.050	50.0	1:21,700	22,788	34.0	1:31,912	33,511	133,436	0.123
N.H. ....	849	365,979	0.431	22.0	1:38,591	16,635	14.0	1:60,643	26,141	199,666	0.235
R.I. ....	935	2,307,674	2.468	109.0	1:8,578	21,171	74.0	1:12,635	31,185	389,809	0.417
Vt. ....	485	484,377	0.999	27.5	1:17,636	17,614	18.5	1:26,216	26,183	125,613	0.259
<b>Middle Atlantic</b> .....	<b>19,114</b>	<b>7,299,067</b>	<b>0.382</b>	<b>332.0</b>	<b>1:57,572</b>	<b>21,985</b>	<b>211.0</b>	<b>1:90,588</b>	<b>34,593</b>	<b>831,452</b>	<b>0.044</b>
N.J. ....	7,329	4,672,067	0.638	227.0	1:32,286	20,582	153.0	1:47,902	30,536	628,247	0.086
N.Y. ....	—	—	—	—	—	—	—	—	—	—	—
Pa. ....	11,785	2,625,000	0.223	105.0	1:112,238	25,000	58.0	1:203,190	45,259	125,613	0.011
<b>East North Central</b> .....	<b>41,056</b>	<b>22,456,804</b>	<b>0.547</b>	<b>1,035.3</b>	<b>1:39,656</b>	<b>21,691</b>	<b>594.5</b>	<b>1:69,060</b>	<b>37,774</b>	<b>3,049,336</b>	<b>0.074</b>
Ill. ....	11,245	2,965,835	0.264	172.0	1:65,378	17,243	102.0	1:110,245	29,077	426,662	0.038
Ind. ....	5,330	2,122,173	0.398	83.0	1:64,217	25,568	64.0	1:83,281	33,159	166,217	0.031
Mich. ....	9,129	9,927,490	1.088	416.3	1:21,929	23,847	224.0	1:40,754	44,319	1,035,509	0.113
Ohio ....	10,701	4,047,772	0.378	188.5	1:56,769	21,474	117.0	1:91,462	34,596	882,138	0.082
Wisc. ....	4,651	3,393,534	0.730	175.5	1:26,501	19,336	87.5	1:53,154	38,783	538,720	0.116
<b>West North Central</b> .....	<b>16,884</b>	<b>9,471,904</b>	<b>0.561</b>	<b>440.2</b>	<b>1:38,355</b>	<b>21,517</b>	<b>273.7</b>	<b>1:61,688</b>	<b>34,607</b>	<b>2,209,688</b>	<b>0.131</b>
Ia. ....	2,879	2,943,618	1.022	117.0	1:24,607	25,159	74.0	1:228,162	39,779	531,350	0.185
Kans. ....	2,326	1,561,380	0.671	82.0	1:28,366	19,041	50.0	1:46,520	31,228	304,394	0.131
Minn. ....	3,975	1,724,345	0.434	88.5	1:44,915	19,484	47.0	1:84,574	42,005	420,005	0.106
Mo. ....	4,801	1,571,083	0.327	60.0	1:80,017	26,185	42.0	1:114,310	37,407	548,509	0.114
Nebr. ....	1,561	533,622	0.342	28.0	1:55,750	19,058	20.0	1:78,050	26,681	135,683	0.087
N.D. ....	653	609,162	0.933	34.0	1:19,206	17,917	20.0	1:32,650	30,458	167,614	0.257
S.D. ....	689	528,694	0.767	25.0	1:27,560	21,148	15.0	1:45,933	35,246	102,093	0.148
<b>South Atlantic</b> .....	<b>29,171</b>	<b>18,612,465</b>	<b>0.638</b>	<b>1,078.2</b>	<b>1:27,055</b>	<b>17,263</b>	<b>704.4</b>	<b>1:41,413</b>	<b>26,423</b>	<b>7,458,944</b>	<b>0.256</b>
Del. ....	582	549,696	0.945	32.1	1:18,131	17,124	22.1	1:26,335	24,873	150,493	0.259
D.C. ....	690	1,044,700	1.514	55.0	1:12,545	18,995	45.0	1:15,333	23,216	365,058	0.529
Fla. ....	8,452	4,569,125	0.541	258.0	1:32,760	17,710	168.0	1:50,310	27,197	2,127,860	0.252
Ga. ....	5,048	2,705,192	0.536	137.0	1:36,847	19,746	71.0	1:71,099	38,101	968,229	0.192
Md. ....	4,139	4,384,323	1.059	269.0	1:15,387	16,299	188.0	1:22,016	23,321	1,363,304	0.329
N.C. ....	5,525	2,739,532	0.496	151.0	1:36,589	18,143	96.0	1:57,552	28,537	785,214	0.142
S.C. ....	2,876	1,825,112	0.635	119.1	1:24,148	15,324	84.3	1:34,116	21,650	768,930	0.267
Va. ....	5,135	—	—	—	—	—	—	—	—	655,946	0.128
W. Va. ....	1,859	794,785	0.428	57.0	1:32,614	13,944	30.0	1:61,967	26,493	313,910	0.169
<b>East South Central</b> .....	<b>13,836</b>	<b>8,693,634</b>	<b>0.628</b>	<b>486.5</b>	<b>1:28,440</b>	<b>17,870</b>	<b>289.0</b>	<b>1:47,875</b>	<b>30,082</b>	<b>3,430,027</b>	<b>0.248</b>
Ala. ....	3,690	3,456,353	0.937	188.0	1:19,628	18,385	121.0	1:30,496	28,565	1,382,189	0.375
Ky. ....	3,458	2,066,731	0.598	88.5	1:39,073	23,353	58.0	1:59,621	35,633	308,819	0.089
Miss. ....	2,389	902,897	0.378	52.0	1:45,942	17,363	33.0	1:72,394	27,361	871,091	0.365
Tenn. ....	4,299	2,267,653	0.528	158.0	1:27,209	14,352	77.0	1:55,831	29,450	867,628	0.202
<b>West South Central</b> .....	<b>21,706</b>	<b>9,252,973</b>	<b>0.426</b>	<b>447.0</b>	<b>1:48,559</b>	<b>20,700</b>	<b>271.0</b>	<b>1:80,096</b>	<b>34,144</b>	<b>4,514,164</b>	<b>0.208</b>
Ark. ....	2,144	1,085,231	0.506	61.0	1:35,148	17,791	38.0	1:56,421	28,559	431,412	0.201
La. ....	3,921	2,273,135	0.580	134.0	1:29,261	16,964	58.0	1:67,603	39,192	610,485	0.156
Okla. ....	2,811	964,107	0.343	52.0	1:54,058	18,541	37.0	1:75,973	26,057	415,374	0.148
Tex. ....	12,830	4,930,500	0.384	200.0	1:64,150	24,653	138.0	1:92,971	35,728	3,056,893	0.238
<b>Mountain</b> .....	<b>10,030</b>	<b>9,306,448</b>	<b>0.928</b>	<b>432.8</b>	<b>1:23,175</b>	<b>21,503</b>	<b>266.5</b>	<b>1:37,636</b>	<b>34,921</b>	<b>1,786,474</b>	<b>0.178</b>
Ariz. ....	2,296	1,499,592	0.653	65.0	1:35,323	23,071	42.0	1:54,667	35,705	131,147	0.057
Colo. ....	2,619	1,537,209	0.587	78.0	1:33,577	19,708	50.0	1:52,380	30,744	516,598	0.197
Ida. ....	857	1,351,495	1.577	67.0	1:12,791	20,172	41.0	1:20,902	32,963	225,749	0.263
Mont. ....	761	514,230	0.676	28.5	1:26,702	18,043	20.0	1:38,050	25,712	96,113	0.126
Nev. ....	633	828,403	1.309	32.0	1:19,781	25,888	15.0	1:42,200	55,227	105,534	0.167
N.M. ....	1,190	1,684,177	1.415	77.5	1:15,355	21,731	43.5	1:27,356	38,717	273,959	0.230
Utah ....	1,268	1,619,369	1.277	70.0	1:18,114	23,134	45.0	1:28,178	35,986	208,228	0.164
Wyo. ....	406	271,973	0.670	14.8	1:27,432	18,377	10.0	1:40,600	27,197	229,138	0.564
<b>Pacific</b> .....	<b>28,825</b>	<b>17,253,870</b>	<b>0.599</b>	<b>601.2</b>	<b>1:47,946</b>	<b>28,699</b>	<b>372.7</b>	<b>1:77,341</b>	<b>46,294</b>	<b>1,052,149</b>	<b>0.037</b>
Alaska .....	—	—	—	—	—	—	—	—	—	—	—
Cal. ....	21,896	12,884,665	0.588	405.6	1:53,984	31,767	259.4	1:84,410	49,671	124,487	0.006
Hawaii ....	895	987,941	1.104	54.5	1:16,422	18,127	37.5	1:23,867	26,345	295,760	0.331
Ore. ....	2,376	1,531,804	0.645	62.1	1:38,261	24,667	40.8	1:58,235	37,544	452,621	0.191
Wash. ....	3,658	1,849,460	0.506	79.0	1:46,304	23,411	35.0	1:104,514	52,842	179,281	0.049
<b>Territories</b> .....	<b>3,301</b>	<b>1,096,000</b>	<b>0.332</b>	<b>150.0</b>	<b>1:22,007</b>	<b>7,307</b>	<b>99.0</b>	<b>1:33,343</b>	<b>11,071</b>	<b>345,582</b>	<b>0.105</b>
Guam .....	96	187,545	1.954	12.0	1:8,000	15,629	9.0	1:10,667	20,838	15,288	0.159
P.R. ....	3,205	908,455	0.283	138.0	1:23,225	6,583	90.0	1:35,611	10,094	277,724	0.087
V.I. ....	95	—	—	—	—	—	—	—	—	52,570	0.553

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						
		State	\$	Ratio	Budgeted Positions	Positions To Pop.	Expenditure Per Position	Budgeted Positions	Positions To Pop.	Expenditure Per Position	Budgeted Positions	Positions To Pop.	Expenditure Per Position			State	#	Ratio			
<b>Total</b>	<b>115,634</b>	<b>0.590</b>	<b>1:35</b>	<b>5,674.7</b>	<b>1:35</b>	<b>20,377</b>	<b>3,505.3</b>	<b>1:56</b>	<b>32,988</b>	<b>26,847</b>	<b>0.134</b>	Average	2,313	1:8	31,767	70.1	1:11	55,297	3,057	0.564	
1	12,885	2.468	1:8	416.3	1:8	31,767	259.4	1:13	55,297	3,057	0.564	1	Cal.	1:13	55,297	70.1	1:11	55,297	3,057	0.564	
2	9,927	1.954	1:9	405.6	1:9	26,185	224.0	1:13	52,842	2,128	0.529	2	Mich.	1:15	52,842	168.0	1:19	49,671	1,382	0.459	
3	4,931	1.574	1:13	289.0	1:13	25,868	168.0	1:19	45,259	1,363	0.459	3	Cal.	1:21	45,259	163.0	1:21	44,319	1,036	0.375	
4	4,672	1.514	1:14	258.0	1:14	25,568	163.0	1:15	44,319	1,036	0.375	4	N.J.	1:22	44,319	153.0	1:22	39,779	968	0.365	
5	4,569	1.415	1:14	235.0	1:14	25,159	163.0	1:15	44,319	1,036	0.375	5	Fla.	1:22	44,319	138.0	1:22	39,779	968	0.365	
6	4,384	1.309	1:15	228.0	1:15	25,000	153.0	1:16	43,844	988	0.365	6	Pa.	1:22	43,844	138.0	1:22	39,779	968	0.365	
7	4,069	1.277	1:16	227.0	1:16	24,667	138.0	1:16	43,844	988	0.365	7	Mass.	1:26	43,844	121.0	1:26	38,773	871	0.329	
8	4,048	1.231	1:16	200.0	1:16	24,667	121.0	1:18	43,844	988	0.365	8	Ohio	1:26	43,844	120.0	1:26	38,773	871	0.329	
9	3,824	1.104	1:18	188.0	1:18	23,847	120.0	1:18	43,844	988	0.365	9	Conn.	1:27	43,844	117.0	1:27	38,101	785	0.264	
10	3,456	1.088	1:18	188.0	1:18	23,411	117.0	1:18	43,844	988	0.365	10	Ala.	1:28	43,844	102.0	1:28	37,544	769	0.260	
11	3,394	1.059	1:18	175.5	1:18	23,353	102.0	1:20	43,844	988	0.365	11	Wisc.	1:30	43,844	96.0	1:30	37,407	690	0.258	
12	2,966	1.050	1:19	172.0	1:19	23,134	96.0	1:20	43,844	988	0.365	12	Ill.	1:32	43,844	90.0	1:32	36,688	656	0.252	
13	2,944	1.022	1:20	158.0	1:20	23,071	90.0	1:20	43,844	988	0.365	13	La.	1:33	43,844	87.5	1:33	35,986	628	0.252	
14	2,740	0.999	1:20	151.0	1:20	22,788	87.5	1:34	43,844	988	0.365	14	N.C.	1:34	43,844	84.3	1:34	35,728	610	0.238	
15	2,705	0.945	1:22	138.0	1:22	21,731	84.3	1:36	43,844	988	0.365	15	Ga.	1:36	43,844	77.0	1:36	35,705	585	0.230	
16	2,625	0.937	1:22	137.0	1:22	21,474	77.0	1:38	43,844	988	0.365	16	Pa.	1:41	43,844	74.0	1:38	35,633	549	0.202	
17	2,308	0.933	1:23	134.0	1:23	21,171	74.0	1:41	43,844	988	0.365	17	R.I.	1:41	43,844	74.0	1:41	35,246	539	0.201	
18	2,273	0.767	1:24	119.1	1:24	21,148	74.0	1:41	43,844	988	0.365	18	La.	1:41	43,844	74.0	1:41	35,246	539	0.201	
19	2,268	0.730	1:25	117.0	1:25	20,582	71.0	1:42	43,844	988	0.365	19	Tenn.	1:42	43,844	64.0	1:42	33,912	517	0.192	
20	2,122	0.704	1:25	109.0	1:25	20,172	64.0	1:46	43,844	988	0.365	20	Ind.	1:46	43,844	58.0	1:46	33,511	463	0.191	
21	2,067	0.676	1:27	105.0	1:27	19,746	58.0	1:47	43,844	988	0.365	21	Ky.	1:47	43,844	58.0	1:47	33,159	431	0.188	
22	1,849	0.671	1:27	88.5	1:27	19,708	58.0	1:48	43,844	988	0.365	22	Wash.	1:48	43,844	58.0	1:48	32,963	427	0.184	
23	1,825	0.670	1:27	88.5	1:27	19,484	58.0	1:48	43,844	988	0.365	23	S.C.	1:48	43,844	58.0	1:48	32,963	427	0.184	
24	1,724	0.653	1:27	82.0	1:27	19,336	50.0	1:50	43,844	988	0.365	24	Minn.	1:48	43,844	50.0	1:50	31,228	420	0.169	
25	1,684	0.645	1:28	82.0	1:28	19,058	50.0	1:50	43,844	988	0.365	25	N.M.	1:50	43,844	50.0	1:50	31,185	415	0.167	
26	1,619	0.638	1:28	79.0	1:28	19,041	47.0	1:52	43,844	988	0.365	26	Utah	1:52	43,844	47.0	1:52	30,744	390	0.164	
27	1,571	0.635	1:29	78.0	1:29	18,995	45.0	1:53	43,844	988	0.365	27	La.	1:53	43,844	45.0	1:53	30,536	385	0.157	
28	1,561	0.598	1:32	77.5	1:32	18,541	45.0	1:55	43,844	988	0.365	28	Kans.	1:55	43,844	45.0	1:55	30,458	314	0.156	
29	1,537	0.588	1:33	70.0	1:33	18,385	43.5	1:56	43,844	988	0.365	29	Mo.	1:56	43,844	43.5	1:56	29,459	309	0.156	
30	1,532	0.587	1:33	67.0	1:33	18,377	42.0	1:56	43,844	988	0.365	30	Ore.	1:56	43,844	42.0	1:56	29,077	304	0.148	
31	1,500	0.580	1:34	65.0	1:34	18,143	42.0	1:58	43,844	988	0.365	31	Ariz.	1:58	43,844	42.0	1:58	28,565	295	0.148	
32	1,351	0.541	1:35	62.1	1:35	18,127	41.0	1:58	43,844	988	0.365	32	Ida.	1:58	43,844	41.0	1:58	28,559	278	0.142	
33	1,139	0.536	1:35	61.0	1:35	18,043	40.8	1:60	43,844	988	0.365	33	Me.	1:60	43,844	40.8	1:60	28,537	274	0.131	
34	1,085	0.528	1:37	60.0	1:37	17,917	38.0	1:61	43,844	988	0.365	34	Ark.	1:61	43,844	38.0	1:61	27,361	229	0.128	
35	1,045	0.506	1:37	60.0	1:37	17,917	37.5	1:62	43,844	988	0.365	35	D.C.	1:62	43,844	37.5	1:62	27,197	226	0.126	
36	988	0.506	1:38	55.0	1:38	17,710	37.0	1:68	43,844	988	0.365	36	Hawaii	1:68	43,844	37.0	1:68	27,197	208	0.119	
37	964	0.496	1:39	54.5	1:39	17,614	35.0	1:71	43,844	988	0.365	37	Ore.	1:71	43,844	35.0	1:71	26,681	203	0.116	
38	908	0.434	1:39	52.0	1:39	17,363	34.0	1:72	43,844	988	0.365	38	P.R.	1:72	43,844	34.0	1:72	26,493	179	0.114	
39	903	0.431	1:45	52.0	1:45	17,317	33.0	1:76	43,844	988	0.365	39	Miss.	1:76	43,844	33.0	1:76	26,345	170	0.113	
40	828	0.428	1:46	50.0	1:46	17,243	30.0	1:78	43,844	988	0.365	40	W.Va.	1:78	43,844	30.0	1:78	26,163	166	0.106	
41	795	0.398	1:46	50.0	1:46	17,124	22.1	1:83	43,844	988	0.365	41	W.Va.	1:83	43,844	22.1	1:83	26,141	166	0.089	
42	609	0.384	1:54	32.1	1:54	16,964	20.0	1:84	43,844	988	0.365	42	N.D.	1:84	43,844	20.0	1:84	26,057	150	0.087	
43	550	0.378	1:54	32.0	1:54	16,773	20.0	1:85	43,844	988	0.365	43	Del.	1:85	43,844	20.0	1:85	25,712	136	0.087	
44	534	0.378	1:54	32.0	1:54	16,635	20.0	1:91	43,844	988	0.365	44	Nebr.	1:91	43,844	20.0	1:91	24,873	133	0.086	
45	529	0.343	1:57	28.0	1:57	16,299	18.5	1:105	43,844	988	0.365	45	S.D.	1:105	43,844	18.5	1:105	23,462	131	0.082	
46	514	0.342	1:64	27.5	1:64	15,629	15.0	1:110	43,844	988	0.365	46	Mont.	1:110	43,844	15.0	1:110	23,321	126	0.057	
47	484	0.327	1:64	25.0	1:64	15,324	15.0	1:110	43,844	988	0.365	47	Vt.	1:110	43,844	15.0	1:110	23,216	124	0.049	
48	366	0.283	1:65	22.0	1:65	14,352	14.0	1:114	43,844	988	0.365	48	N.H.	1:114	43,844	14.0	1:114	21,650	106	0.038	
49	272	0.264	1:80	14.8	1:80	13,944	10.0	1:228	43,844	988	0.365	49	Wyo.	1:228	43,844	10.0	1:228	20,838	102	0.031	
50	188	0.223	1:112	12.0	1:112	6,583	9.0	1:228	43,844	988	0.365	50	Guam	1:228	43,844	9.0	1:228	10,094	96	0.023	
51												51	Pa.								0.017
52												52	V.I.								0.006
53												53	Cal.								
54												54	Guam								

\* National averages indicated by underlining.

Table 1-4  
 INTER-REGIONAL RANKING OF STATE AND 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			
	State	\$	State	Ratio	Budgeted Positions		Positions To Pop.		Expenditure Per Position		Budgeted Positions		Positions To Pop.		Expenditure Per Position		State	#	State	Ratio
					#	Ratio (X1000)	State	Ratio (X1000)	\$	State	#	Ratio (X1000)	\$	State	#	Ratio				
<b>Total</b>	115,634	2,313	0.590	1.35	5,674.7	113.5	1:35	20,377	3,505.3	32,988	26,847	1:56	32,988	26,847	0.134	26,847	516	0.134	0.134	
<b>Average</b>	12,191	246.8	0.996	1:18	671.5	11.3	1:18	18,155	423.5	28,787	2,170	1:29	28,787	2,170	0.177	2,170	43	0.177	0.177	
<b>New England</b>	3,824	76.4	2.468	1:14	235.0	4.1	1:14	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
1	Mass.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
2	Conn.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
3	R.I.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
4	Me.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
5	Vt.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
6	N.H.	3,824	76.4	2.468	1:14	235.0	4.1	22,788	120.0	33,912	690	1:13	33,912	690	0.459	690	13	0.459	0.459	
<b>Middle Atlantic</b>	7,299	145.9	0.382	1:58	332.0	5.7	1:58	21,985	211.0	34,593	831	1:91	34,593	831	0.043	831	16	0.043	0.043	
1	N.J.	7,299	145.9	0.382	1:58	332.0	5.7	21,985	211.0	34,593	831	1:91	34,593	831	0.043	831	16	0.043	0.043	
2	Pa.	7,299	145.9	0.382	1:58	332.0	5.7	21,985	211.0	34,593	831	1:91	34,593	831	0.043	831	16	0.043	0.043	
3	N.Y.	7,299	145.9	0.382	1:58	332.0	5.7	21,985	211.0	34,593	831	1:91	34,593	831	0.043	831	16	0.043	0.043	
<b>East North Central</b>	22,457	449.1	0.547	1:40	1,035.3	18.6	1:40	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
1	Mich.	22,457	449.1	0.547	1:40	1,035.3	18.6	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
2	Ohio	22,457	449.1	0.547	1:40	1,035.3	18.6	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
3	Wis.	22,457	449.1	0.547	1:40	1,035.3	18.6	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
4	Ill.	22,457	449.1	0.547	1:40	1,035.3	18.6	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
5	Ind.	22,457	449.1	0.547	1:40	1,035.3	18.6	21,691	594.5	37,774	3,049	1:69	37,774	3,049	0.074	3,049	61	0.074	0.074	
<b>West North Central</b>	9,472	189.4	0.561	1:38	440.2	7.7	1:38	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
1	Ia.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
2	Minn.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
3	Wis.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
4	Ill.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
5	Mo.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
6	Nebr.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
7	S.D.	9,472	189.4	0.561	1:38	440.2	7.7	21,517	273.7	34,607	2,210	1:62	34,607	2,210	0.131	2,210	44	0.131	0.131	
<b>South Atlantic</b>	18,612	372.2	0.638	1:27	1,078.2	19.1	1:27	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
1	Fla.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
2	Ms.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
3	N.C.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
4	Ga.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
5	S.C.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
6	D.C.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
7	W.Va.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
8	Del.	18,612	372.2	0.638	1:27	1,078.2	19.1	17,263	704.4	28,423	7,459	1:41	28,423	7,459	0.217	7,459	149	0.217	0.217	
<b>East South Central</b>	8,694	173.8	0.628	1:28	466.5	8.3	1:28	17,870	289.0	30,082	3,430	1:48	30,082	3,430	0.248	3,430	69	0.248	0.248	
1	Ala.	8,694	173.8	0.628	1:28	466.5	8.3	17,870	289.0	30,082	3,430	1:48	30,082	3,430	0.248	3,430	69	0.248	0.248	
2	Tenn.	8,694	173.8	0.628	1:28	466.5	8.3	17,870	289.0	30,082	3,430	1:48	30,082	3,430	0.248	3,430	69	0.248	0.248	
3	Ky.	8,694	173.8	0.628	1:28	466.5	8.3	17,870	289.0	30,082	3,430	1:48	30,082	3,430	0.248	3,430	69	0.248	0.248	
4	Miss.	8,694	173.8	0.628	1:28	466.5	8.3	17,870	289.0	30,082	3,430	1:48	30,082	3,430	0.248	3,430	69	0.248	0.248	
<b>West South Central</b>	9,253	185.0	0.426	1:49	447.0	7.9	1:49	20,700	271.0	34,142	4,514	1:80	34,142	4,514	0.208	4,514	90	0.208	0.208	
1	Tex.	9,253	185.0	0.426	1:49	447.0	7.9	20,700	271.0	34,142	4,514	1:80	34,142	4,514	0.208	4,514	90	0.208	0.208	
2	La.	9,253	185.0	0.426	1:49	447.0	7.9	20,700	271.0	34,142	4,514	1:80	34,142	4,514	0.208	4,514	90	0.208	0.208	
3	Okla.	9,253	185.0	0.426	1:49	447.0	7.9	20,700	271.0	34,142	4,514	1:80	34,142	4,514	0.208	4,514	90	0.208	0.208	
4	Ark.	9,253	185.0	0.426	1:49	447.0	7.9	20,700	271.0	34,142	4,514	1:80	34,142	4,514	0.208	4,514	90	0.208	0.208	
<b>Mountain</b>	9,306	186.1	0.928	1:35	432.8	8.0	1:35	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
1	N.M.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
2	Utah	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
3	Wyo.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
4	Ariz.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
5	Nev.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
6	Mont.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
7	Wyo.	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,227	1,786	0.178	1,786	36	0.178	0.178	
8	Idaho	9,306	186.1	0.928	1:35	432.8	8.0	25,988	50.0	55,227	1,786	1:21	55,2							

Table 1-5  
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 Health/Safety		Toxicology	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
No. States Reporting	52																								
Total	26,847,473	7,640,958	28.5	59,566	0.2	297,252	1.1	186,170	0.7	8,514,630	31.7	1,453,047	5.4	4,068,096	15.2	512,730	1.9	2,629,005	9.8	881,069	41	60,187	19	544,730	2.0
Average	516,298	146,942		1,267		5,717		3,723		163,743		27,816		78,437		39,441		53,653		21,489		3,168		14,722	
New England	2,169,657	636,191	29.3	2,904	0.1	17,011	0.8	15,750	0.7	580,148	26.7	16,949	0.8	388,202	17.9	3,082	0.1	178,864	8.2	110,226	5.1	3,824	3	216,506	10.0
Conn	584,894	132,308	22.6	1,532	0.3	10,751	1.8	9,178	1.6	168,572	28.8	15,524	2.7	116,324	19.9	3,082	0.5	23,467	4.0	28,800	4.9	2,672	0.5	72,684	12.4
Mass.	690,165	172,445	25.0	671	0.2	3,833	0.5	5,284	0.6	202,356	29.3	19,952	2.8	195,952	28.4	3,082	0.5	38	—	—	—	—	—	113,386	16.4
N.H.	133,436	46,695	35.0	271	0.2	1,383	0.1	858	0.6	28,327	21.2	—	—	17,363	13.0	—	—	18,685	14.8	12,384	9.3	45	0.4	7,715	5.8
N.J.	169,666	106,520	62.8	86	0.1	1,145	0.7	188	0.1	40,383	24.2	—	—	21,310	12.6	—	—	29,810	7.6	65,872	16.9	1,107	0.3	18,525	4.8
R.I.	389,809	139,030	35.7	88	0.02	2,307	0.6	72	0.02	94,320	23.8	1,425	0.4	37,253	9.6	—	—	30,935	24.6	3,170	2.5	—	—	4,161	3.3
Vt.	125,613	39,193	31.2	257	0.2	1,447	1.2	170	0.1	46,280	36.8	—	—	21,310	12.6	—	—	16,906	2.7	13,655	1.6	—	—	1,008	0.1
Middle Atlantic	831,452	262,081	31.5	1,506	0.2	3,314	0.4	10,555	1.3	259,993	31.3	430	0.1	262,004	31.5	—	—	16,906	2.2	13,655	1.6	—	—	1,008	0.1
N.J.	628,247	238,066	37.9	1,238	0.2	2,893	0.5	9,056	1.4	249,370	39.7	—	—	97,063	15.4	—	—	16,906	2.7	13,655	2.2	—	—	1,008	0.1
N.Y.	203,205	24,015	11.8	0.1	421	0.2	1,499	0.7	10,623	5.2	430	0.2	164,941	81.2	—	—	—	—	—	—	—	—	—	1,008	0.5
Pa.	3,049,336	914,759	30.0	7,391	0.2	13,306	0.4	49,733	1.6	751,188	24.6	48,559	1.6	619,304	20.3	100,134	3.3	360,266	11.8	132,791	4.4	16,950	0.6	34,955	1.1
East North Central	4,266,662	1,190,274	28.1	12,103	0.3	22,429	0.5	11,548	0.3	121,870	28.6	—	—	12,311	2.9	—	—	57,260	13.4	24,515	5.7	—	—	12,535	2.9
Ill.	1,666,217	419,071	25.2	730	0.4	3,324	2.0	6,762	3.9	121,870	28.6	—	—	12,311	2.9	—	—	57,260	13.4	24,515	5.7	—	—	12,535	2.9
Ind.	1,035,509	329,015	31.8	1,915	0.2	3,712	0.4	4,386	0.4	328,596	31.7	11,902	1.1	225,743	21.8	—	—	101,848	9.8	28,392	2.7	—	—	14,455	1.6
Mich.	882,138	343,739	39.0	764	0.1	1,494	0.2	2,306	0.2	104,651	11.9	4,798	0.5	282,585	32.0	—	—	75,361	8.5	24,077	2.7	—	—	10,444	1.9
Wis.	536,720	45,824	8.5	2,772	0.5	4,638	0.9	6,767	1.3	31,309	24.3	31,859	5.9	98,665	18.3	100,134	18.6	66,940	12.5	31,442	5.8	—	—	7,926	1.5
West North Central	2,209,688	635,362	28.8	7,006	0.3	21,411	1.0	13,796	0.6	847,090	38.3	25,549	1.2	222,931	10.1	204	0.02	277,278	12.4	137,627	6.2	4,210	0.2	17,224	0.8
la.	531,350	133,958	25.2	1,720	0.2	2,033	0.4	2,857	0.5	240,879	45.3	—	—	2,985	0.6	—	—	45,736	8.6	91,071	17.1	—	—	3,285	0.6
Kans.	304,394	72,733	23.9	764	0.2	5,230	1.7	597	0.2	102,622	33.7	—	—	50,584	16.6	—	—	51,274	16.8	16,529	5.4	—	—	925	0.3
Minn.	420,005	124,023	29.5	3,923	0.9	10,798	2.6	5,335	1.3	207,197	49.3	—	—	68,565	16.7	204	0.05	125,059	22.8	11,311	2.1	—	—	861	0.2
Mo.	548,509	187,813	34.2	4,661	0.1	1,362	0.2	3,686	0.7	144,986	26.4	14,154	2.6	58,811	10.3	—	—	23,896	17.6	8,653	6.4	—	—	5,801	4.3
Nebr.	135,683	27,034	19.9	55	0.04	399	0.3	600	0.4	66,473	49.0	—	—	2,772	2.0	—	—	10,480	6.3	—	—	—	—	—	—
Neb.	167,614	56,820	33.9	523	0.3	1,177	0.7	452	0.3	47,553	28.4	11,395	6.8	39,214	23.4	—	—	20,833	20.4	10,063	9.9	—	—	—	—
N.D.	102,093	32,981	32.3	155	0.2	412	0.4	269	0.3	37,380	36.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
S.D.	7,458,944	2,013,353	27.0	10,903	0.1	125,259	1.7	37,364	0.5	2,333,300	31.3	517,480	6.9	1,198,327	16.1	388,123	5.2	528,236	7.8	133,655	1.8	16,925	0.2	156,019	2.1
South Atlantic	1,504,943	32,282	2.1	210	0.01	1,192	0.8	39,569	2.6	118,611	32.5	1,972	1.3	8,602	0.6	47,441	3.1	11,800	7.8	4,923	3.3	—	—	2,502	1.7
Del.	365,068	11,502	3.0	294	0.1	63	0.02	53	0.01	664,342	31.2	53,204	14.6	41,629	11.4	16,976	4.7	1,191	0.3	1,673	0.5	—	—	18,815	5.2
D.C.	2,127,860	656,372	30.8	2,292	0.1	59,700	2.8	5,511	0.3	664,342	31.2	53,204	14.6	41,629	11.4	16,976	4.7	1,191	0.3	1,673	0.5	—	—	18,815	5.2
Fla.	966,229	270,499	27.9	807	0.1	22,479	2.3	11,523	1.2	461,293	47.6	49,507	5.1	308,112	14.5	—	—	256,551	12.1	51,719	0.2	1,231	0.1	18,272	0.9
Ga.	1,363,304	407,901	29.9	2,343	0.2	8,140	0.6	4,897	0.4	372,100	27.3	94,076	6.9	201,565	14.8	—	—	163	—	—	—	97	0.01	37,053	2.7
Md.	785,214	220,924	28.1	1,697	0.2	5,863	0.7	3,112	0.4	236,038	30.1	53,951	6.9	151,318	19.3	73,766	5.4	103,569	7.6	48,930	3.6	9,264	0.7	37,053	2.7
N.C.	1,176,930	240,428	20.4	1,683	0.2	13,489	1.2	8,631	0.8	338,579	31.0	70,556	9.2	155,276	15.0	204,633	26.1	75,621	9.6	19,883	2.5	4,956	0.6	5,218	0.7
S.C.	655,946	160,310	24.4	1,632	0.2	12,186	1.9	1,771	0.3	168,870	25.7	42,557	6.5	150,471	22.9	—	—	53,586	8.2	40,294	6.1	1,377	0.2	22,692	3.5
Va.	313,919	110,135	35.1	449	0.1	2,628	0.8	1,974	0.6	153,898	17.2	1,259	0.4	68,875	21.9	—	—	30,595	9.7	—	—	—	—	—	—
West South Central	3,430,027	1,043,190	30.3	8,660	0.3	45,682	1.3	9,193	0.3	1,189,246	34.7	265,732	7.7	361,407	10.5	15,547	0.5	318,532	9.3	61,852	1.8	2,656	0.1	8,330	0.2
Ky.	1,382,189	448,668	32.5	3,873	0.3	28,377	2.1	4,073	0.3	471,147	34.1	77,251	5.6	151,933	17.0	14,700	1.1	125,284	9.1	51,387	3.7	—	—	5,026	0.4
Kv.	308,191	30,383	9.8	2,196	0.7	6,888	2.2	1,977	0.6	142,157	46.0	19,376	6.3	54,161	17.5	847	0.3	45,604	14.8	7,380	2.4	—	—	3,304	1.1
Miss.	971,091	252,204	26.0	2,196	0.3	10,206	1.2	702	0.1	271,188	31.1	167,979	19.3	86,324	9.9	—	—	77,157	8.9	3,085	0.4	—	—	—	—
Tenn.	867,628	411,735	47.5	2,315	0.3	6,411	0.7	2,441	0.3	304,174	35.1	1,126	0.1	68,939	7.9	—	—	70,487	8.1	—	—	—	—	—	—
West South Central	4,514,162	1,086,963	24.1	13,378	0.3	36,355	0.8	32,159	0.7	1,490,861	33.0	468,722	10.4	620,291	13.7	388,123	5.2	528,236	7.8	133,655	1.8	16,925	0.2	156,019	2.1
Ark.	431,412	117,166	27.2	1,836	0.4	3,387	0.8	2,282	0.5	123,901	28.6	44,980	10.4	71,641	16.6	—	—	61,972	14.4	6,247	1.4	—	—	—	—
La.	610,485	111,419	18.3	2,698	0.4	18,767	3.1	2,262	0.4	284,721	46.6	9,321	2.2	54,732	9.2	—	—	119,391	19.6	16,495	2.7	—	—	—	—
Ola.	415,374	136,317	32.8	3,925	0.9																				



**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	#	%
<b>Total</b> .....	<b>5,673.0</b>	<b>385.0</b>	<b>6.8</b>	<b>15.0</b>	<b>752.8</b>	<b>13.3</b>	<b>68.5</b>	<b>3,502.6</b>	<b>61.7</b>	<b>202.0</b>	<b>887.6</b>	<b>15.6</b>	<b>54.0</b>	<b>145.0</b>	<b>2.6</b>	<b>10.0</b>	<b>5,065.5</b>	<b>89.3</b>
Average .....	111.2	7.6	6.8	0.3	14.8	13.3	1.3	68.7	61.7	4.0	17.4	15.6	1.1	2.8	2.6	0.2	99.3	89.3
<b>New England</b> .....	<b>671.5</b>	<b>41.0</b>	<b>6.1</b>	<b>—</b>	<b>89.0</b>	<b>13.2</b>	<b>5.0</b>	<b>423.5</b>	<b>63.1</b>	<b>15.0</b>	<b>82.0</b>	<b>12.2</b>	<b>5.0</b>	<b>36.0</b>	<b>5.4</b>	<b>2.0</b>	<b>644.5</b>	<b>96.0</b>
Conn. ....	228.0	7.0	3.1	—	30.0	13.2	3.0	163.0	71.5	11.0	27.0	11.8	2.0	1.0	0.4	—	212.0	93.0
Mass. ....	235.0	25.0	10.7	—	33.0	14.0	2.0	120.0	51.1	1.0	24.0	10.2	2.0	33.0	14.0	2.0	228.0	97.0
Me. ....	50.0	2.0	4.0	—	7.0	14.0	—	34.0	68.0	2.0	7.0	14.0	—	—	—	—	48.0	96.0
N.H. ....	22.0	1.0	4.6	—	4.0	18.2	—	14.0	63.6	—	3.0	13.6	—	—	—	—	22.0	100.0
R.I. ....	109.0	5.0	4.6	—	11.0	10.1	—	74.0	67.9	1.0	17.0	15.6	1.0	2.0	1.8	—	107.0	98.2
Vt. ....	27.5	1.0	3.7	—	4.0	14.5	—	18.5	67.3	—	4.0	14.5	—	—	—	—	27.5	100.0
<b>Middle Atlantic</b> .....	<b>332.0</b>	<b>27.0</b>	<b>8.1</b>	<b>—</b>	<b>45.0</b>	<b>13.5</b>	<b>6.0</b>	<b>211.0</b>	<b>63.6</b>	<b>9.0</b>	<b>46.0</b>	<b>13.9</b>	<b>2.0</b>	<b>3.0</b>	<b>0.9</b>	<b>1.0</b>	<b>314.0</b>	<b>94.6</b>
N.J. ....	227.0	8.0	3.5	—	27.0	11.9	1.0	153.0	67.4	6.0	39.0	17.2	2.0	—	—	—	218.0	96.0
N.Y. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pa. ....	105.0	19.0	18.1	—	18.0	17.1	5.0	58.0	55.2	3.0	7.0	6.7	—	3.0	2.9	1.0	96.0	91.4
<b>East North Central</b> .....	<b>1,035.3</b>	<b>83.0</b>	<b>8.0</b>	<b>5.0</b>	<b>96.0</b>	<b>9.3</b>	<b>16.0</b>	<b>594.5</b>	<b>57.4</b>	<b>70.0</b>	<b>195.8</b>	<b>18.9</b>	<b>22.0</b>	<b>66.0</b>	<b>6.4</b>	<b>7.0</b>	<b>915.3</b>	<b>88.4</b>
Ill. ....	172.0	13.0	7.5	1.0	27.0	15.7	8.0	102.0	59.3	31.0	29.0	16.9	6.0	1.0	0.6	—	126.0	73.3
Ind. ....	83.0	7.0	8.4	—	—	—	—	64.0	77.1	2.0	12.0	14.5	1.0	—	—	—	80.0	96.4
Mich. ....	416.3	15.0	3.6	2.0	27.0	6.5	1.0	224.0	53.8	19.0	94.3	22.7	9.0	56.0	13.4	6.0	379.3	91.1
Ohio ....	188.5	7.0	3.7	—	20.0	10.6	3.0	117.0	62.1	8.0	35.5	18.8	4.0	9.0	4.8	1.0	172.5	91.5
Wis. ....	175.5	41.0	23.4	2.0	22.0	12.5	4.0	87.5	49.9	10.0	25.0	14.2	2.0	—	—	—	157.5	89.7
<b>West North Central</b> .....	<b>434.5</b>	<b>43.0</b>	<b>9.9</b>	<b>3.0</b>	<b>64.5</b>	<b>14.8</b>	<b>4.0</b>	<b>268.0</b>	<b>61.7</b>	<b>6.0</b>	<b>58.0</b>	<b>13.4</b>	<b>2.0</b>	<b>1.0</b>	<b>0.2</b>	<b>—</b>	<b>419.5</b>	<b>96.6</b>
Ia. ....	117.0	12.0	10.3	—	17.0	14.5	1.0	74.0	63.2	3.0	14.0	12.0	—	—	—	—	113.0	96.6
Kans. ....	82.0	13.0	15.8	3.0	10.0	12.2	1.0	50.0	61.0	2.0	9.0	11.0	—	—	—	—	76.0	92.7
Minn. ....	88.5	6.0	6.8	—	18.5	20.9	2.0	47.0	53.1	1.0	17.0	19.2	1.0	—	—	—	84.5	95.5
Mo. ....	60.0	3.0	5.0	—	7.0	11.7	—	42.0	70.0	—	7.0	11.7	—	1.0	1.6	—	60.0	100.0
Nebr. ....	28.0	2.0	7.1	—	4.0	14.3	—	20.0	71.5	—	2.0	7.1	—	—	—	—	28.0	100.0
N.D. ....	34.0	3.0	8.8	—	5.0	14.7	—	20.0	58.8	—	6.0	17.7	—	—	—	—	34.0	100.0
S.D. ....	25.0	4.0	16.0	—	3.0	12.0	—	15.0	60.0	—	3.0	12.0	1.0	—	—	—	24.0	96.0
<b>South Atlantic</b> .....	<b>1,078.2</b>	<b>50.0</b>	<b>4.7</b>	<b>1.0</b>	<b>144.8</b>	<b>13.4</b>	<b>8.0</b>	<b>704.4</b>	<b>65.3</b>	<b>24.6</b>	<b>162.0</b>	<b>15.0</b>	<b>3.0</b>	<b>17.0</b>	<b>1.6</b>	<b>—</b>	<b>783.6</b>	<b>72.7</b>
Del. ....	32.1	1.0	3.1	—	4.0	12.5	—	22.1	68.8	2.0	5.0	15.6	—	—	—	—	30.1	93.8
D.C. ....	55.0	2.0	3.6	—	6.0	10.9	2.0	45.0	81.9	3.0	2.0	3.6	—	—	—	—	50.0	90.9
Fla. ....	258.0	12.0	4.6	—	35.0	13.6	—	168.0	65.1	—	41.0	15.9	—	2.0	0.8	—	—	—
Ga. ....	137.0	8.0	5.8	—	22.0	16.1	—	71.0	51.8	2.0	35.0	25.6	—	1.0	0.7	—	135.0	98.5
Md. ....	269.0	4.0	1.5	—	37.0	13.7	1.0	188.0	69.9	4.0	35.0	13.0	1.0	5.0	1.9	—	263.0	98.0
N.C. ....	151.0	9.0	5.9	—	19.0	12.6	1.0	96.0	63.6	4.0	25.0	16.6	—	2.0	1.3	—	146.0	96.7
S.C. ....	119.1	12.0	10.0	1.0	10.8	9.1	1.0	84.3	70.8	5.6	10.0	8.4	—	2.0	1.7	—	111.5	93.6
Va. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W. Va. ....	57.0	2.0	3.5	—	11.0	19.3	3.0	30.0	52.6	4.0	9.0	15.8	2.0	5.0	8.8	—	48.0	84.2
<b>East South Central</b> .....	<b>486.5</b>	<b>32.0</b>	<b>6.6</b>	<b>1.0</b>	<b>71.0</b>	<b>14.6</b>	<b>2.0</b>	<b>289.0</b>	<b>59.4</b>	<b>10.0</b>	<b>83.5</b>	<b>17.1</b>	<b>3.0</b>	<b>11.0</b>	<b>2.3</b>	<b>—</b>	<b>470.5</b>	<b>96.7</b>
Ala. ....	188.0	14.0	7.4	—	30.0	15.9	1.0	121.0	64.4	2.0	21.0	11.2	1.0	2.0	1.1	—	184.0	97.9
Ky. ....	88.5	6.0	6.8	—	10.0	11.3	—	58.0	65.5	5.0	13.5	15.3	1.0	1.0	1.1	—	82.5	93.2
Miss. ....	52.0	2.0	3.8	—	8.0	15.4	—	33.0	63.5	1.0	9.0	17.3	—	—	—	—	51.0	98.1
Tenn. ....	158.0	10.0	6.3	1.0	23.0	14.6	1.0	77.0	48.7	2.0	40.0	25.3	1.0	8.0	5.1	—	153.0	96.8
<b>West South Central</b> .....	<b>447.0</b>	<b>16.0</b>	<b>3.6</b>	<b>—</b>	<b>84.7</b>	<b>18.9</b>	<b>11.0</b>	<b>271.0</b>	<b>60.6</b>	<b>13.0</b>	<b>75.3</b>	<b>16.9</b>	<b>6.0</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>417.0</b>	<b>93.3</b>
Ark. ....	61.0	2.0	3.3	—	11.0	18.0	4.0	38.0	62.3	4.0	10.0	16.4	3.0	—	—	—	50.0	82.0
La. ....	134.0	9.0	6.7	—	35.0	26.1	—	58.0	43.3	—	32.0	23.9	2.0	—	—	—	132.0	98.5
Okla. ....	52.0	2.0	3.8	—	6.7	12.9	—	37.0	71.2	—	6.3	12.1	—	—	—	—	52.0	100.0
Tex. ....	200.0	3.0	1.5	—	32.0	16.0	7.0	138.0	69.0	9.0	27.0	13.5	1.0	—	—	—	183.0	91.5
<b>Mountain</b> .....	<b>432.8</b>	<b>47.0</b>	<b>10.8</b>	<b>1.0</b>	<b>60.0</b>	<b>13.9</b>	<b>2.0</b>	<b>266.5</b>	<b>61.6</b>	<b>7.0</b>	<b>52.3</b>	<b>12.1</b>	<b>2.0</b>	<b>7.0</b>	<b>1.6</b>	<b>—</b>	<b>420.8</b>	<b>97.2</b>
Ariz. ....	65.0	6.0	9.2	—	14.0	21.6	1.0	42.0	64.6	1.0	2.0	3.1	1.0	1.0	1.5	—	62.0	95.4
Colo. ....	78.0	14.0	17.9	—	7.0	9.0	1.0	50.0	64.1	2.0	7.0	9.0	1.0	—	—	—	74.0	94.9
Ida. ....	67.0	6.0	8.9	—	14.0	20.9	—	41.0	61.2	2.5	2.0	3.0	—	4.0	6.0	—	64.5	96.3
Mont. ....	28.5	2.0	7.0	—	3.0	10.5	—	20.0	70.2	—	3.5	12.3	—	—	—	—	28.5	100.0
Nev. ....	32.0	2.0	6.2	—	3.0	9.4	—	15.0	46.9	—	11.0	34.4	—	1.0	3.1	—	32.0	100.0
N.M. ....	77.5	8.0	10.4	1.0	7.0	9.0	—	43.5	56.1	1.5	18.0	23.2	—	1.0	1.3	—	75.0	96.8
Utah ....	70.0	8.0	11.4	—	10.0	14.3	—	45.0	64.3	—	7.0	10.0	—	—	—	—	70.0	100.0
Wyo. ....	14.8	1.0	6.8	—	2.0	13.5	—	10.0	67.5	—	1.8	12.2	—	—	—	—	14.8	100.0
<b>Pacific</b> .....	<b>601.2</b>	<b>31.0</b>	<b>5.2</b>	<b>3.0</b>	<b>80.8</b>	<b>13.4</b>	<b>6.5</b>	<b>372.7</b>	<b>62.0</b>	<b>18.4</b>	<b>115.7</b>	<b>19.2</b>	<b>8.0</b>	<b>1.0</b>	<b>0.2</b>	<b>—</b>	<b>565.3</b>	<b>94.0</b>
Alaska ....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cal. ....	405.6	13.0	3.2	2.0	52.5	12.9	4.5	259.4	64.0	13.4	80.7	19.9	5.0	—	—	—	380.7	93.9
Hawaii ....	54.5	1.0	1.8	—	4.0	7.4	—	37.5	68.8	2.0	12.0	22.0	1.0	—	—	—	51.5	94.5
Ore. ....	62.1	5.0	8.1	—	11.3	18.2	1.0	40.8	65.7	1.0	5.0	8.0	—	—	—	—	60.1	96.8
Wash. ....	79.0	12.0	15.2	1.0	13.0	16.4	1.0	35.0	44.3	2.0	18.0	22.8	2.0	1.0	1.3	—	73.0	92.4
<b>Territories</b> .....	<b>154.0</b>	<b>15.0</b>	<b>9.8</b>	<b>1.0</b>	<b>17.0</b>	<b>11.0</b>	<b>8.0</b>	<b>102.0</b>										

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
						# Pos.	Resig & Sep.	% Turn-over		
<b>Total</b> .....	<b>5,065.5</b>	<b>748.3</b>	<b>14.8</b>	<b>31.0</b>	<b>174.5</b>	<b>3,334.6</b>	<b>369.0</b>	<b>11.1</b>	<b>150.8</b>	<b>29.0</b>
Average .....	101.3	15.0	14.8	0.6	3.5	66.7	7.4	11.1	3.0	0.6
<b>New England</b> .....	<b>644.5</b>	<b>55.0</b>	<b>8.5</b>	<b>1.0</b>	<b>15.0</b>	<b>423.5</b>	<b>27.0</b>	<b>6.4</b>	<b>8.0</b>	<b>4.0</b>
Conn. ....	212.0	15.0	7.1	—	3.0	163.0	10.0	6.1	2.0	—
Mass. ....	228.0	17.0	7.5	1.0	6.0	120.0	3.0	2.5	3.0	4.0
Me. ....	48.0	3.0	6.3	—	1.0	34.0	1.0	2.9	1.0	—
N.H. ....	22.0	4.0	18.2	—	2.0	14.0	2.0	14.3	—	—
R.I. ....	107.0	15.0	14.0	—	2.0	74.0	11.0	14.9	2.0	—
Vt. ....	27.5	1.0	3.6	—	1.0	18.5	—	—	—	—
<b>Middle Atlantic</b> .....	<b>314.0</b>	<b>49.0</b>	<b>15.6</b>	<b>—</b>	<b>19.0</b>	<b>211.0</b>	<b>19.0</b>	<b>9.0</b>	<b>10.0</b>	<b>1.0</b>
N.J. ....	218.0	40.0	18.3	—	14.0	153.0	16.0	10.5	10.0	—
N.Y. ....	—	—	—	—	—	—	—	—	—	—
Pa. ....	96.0	9.0	9.4	—	5.0	58.0	3.0	5.2	—	1.0
<b>East North Central</b> .....	<b>915.3</b>	<b>162.0</b>	<b>17.7</b>	<b>5.0</b>	<b>23.0</b>	<b>594.5</b>	<b>83.0</b>	<b>14.0</b>	<b>38.0</b>	<b>13.0</b>
Ill. ....	126.0	21.0	16.7	—	4.0	102.0	13.0	12.7	4.0	—
Ind. ....	80.0	10.0	12.5	—	—	64.0	7.0	10.9	3.0	—
Mich. ....	379.3	42.0	11.1	2.0	1.0	224.0	13.0	5.8	16.0	10.0
Ohio ....	172.5	65.0	37.7	1.0	14.0	117.0	37.0	31.6	10.0	3.0
Wisc. ....	157.5	24.0	15.2	2.0	4.0	87.5	13.0	14.9	5.0	—
<b>West North Central</b> .....	<b>419.5</b>	<b>72.0</b>	<b>17.2</b>	<b>7.0</b>	<b>26.0</b>	<b>268.0</b>	<b>29.0</b>	<b>10.8</b>	<b>16.0</b>	<b>—</b>
Ia. ....	113.0	18.0	15.9	1.0	6.0	74.0	9.0	12.2	2.0	—
Kans. ....	76.0	17.0	22.4	1.0	6.0	50.0	8.0	16.0	2.0	—
Minn. ....	84.5	18.0	21.3	—	11.0	47.0	2.0	4.3	5.0	—
Mo. ....	60.0	8.0	13.3	—	—	42.0	5.0	11.9	3.0	—
Nebr. ....	28.0	4.0	14.3	1.0	—	20.0	2.0	10.0	1.0	—
N.D. ....	34.0	2.0	5.9	—	—	20.0	1.0	5.0	1.0	—
S.D. ....	24.0	5.0	20.8	4.0	3.0	15.0	2.0	13.3	2.0	—
<b>South Atlantic</b> .....	<b>783.6</b>	<b>125.6</b>	<b>16.0</b>	<b>5.0</b>	<b>29.0</b>	<b>536.4</b>	<b>76.6</b>	<b>14.3</b>	<b>11.0</b>	<b>4.0</b>
Del. ....	30.1	5.0	16.6	—	2.0	22.1	2.0	9.1	1.0	—
D.C. ....	50.0	5.0	10.0	—	2.0	45.0	3.0	6.7	—	—
Fla. ....	—	—	—	—	—	—	—	—	—	—
Ga. ....	135.0	20.0	14.8	—	8.0	71.0	10.0	7.4	2.0	—
Md. ....	263.0	32.0	12.2	1.0	7.0	188.0	21.0	11.2	3.0	—
N.C. ....	146.0	24.0	16.4	1.0	2.0	96.0	18.0	18.8	3.0	—
S.C. ....	111.5	21.6	19.4	3.0	3.0	84.3	14.6	17.3	—	1.0
Va. ....	—	—	—	—	—	—	—	—	—	—
W. Va. ....	48.0	18.0	37.5	—	5.0	30.0	8.0	26.7	2.0	3.0
<b>East South Central</b> .....	<b>470.5</b>	<b>72.0</b>	<b>15.3</b>	<b>8.0</b>	<b>18.0</b>	<b>289.0</b>	<b>29.0</b>	<b>10.0</b>	<b>16.0</b>	<b>1.0</b>
Ala. ....	184.0	25.0	13.6	4.0	7.0	121.0	8.0	6.6	6.0	—
Ky. ....	82.5	10.0	12.1	—	4.0	58.0	4.0	6.9	2.0	—
Miss. ....	51.0	8.0	15.7	—	1.0	33.0	6.0	18.2	1.0	—
Tenn. ....	153.0	29.0	18.9	4.0	6.0	77.0	11.0	14.3	7.0	1.0
<b>West South Central</b> .....	<b>417.0</b>	<b>81.0</b>	<b>19.4</b>	<b>—</b>	<b>18.0</b>	<b>271.0</b>	<b>41.0</b>	<b>15.1</b>	<b>22.0</b>	<b>—</b>
Ark. ....	50.0	14.0	28.0	—	4.0	38.0	7.0	18.4	3.0	—
La. ....	132.0	27.0	20.5	—	4.0	58.0	12.0	20.7	11.0	—
Okla. ....	52.0	5.0	9.6	—	—	37.0	4.0	10.8	1.0	—
Tex. ....	183.0	35.0	19.1	—	10.0	138.0	18.0	13.0	7.0	—
<b>Mountain</b> .....	<b>420.8</b>	<b>70.8</b>	<b>16.8</b>	<b>2.0</b>	<b>15.0</b>	<b>266.5</b>	<b>33.0</b>	<b>12.4</b>	<b>15.8</b>	<b>5.0</b>
Ariz. ....	62.0	10.0	16.1	1.0	4.0	42.0	4.0	9.5	1.0	—
Colo. ....	74.0	12.0	16.2	—	3.0	50.0	5.0	10.0	4.0	—
Ida. ....	64.5	14.0	21.7	—	4.0	41.0	6.0	14.6	—	4.0
Mont. ....	28.5	3.0	10.5	—	—	20.0	3.0	15.0	—	—
Nev. ....	32.0	6.0	18.8	—	—	15.0	2.0	13.3	4.0	—
N.M. ....	75.0	12.0	16.0	1.0	1.0	43.5	6.0	13.8	3.0	1.0
Utah ....	70.0	10.0	14.3	—	3.0	45.0	5.0	11.1	2.0	—
Wyo. ....	14.8	3.8	25.7	—	—	10.0	2.0	20.0	1.8	—
<b>Pacific</b> .....	<b>565.3</b>	<b>50.9</b>	<b>9.0</b>	<b>3.0</b>	<b>10.5</b>	<b>372.7</b>	<b>24.4</b>	<b>6.6</b>	<b>13.0</b>	<b>—</b>
Alaska ....	—	—	—	—	—	—	—	—	—	—
Cal. ....	380.7	26.9	7.1	2.0	4.5	259.4	13.4	5.2	7.0	—
Hawaii ....	51.5	5.0	9.7	—	—	37.5	3.0	8.0	2.0	—
Ore. ....	60.1	13.0	21.6	—	5.0	40.8	6.0	14.7	2.0	—
Wash. ....	73.0	6.0	8.2	1.0	1.0	35.0	2.0	5.7	2.0	—
<b>Territories</b> .....	<b>115.0</b>	<b>10.0</b>	<b>8.7</b>	<b>—</b>	<b>1.0</b>	<b>102.0</b>	<b>7.0</b>	<b>6.9</b>	<b>1.0</b>	<b>1.0</b>
Guam ....	11.0	2.0	18.2	—	—	9.0	2.0	22.2	—	—
P.R. ....	101.0	4.0	4.0	—	—	90.0	2.0	2.2	1.0	1.0
V.I. ....	3.0	4.0	133.3	—	1.0	3.0	3.0	100.0	—	—





**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.
<b>Total</b> .....	<b>115,632,338</b>	<b>72,008,384</b>	<b>12,160,821</b>	<b>72.8</b>	<b>12,812,035</b>	<b>11.1</b>	<b>6,175,232</b>	<b>5.3</b>	<b>9,426,519</b>	<b>8.2</b>	<b>3,049,347</b>	<b>2.6</b>
Average .....	2,312,647	1,440,168	243,216	—	256,241	—	123,505	—	188,530	—	60,987	—
<b>New England</b> .....	<b>12,191,173</b>	<b>7,728,052</b>	<b>1,115,829</b>	<b>72.5</b>	<b>1,235,144</b>	<b>10.1</b>	<b>626,476</b>	<b>5.2</b>	<b>1,325,306</b>	<b>10.9</b>	<b>160,366</b>	<b>1.3</b>
Conn. ....	3,824,259	2,594,649	615,451	83.9	367,084	9.6	135,820	3.6	103,234	2.7	8,021	0.2
Mass. ....	4,069,498	2,513,616	71,292	63.5	437,863	10.8	14,739	0.4	1,005,435	24.7	26,553	0.6
Me. ....	1,139,386	562,099	72,405	55.7	112,345	9.9	241,733	21.2	86,402	7.6	64,402	5.6
N.H. ....	365,979	221,003	32,910	69.4	57,586	15.7	180	0.1	53,950	14.7	350	0.1
R.I. ....	2,307,674	1,467,252	293,450	76.3	197,956	8.6	220,515	9.6	67,461	2.9	61,040	2.6
Vt. ....	484,377	369,433	30,321	82.5	62,310	12.9	13,489	2.8	8,824(A)	1.8	(A)	—
<b>Middle Atlantic</b> .....	<b>7,297,067</b>	<b>4,265,873</b>	<b>1,144,084</b>	<b>74.1</b>	<b>600,244</b>	<b>8.2</b>	<b>188,084</b>	<b>2.6</b>	<b>494,069</b>	<b>6.8</b>	<b>604,713</b>	<b>8.3</b>
N.J. ....	4,672,067	2,905,873	562,084	74.2	435,244	9.3	139,084	3.0	35,069	0.8	594,713(B)	12.7
N.Y. ....	—	—	—	—	—	—	—	—	—	—	—	—
Pa. ....	2,625,000	1,360,000	582,000	73.9	165,000	6.3	49,000	1.9	459,000	17.5	10,000	0.4
<b>East North Central</b> .....	<b>22,456,804</b>	<b>14,033,301</b>	<b>2,582,032</b>	<b>74.0</b>	<b>2,135,160</b>	<b>9.5</b>	<b>1,079,978</b>	<b>4.8</b>	<b>2,430,968</b>	<b>10.8</b>	<b>195,365</b>	<b>0.9</b>
Ill. ....	2,965,835	1,956,274	279,042	75.4	326,201	11.0	237,544	8.0	146,487	4.9	20,287	0.7
Ind. ....	2,122,173	1,390,588	236,400	76.7	—	—	—	—	490,987	23.1	4,198	0.2
Mich. ....	9,927,490	6,202,881	1,445,182	77.0	638,731	6.4	251,526	2.6	1,324,268	13.3	64,902	0.7
Ohio ....	4,047,772	2,194,803	482,857	66.1	602,040	14.9	384,751	9.5	305,779	7.6	77,542	1.9
Wisc. ....	3,393,534	2,288,755	138,551	71.5	568,188	16.7	206,157	6.2	163,447	4.8	28,436	0.8
<b>West North Central</b> .....	<b>9,471,904</b>	<b>5,492,260</b>	<b>839,502</b>	<b>66.8</b>	<b>1,497,844</b>	<b>15.8</b>	<b>623,065</b>	<b>6.6</b>	<b>793,177</b>	<b>8.4</b>	<b>226,056</b>	<b>2.4</b>
Ia. ....	2,943,618	1,608,816	239,598	62.8	507,079	17.2	264,384	9.0	270,142	9.2	53,599	1.8
Kans. ....	1,561,380	969,809	152,391	71.8	138,623	8.9	10,718	0.7	271,544	17.4	18,295	1.2
Minn. ....	1,724,345	1,147,531	217,455	79.2	259,198	15.0	17,219	1.0	64,761	3.7	18,181	1.1
Mo. ....	1,571,083	864,267	107,312	61.8	321,983	20.5	150,171	9.6	85,656	5.5	41,694	2.6
Nebr. ....	533,622	282,492	33,799	59.3	88,339	16.6	53,890	10.1	61,577	11.5	13,525	2.5
N.D. ....	609,162	358,401	50,696	67.2	95,843	15.7	87,733	14.4	6,239	1.0	10,250	1.7
S.D. ....	528,694	260,944	38,251	56.6	86,779	16.4	38,950	7.4	33,258	6.3	70,512	13.3
<b>South Atlantic</b> .....	<b>18,612,465</b>	<b>12,668,652</b>	<b>1,565,927</b>	<b>76.5</b>	<b>2,652,573</b>	<b>14.2</b>	<b>589,830</b>	<b>3.2</b>	<b>856,125</b>	<b>4.6</b>	<b>279,358</b>	<b>1.5</b>
Del. ....	549,696	395,569	87,025	87.8	41,270	7.5	5,426	1.0	12,301	2.2	8,105	1.5
D.C. ....	1,044,700	800,700	78,000	84.1	120,400	11.5	45,600	4.4	—	—	—	—
Fla. ....	4,569,125	2,766,744	452,647	70.4	566,770	12.4	304,672	6.7	397,084	8.7	81,208	1.8
Ga. ....	2,705,192	1,744,885	396,077	79.1	364,065	13.5	72,945	2.7	34,860	1.3	92,360	3.4
Md. ....	4,384,323	3,369,595	—	76.9	723,510	16.5	31,105	0.7	254,670	5.8	5,443	0.1
N.C. ....	2,739,532	1,803,802	311,130	77.2	399,983	14.6	86,617	3.2	85,075	3.1	52,925	1.9
S.C. ....	1,825,112	1,228,969	193,947	78.0	327,072	17.9	6,663	0.4	39,509	2.1	28,952	1.6
Va. ....	—	—	—	—	—	—	—	—	—	—	—	—
W. Va. ....	794,785	558,388	47,101	76.2	109,503	13.8	36,802	4.6	32,626	4.1	10,365	1.3
<b>East South Central</b> .....	<b>8,693,634</b>	<b>5,674,314</b>	<b>735,800</b>	<b>73.7</b>	<b>1,206,924</b>	<b>13.9</b>	<b>316,051</b>	<b>3.6</b>	<b>535,947</b>	<b>6.2</b>	<b>224,598</b>	<b>2.6</b>
Ala. ....	3,456,353	2,482,587	224,009	78.3	589,634	17.1	83,323	2.4	64,800	1.9	12,000	0.3
Ky. ....	2,066,731	1,048,640	164,894	58.7	272,297	13.2	170,794	8.3	254,865	12.3	155,241	7.5
Miss. ....	902,897	557,940	99,753	72.8	156,957	17.4	4,694	0.5	79,477	8.8	4,076	0.5
Tenn. ....	2,267,653	1,585,147	247,144	80.8	188,036	8.3	57,240	2.5	136,805	6.0	53,281	2.4
<b>West South Central</b> .....	<b>9,252,973</b>	<b>5,263,234</b>	<b>977,268</b>	<b>67.4</b>	<b>951,692</b>	<b>10.3</b>	<b>720,313</b>	<b>7.8</b>	<b>1,292,037</b>	<b>14.0</b>	<b>48,429</b>	<b>0.5</b>
Ark. ....	1,085,231	598,187	118,518	66.0	123,626	11.4	7,891	0.7	236,159	21.8	850	0.1
La. ....	2,273,135	1,615,720	164,140	78.3	180,705	7.9	144,268	6.3	155,378	6.8	12,924	0.7
Okla. ....	964,107	646,827	143,110	81.9	105,361	10.9	21,654	2.3	32,500	3.4	14,655	1.5
Tex. ....	4,930,500	2,402,500	551,500	59.9	542,000	11.0	546,500	11.1	868,000	17.6	20,000	0.4
<b>Mountain</b> .....	<b>9,306,448</b>	<b>5,925,566</b>	<b>857,079</b>	<b>72.9</b>	<b>1,043,701</b>	<b>11.2</b>	<b>622,658</b>	<b>6.7</b>	<b>730,235</b>	<b>7.8</b>	<b>127,209</b>	<b>1.4</b>
Ariz. ....	1,499,592	905,343	180,432	72.4	142,198	9.5	49,161	3.3	196,644	13.1	25,814	1.7
Colo. ....	1,537,209	1,165,498	152,809	85.8	196,852	12.8	10,150	0.6	—	—	11,900	0.8
Ida. ....	1,351,495	965,199	—	71.4	314,813	23.3	71,483	5.3	—	—	—	—
Mont. ....	514,230	342,482	55,783	77.4	49,174	9.6	22,677	4.4	17,964	3.5	26,150	5.1
Nev. ....	828,403	473,178	74,755	66.1	52,841	6.4	168,026	20.3	43,080	5.2	16,523	2.0
N.M. ....	1,684,177	938,506	135,009	63.7	144,162	8.6	87,434	5.2	353,174	21.0	25,892	1.5
Utah ....	1,619,369	952,229	230,962	73.1	124,707	7.7	198,346	12.3	102,663	6.3	10,462	0.6
Wyo. ....	271,973	183,131	27,329	77.4	18,954	7.0	15,381	5.7	16,710	6.1	10,468	3.8
<b>Pacific</b> .....	<b>17,253,870</b>	<b>10,115,084</b>	<b>2,288,647</b>	<b>71.9</b>	<b>1,376,886</b>	<b>8.0</b>	<b>1,349,477</b>	<b>7.8</b>	<b>957,799</b>	<b>5.5</b>	<b>1,165,977</b>	<b>6.8</b>
Alaska .....	—	—	—	—	—	—	—	—	—	—	—	—
Cal. ....	12,884,665	7,271,876	1,765,946	70.1	1,089,553	8.5	1,211,247	9.4	440,380	3.4	1,105,663	8.6
Hawaii ....	987,941	700,155	142,031	85.2	67,617	6.8	67,443	6.8	8,595	1.0	2,100	0.2
Ore. ....	1,531,804	814,017	154,734	63.2	139,716	9.1	70,237	4.7	343,470	22.4	9,630	0.6
Wash. ....	1,849,460	1,329,036	225,936	84.0	80,000	4.3	550	0.1	165,354	9.0	48,584	2.6
<b>Territories</b> .....	<b>1,096,000</b>	<b>842,048</b>	<b>54,653</b>	<b>81.8</b>	<b>111,867</b>	<b>10.2</b>	<b>59,300</b>	<b>5.4</b>	<b>10,856</b>	<b>1.0</b>	<b>17,276</b>	<b>1.6</b>
Guam .....	187,545	147,212	17,420	87.8	18,538	9.9	3,900	2.0	475	0.3	—	—
P.R. ....	908,455	694,836	37,233	80.6	93,329	10.3	55,400	6.1	10,381	1.1	17,276	1.9
V.I. ....	—	—	—	—	—	—	—	—	—	—	—	—

(A) "Other" included with "General Operating Expenditures" (B) Includes Indirect Cost

**Table 3-2  
SOURCES OF LABORATORY FUNDS**

Lab & Region	Total Laboratory Budget	State Funds		Federal Funds		Earned Funds		Other Funds	
		Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.	Amount	% of Total Exp.
<b>Total</b> .....	<b>114,723,883</b>	<b>81,100,176</b>	<b>70.7</b>	<b>25,569,648</b>	<b>22.3</b>	<b>6,266,550</b>	<b>5.5</b>	<b>1,787,509</b>	<b>1.5</b>
Average .....	2,341,304	1,655,106	—	521,830	—	127,889	—	36,480	—
<b>New England</b> .....	<b>12,191,173</b>	<b>9,825,976</b>	<b>80.6</b>	<b>1,604,071</b>	<b>13.2</b>	<b>725,867</b>	<b>5.9</b>	<b>35,259</b>	<b>0.3</b>
Conn. ....	3,824,259	3,605,879	94.3	218,380	5.7	—	—	—	—
Mass. ....	4,069,498	3,645,705	89.6	423,793	10.4	—	—	—	—
Me. ....	1,139,386	227,086	19.9	151,174	13.3	725,867	63.7	35,259	3.1
N.H. ....	365,979	270,179	73.8	95,800	26.2	—	—	—	—
R.I. ....	2,307,674	1,781,359	77.2	526,315	22.8	—	—	—	—
Vt. ....	484,377	295,768	61.1	188,609	38.9	—	—	—	—
<b>Middle Atlantic</b> .....	<b>7,297,067</b>	<b>5,815,722</b>	<b>79.7</b>	<b>1,095,521</b>	<b>15.0</b>	<b>385,824</b>	<b>5.3</b>	—	—
N.J. ....	4,672,067	3,615,722	77.4	670,521	14.3	385,824	8.3	—	—
N.Y. ....	—	—	—	—	—	—	—	—	—
Pa. ....	2,625,000	2,200,000	83.8	425,000	16.2	—	—	—	—
<b>East North Central</b> .....	<b>22,456,804</b>	<b>13,208,241</b>	<b>58.8</b>	<b>6,292,698</b>	<b>28.0</b>	<b>2,248,998</b>	<b>10.0</b>	<b>706,867</b>	<b>3.2</b>
Ill. ....	2,965,835	374,622	12.6	2,591,213	87.4	—	—	—	—
Ind. ....	2,122,173	1,861,547	87.7	260,626	12.3	—	—	—	—
Mich. ....	9,927,490	8,504,444	85.7	1,275,335	12.8	—	—	147,711	1.5
Ohio ....	4,047,772	670,644	16.6	1,996,588	49.3	821,384	20.3	559,156	13.8
Wisc. ....	3,393,534	1,796,984	52.9	168,936	5.0	1,427,614	42.1	—	—
<b>West North Central</b> .....	<b>9,471,904</b>	<b>5,121,847</b>	<b>54.1</b>	<b>2,887,553</b>	<b>30.5</b>	<b>596,677</b>	<b>6.3</b>	<b>865,827</b>	<b>9.1</b>
Ia. ....	2,943,618	1,471,351	50.0	144,594	4.9	520,000	17.7	807,673	27.4
Kans. ....	1,561,380	1,285,104	82.3	276,276	17.7	—	—	—	—
Minn. ....	1,724,345	1,251,531	72.6	472,814	27.4	—	—	—	—
Mo. ....	1,571,083	383,588	24.4	1,129,341	71.9	—	—	58,154	3.7
Nebr. ....	533,622	195,290	36.6	307,271	57.6	31,061	5.8	—	—
N.D. ....	609,162	258,068	42.4	346,970	57.0	4,124	0.6	—	—
S.D. ....	528,694	276,915	52.4	210,287	39.8	41,492	7.8	—	—
<b>South Atlantic</b> .....	<b>18,612,465</b>	<b>14,058,871</b>	<b>75.5</b>	<b>3,728,181</b>	<b>20.0</b>	<b>645,857</b>	<b>3.5</b>	<b>179,556</b>	<b>1.0</b>
Del. ....	549,696	348,398	63.4	201,298	36.6	—	—	—	—
D.C. ....	1,044,700	827,800	79.2	216,900	20.8	—	—	—	—
Fla. ....	4,569,125	2,949,795	64.6	1,428,924	31.3	10,850	0.2	179,556	3.9
Ga. ....	2,705,192	2,361,517	87.3	343,675	12.7	—	—	—	—
Md. ....	4,384,323	4,066,872	92.8	317,451	7.2	—	—	—	—
N.C. ....	2,739,532	1,854,371	67.7	600,433	21.9	284,728	10.4	—	—
S.C. ....	1,825,112	1,263,751	69.2	211,082	11.6	350,279	19.2	—	—
Va. ....	—	—	—	—	—	—	—	—	—
W. Va. ....	794,785	386,367	48.6	408,418	51.4	—	—	—	—
<b>East South Central</b> .....	<b>8,693,634</b>	<b>6,191,314</b>	<b>71.2</b>	<b>2,053,916</b>	<b>23.6</b>	<b>448,404</b>	<b>5.2</b>	—	—
Ala. ....	3,456,353	2,412,103	69.8	1,044,250	30.2	—	—	—	—
Ky. ....	2,066,731	1,438,200	69.6	430,582	20.8	197,949	9.6	—	—
Miss. ....	902,897	223,078	24.7	516,777	57.2	163,042	18.1	—	—
Tenn. ....	2,267,653	2,117,933	93.4	62,307	2.8	87,413	3.8	—	—
<b>West South Central</b> .....	<b>9,252,973</b>	<b>7,323,563</b>	<b>79.1</b>	<b>1,913,982</b>	<b>20.7</b>	<b>15,428</b>	<b>0.2</b>	—	—
Ark. ....	1,085,231	706,145	65.1	363,658	33.5	15,428	1.4	—	—
La. ....	2,273,135	2,146,459	94.4	126,676	5.6	—	—	—	—
Okla. ....	964,107	679,959	70.5	284,148	29.5	—	—	—	—
Tex. ....	4,930,500	3,791,000	76.9	1,139,500	23.1	—	—	—	—
<b>Mountain</b> .....	<b>9,306,448</b>	<b>5,854,343</b>	<b>62.9</b>	<b>3,127,270</b>	<b>33.6</b>	<b>324,835</b>	<b>3.5</b>	—	—
Ariz. ....	1,499,592	739,049	49.3	760,543	50.7	—	—	—	—
Colo. ....	1,537,209	778,196	50.6	700,013	45.6	59,000	3.8	—	—
Ida. ....	1,351,495	819,692	60.7	374,803	27.7	157,000	11.6	—	—
Mont. ....	514,230	175,143	34.0	266,680	51.9	72,407	14.1	—	—
Nev. ....	828,403	630,523	76.1	193,880	23.4	4,000	0.5	—	—
N.M. ....	1,684,177	1,375,577	81.7	308,600	18.3	—	—	—	—
Utah ....	1,619,369	1,177,313	72.7	409,628	25.3	32,428	2.0	—	—
Wyo. ....	271,973	158,850	58.4	113,123	41.6	—	—	—	—
<b>Pacific</b> .....	<b>17,253,870</b>	<b>13,555,773</b>	<b>78.6</b>	<b>2,823,437</b>	<b>16.3</b>	<b>874,660</b>	<b>5.1</b>	—	—
Alaska ....	—	—	—	—	—	—	—	—	—
Cal. ....	12,884,665	10,428,981	80.9	1,967,899	15.3	487,785	3.8	—	—
Hawaii ....	987,941	766,556	77.6	221,385	22.4	—	—	—	—
Ore. ....	1,531,804	904,929	59.1	371,225	24.2	255,650	16.7	—	—
Wash. ....	1,849,460	1,455,307	78.7	262,928	14.2	131,225	7.1	—	—
<b>Territories</b> .....	<b>187,545</b>	<b>144,526</b>	<b>77.1</b>	<b>43,019</b>	<b>22.9</b>	—	—	—	—
Guam ....	187,545	144,526	77.1	43,019	22.9	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—	—	—

Lab & Region	Total Lab Expenditure	I Diagnostic Bacteriology		M
		\$	%	
<b>New England</b> .....				
Conn. ....	3,824,259	380,000	9.9	17.0
Mass. ....	4,069,498	—	—	
Me. ....	1,139,386	268,864	23.6	4.4
N.H. ....	365,979	242,995#	66.4	
R.I. ....	2,307,674	271,473#	11.8	
Vt. ....	484,377	71,900	14.8	9.3
<b>Middle Atlantic</b> .....				
N.J. ....	4,672,067	746,232	16.0	
N.Y. ....	—	—	—	
Pa. ....	2,625,000	505,200#	19.3	
<b>East North Central</b> ....				
Ill. ....	2,965,835	460,000	15.5	29.0
Ind. ....	2,122,173	—	—	
Mich. ....	9,927,490	2,684,391#	27.0	
Ohio ....	4,047,772	1,254,896#	31.0	
Wisc. ....	3,393,534	302,029	8.9	62.7
<b>West North Central</b> ...				
Ia. ....	2,943,618	188,387	6.4	46.2
Kans. ....	—	—	—	
Minn. ....	1,724,345	303,048	17.7	41.9
Mo. ....	1,571,083	409,110	26.0	24.3
Nebr. ....	533,622	131,440	24.6	
N.D. ....	609,162	157,773#	25.9	
S.D. ....	528,694	129,316#	24.5	
<b>South Atlantic</b> .....				
Del. ....	549,696	56,666	10.3	9.9
D.C. ....	1,044,700	169,152	16.2	63.8
Fla. ....	4,569,125	—	—	
Ga. ....	2,705,192	839,997	31.0	55.5
Md. ....	4,384,323	974,854	22.2	9.9
N.C. ....	2,739,532	424,944#	15.5	
S.C. ....	1,825,112	280,037	15.3	49.2
Va. ....	—	—	—	
W. Va. ....	794,785	123,166#	15.5	
<b>East South Central</b> ....				
Ala. ....	—	—	—	
Ky. ....	2,066,731	189,000	9.2	27.0
Miss. ....	902,897	253,690#	28.1	
Tenn. ....	2,267,653	446,530	19.7	21.5
<b>West South Central</b> ...				
Ark. ....	1,085,231	513,110#	47.3	
La. ....	—	—	—	
Okla. ....	964,107	174,503	18.1	9.6
Tex. ....	4,930,500	2,282,500	46.3	
<b>Mountain</b> .....				
Ariz. ....	1,499,592	757,936#	50.5	
Colo. ....	1,537,209	545,444#	35.5	
Ida. ....	1,351,495	646,882#	47.9	
Mont. ....	514,230	58,554#	11.4	
Nev. ....	828,403	99,409#	12.0	
N.M. ....	1,684,177	173,934#	10.3	70.3
Utah ....	1,619,369	536,424#	33.1	
Wyo. ....	271,973	162,952#	59.9	
<b>Pacific</b> .....				
Alaska ....	—	—	—	
Cal. ....	—	—	—	
Hawaii ....	987,941	464,332	47.0	
Ore. ....	1,531,804	213,611#	13.9	
Wash. ....	—	—	—	
<b>Territories</b> .....				
Guam ....	—	—	—	
P.R. ....	—	—	—	
V.I. ....	—	—	—	

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 Hamatology		VII Clinical Chemistry		VIII Pathology		IX Environmental Microbiology		X Environmental Chemistry		XI Occupational Health/Safety		XII Toxicology		XIII Lab Improvement Program		XIV Biol., Reagent Media Prod.		XV Research & Development		XVI Administrative Support & Other				
		\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%					
<b>New England</b>	3,824,259	380,000	9.9	17,000	0.5	69,000	1.8	69,000	1.8	265,000	6.9	47,000	1.2	265,000	6.9	16,000	0.4	132,000	3.5	578,000	15.1	33,000	0.9	486,000	12.7	224,000	5.9	85,000	2.2			1,158,259	30.3			
Conn.	4,069,498																																			
Mass.	1,139,386	268,864	23.6	4,436	0.4	2,115	0.2	37,176	3.3	121,482	10.7			53,918	4.7			78,076	6.8	204,131	17.9	226,910	19.9			30,569	2.7			33,918	3.0	77,791	6.8			
Me.	365,979	242,995#	66.4																																	
N.H.	2,307,674	271,473#	11.8							169,355	7.3			19,378	5.3								3,910	1.1			41,693	1.8			99,696	27.2				
R.I.	484,377	71,900	14.8	9,300	1.9	16,600	3.4	38,000	7.9	50,200	10.4			141,356	6.1			40,100	8.3	56,400	11.6		46,600	9.6	1,777	0.4	37,000	7.6			441,810	19.1				
Vt.																																	116,500	24.1		
<b>Middle Atlantic</b>	4,672,067	746,232	16.0					543,441	11.6			239,872	5.1	1,128,412	24.2																		1,471,583	31.5		
N.J.																																				
N.Y.																																				
Pa.	2,625,000	505,200#	19.3					399,950#	15.2															140,000	5.3	475,100	18.1						739,550	28.2		
<b>East North Central</b>	2,965,835	460,000	15.5	29,000	1.0	31,000	1.0	269,000	9.1	200,000	6.7																							445,500	15.0	
Ill.	2,122,173																																			
Ind.	9,927,490	2,684,391#	27.0																																	
Mich.	4,047,772	1,254,896#	31.0											178,154	4.4			928,011#	22.9			IX		440,186	10.9	266,022	6.6	2,389,400	24.1	1,115,278	11.2	3,450,394	34.8			
Ohio	3,393,534	302,029	8.9	62,741	1.8			365,063	10.8	325,332	9.6			436,708	12.9			407,980	12.0	166,756	4.9		156,264	4.6			107,899	2.7	101,211	3.0			1,069,460	31.5		
Wis.																																				
<b>West North Central</b>	2,943,618	188,387	6.4	46,240	1.6	15,962	0.5	174,750	5.9	119,917	4.1			12,036	0.4					82,586	2.8	843,171	28.6	178,793	6.1	14,658	0.5	210,190	7.1	125,215	4.3			931,713	31.7	
Ill.																																				
Kans.																																				
Minn.	1,724,345	303,048	17.7	41,968	2.4	45,205	2.6	337,668	19.6	450,617	26.1			84,935	4.9	86,308	5.0			188,530	12.0	144,540	9.2			219,741	12.7	44,450	2.6			110,315	6.4			
Mo.	1,571,083	409,110	26.0	24,352	1.6	19,481	1.2	265,827	16.9	235,662	15.0	16,968	1.1	41,948	2.7					188,530	12.0	144,540	9.2	4,713#	0.3	219,952#	14.0									
Nebr.	533,622	131,440	24.6							49,723	9.3			13,766	2.6					110,536	20.7	106,504	20.0													
N.D.	609,162	157,773#	25.9											45,078	7.4					110,536	20.7	106,504	20.0	121,653	22.8			17,056	2.8	20,102	3.3			139,495	22.9	
S.D.	528,694	129,316#	24.5											51,778	8.5					124,849#	23.6							86,987	16.5					187,542#	35.4	
<b>South Atlantic</b>	549,696	56,666	10.3	944	0.2	998	0.2	82,368	15.0	17,281	3.1	10,897	2.0	4,888	0.9	111,969	20.4	38,641	7.0	39,956	7.3	396	0.1	14,025	2.5	5,666	1.0							165,001	30.0	
D.C.	1,044,700	169,152	16.2	63,812	6.1	14,074	1.3			124,733	11.9	128,562	12.3	73,816	7.1	109,604	10.5	38,139	3.7	1,913	0.2			142,018	13.6	42,133	4.0	27,911	2.7					108,833	10.4	
Fla.	4,569,125																																			
Ga.	2,705,192	839,997	31.0	55,500	2.1	95,649	3.5	192,094	7.1	498,191	18.4	80,649	3.0	195,500	7.2							21,676	0.8	181,552	6.7			144,893	5.4	10,716	0.4			388,775	14.4	
Id.	4,384,323	974,854	22.2	9,996	0.2	19,027	0.4	129,249	3.0	742,879	16.9	231,273	5.3	463,554	10.6	324,051	7.4	368,283	8.4	887,430	20.2	91,237	2.1	21,790	0.5	120,700	2.8									
N.C.	2,739,532	424,944#	15.5							655,453	23.9			339,293	12.4	418,550	15.3																			
S.C.	1,825,112	280,037	15.3	49,221	2.7	58,437	3.2	89,016	4.9	270,532	14.8	76,517	4.2	137,123	7.5									127,862	7.0	31,434	1.7	4,800	0.3					536,647	29.4	
Va.																																				
W. Va.	794,785	123,166#	15.5			38,430	4.8	52,837	6.6	54,843	6.9			96,997	12.2	66,545	8.4	66,511	8.4									57,041	7.2	176,364	22.2			62,051	7.8	
<b>East South Central</b>	2,066,731	189,000	9.2	27,020	1.3	27,020	1.3	54,041	2.6	378,000	18.3	81,061	3.9	216,076	10.5	243,808	11.8	162,122	7.8	243,183	11.8	81,061	3.9	189,000	9.1	118,410	5.7							56,929	2.8	
Ky.	902,897	253,690#	28.1			144,474#	16.0							110,879	12.3			194,144	21.5	44,503	4.9													155,207	17.2	
Miss.	2,267,653	446,530	19.7	21,564	0.9	33,862	1.5	107,393	4.7	190,123	8.4	38,695	1.7					171,770	7.6															960,599	42.4	
Tenn.																																				
<b>West South Central</b>	1,085,231	513,110#	47.3									168,087#	15.5					141,547	13.0																209,550	19.3
Ark.																																				
La.																																				
Okla.	964,107	174,503	18.1	9,641	1.0	18,318	1.9	55,918	5.8	170,647	17.7	14,462	1.5	53,990	5.6			120,513	12.5	16,390	1.7					46,277	4.8			5,785	0.6			277,663	28.8	
Tex.	4,930,500	2,282,500	46.3			152,000	3.1	198,000	4.0	806,500	16.4			593,500	12.0					685,000	13.9					213,000	4.3									
<b>Mountain</b>	1,499,592	757,936#	50.5																	217,410	14.5	30,832	2.1			170,102	11.3							323,283	21.6	

**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				
Ala. ....	<b>Federal</b>	<b>Medicaid — Sickle Cell</b> (Electrophoretic separation of filter paper blood specimens for the detection of abnormal hemoglobins)	Micro. IV	.15	Pers.	33,062		
			Micro. III	.25	Supp.	1,703		
			Micro. II	.35	Equip.	2,658		
			Micro. I	.55	Other	929		
			Lab. Tech. II	.35	<b>Total</b>	<b>38,352</b>		
			Clerk Typist II	.95				
		<b>Medicaid — Intestinal Parasites</b> (Microscopic examinations of formalized specimens for the detection of Helminth and protozoa)	Micro. III	.30	Pers.	16,041		
			Micro. I	.20	Supp.	1,198		
			Lab. Tech. II	.40	Equip.	1,312		
			Clerk Steno III	.15	Other	642		
			Clerk Typist II	.10	<b>Total</b>	<b>19,193</b>		
		<b>Medicaid — Pinworm</b> (Microscopic examination of taped slide preparation for the detection of pinworms.)	Micro. II	.12	Pers.	6,784		
			Lab. Tech. II	.25	Supp.	481		
			Clerk Typist II	.10	Equip.	583		
			Lab. Tech. I	.05	Other	516		
			<b>Total</b>		<b>8,364</b>			
<b>Medicaid — Lead</b> (Epp. & Blood lead determination Pelves Cup)	Micro. IV	.10	Pers.	15,659				
	Micro. III	.20	Supp.	910				
	Micro. I	.60	Equip.	36,000				
	Clerk Typist II	.25	Other	220				
	<b>Total</b>		<b>52,789</b>					
Ariz. ....	<b>Federal</b>	<b>HIB (Medicare)</b> (Laboratory certification)	Lab. Cons. Surveyor	1.0	Pers.	32,071		
			Typist II	1.0	Supp.	1,949		
					Equip.	851		
					Other	13,158		
				<b>Total</b>	<b>48,029</b>			
		<b>EPA (Safe Drinking Water)</b> (Environmental laboratory certification)	Lab. Cons. Surveyor	1.0	Pers.	26,972		
			Typist II	1.0	Supp.	3,441		
					Other	1,099		
				<b>Total</b>	<b>31,512</b>			
		<b>EPA (Air Pollution)</b> (Laboratory analysis of samples)	Chemist III	1.0	Pers.	23,771		
					<b>Total</b>	<b>23,771</b>		
		<b>EPA (Water Pollution)</b> (Laboratory analysis of samples)	Chemist III	1.0	Pers.	23,346		
			<b>Total</b>	<b>23,346</b>				
State	<b>Arizona Dairy Commission</b> (Laboratory analysis of dairy products)	Chemist II	2.0	Pers.	94,819			
		Lab. Tech. II	5.0	Supp.	43,379			
		Typist II	1.0	Equip.	33,056			
				Other	4,463			
				<b>Total</b>	<b>175,717</b>			
		<b>Arizona Industrial Commission</b> (Laboratory analysis of industrial hygiene samples)	Chemist III	1.0	Pers.	28,842		
			Lab. Tech. I	1.0	Supp.	526		
					Other	1,464		
					<b>Total</b>	<b>30,832</b>		
		Ark. ....	<b>Federal</b>	<b>Development Grant (314d)</b> (General Services)	—	23.0	Pers.	268,320
							Supp.	29,794
							Equip.	504
					Other	75,040		
				<b>Total</b>	<b>373,658</b>			
<b>Safe Drinking Water Act</b> (Bacteriological Analysis)	—	2.0	Pers.	41,111				
			Supp.	11,599				
			Other	13,705				
		<b>Total</b>	<b>66,415</b>					

**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	
Cal.....	<b>Federal</b>				
	<b>Federal Environmental Protection Agency</b> (Calibration of particulate mass monitors)	Res. Spec. III Res. Spec. I Adm. Asst.	.25 .20 .10	Pers. Supp. Equip. Other	17,896 2,000 1,200 8,859
				<b>Total</b>	<b>29,955</b>
	<b>Federal Environmental Protection Agency</b> (Improvement & evaluation of methods for sulfate analysis)	Res. Spec. III Res. Chem. Chem. II Chem. III Std. Asst.	.15 .25 .70 .15 .60	Pers. Supp. Other	48,596 2,196 18,532
				<b>Total</b>	<b>69,324</b>
	<b>Federal Environmental Protection Agency</b> (Improve design and validate sampler for inhaled particles)	Res. Spec. III Res. Spec. I Chem. II	0.5 0.5 0.15 1.0	Pers. Supp. Equip. Other	42,479 4,000 4,776 38,526
				<b>Total</b>	<b>89,781</b>
	<b>BMSRG</b> (Identify carcinogens by cell transformation tech.)	Chem. II	1.0	Pers. Other	23,724 800
				<b>Total</b>	<b>24,524</b>
	<b>Federal Environmental Protection Agency</b> (Conference on methods in air pollution studies)	Off. Asst.	0.5	Pers. Other	6,000 11,200
				<b>Total</b>	<b>17,200</b>
	<b>DHEW Extramural Programs, National Institute of Allergy and Infectious Diseases (NIAID)</b> (Studies on the pathogenesis of naegleria infections)	Research Spec. II P.H. Micro. I	1.0 0.6	Pers. Supp. Other	49,059 3,879 2,075
				<b>Total</b>	<b>55,013</b>
	<b>DHEW Extramural Programs, National Institute of Allergy and Infectious Diseases (NIAID)</b> (Electron microscopic studies of selected viral agents.)	Laboratory Asst.	1.0	Pers. Supp. Equip. Other	13,689 5,864 553 215
				<b>Total</b>	<b>20,321</b>
	<b>DHEW Extramural Programs, National Institute of Allergy and Infectious Diseases (NIAID)</b> (Immunology and epidemiology of certain viral diseases)	Research Spec. P.H. Micro. I Lab. Asst./An. Tech. Postdoc. Fellow	1.0 3.8 4.0 1.0	Pers. Supp. Other	190,133 17,000 16,210
				<b>Total</b>	<b>223,343</b>
	<b>US Army Medical Research and Development Command</b> (Development of psoralen photoinactivated alphavirus and arenavirus vaccines.)	Research Spec. II P.H. Micro. I Lab. Asst.	1.0 0.5 0.8	Pers. Supp. Other	58,883 5,675 15,443
				<b>Total</b>	<b>80,001</b>
	<b>National Institutes of Health Procurement Branch/National Cancer Institute (NCI)</b> (NCI collaborative studies (cancer virus studies))	P.H. Micro. I Animal Tech.	1.6 3.0	Pers. Supp. Other	89,461 9,888 26,149
				<b>Total</b>	<b>125,498</b>
	<b>National Science Foundation — Division of Cell Biology</b> (Cytogenetic and immunological studies on virus-induced cell transformation in marsupial cell cultures.)	P.H. Micro. I	0.6	Pers. Supp. Other	12,073 3,897 4,030
				<b>Total</b>	<b>20,000</b>
	<b>Health Effects Research Laboratory — EPA</b> (Studies on viruses in water and reclaimed waste-water.)	P.H. Micro. I Lab. Asst.	2.0 1.0	Pers. Supp. Other	60,720 6,000 25,444
				<b>Total</b>	<b>92,164</b>

**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	
Cal. (Cont.)	<b>Environmental Protection Agency — Water Virology Laboratory Unit.</b> (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. Services are part of the support for Sanitary Engineering Section.)	Res. Spec. IV	1.0	Pers. 73,560	
		P.H. Micro. II	1.0	Supp. 5,000 Equip. 25,000 Other 27,227 <b>Total 130,787</b>	
Col.....	<b>State</b> (State Department of Highways — Alcohol test laboratory)	—	2.0	Pers. 53,054 Supp. 5,692 Equip. 5,000 Other 7,200 <b>Total 70,946</b>	
Conn.....	<b>Federal</b>				
	<b>Medicare</b> (Laboratory improvement)	Sr. Clerk	1.0	Pers. 76,632	
		Supv Med. Examiner	0.8	<b>Total 76,632</b>	
		Med. Examiners	1.6		
		Asst. Biochemist	1.0		
		Asst. Director	0.3		
		<b>314D Block Grant</b> (Toxicology reports)	Clerk-Typist	1.0	Pers. 8,204 <b>Total 8,204</b>
		(Lab. equip. maintainer)	Asst. Main. Foreman	1.0	Pers. 13,610 <b>Total 13,610</b>
		(Parasitology)	Sr. Micro.	1.0	Pers. 16,525 <b>Total 16,525</b>
		(Pub. Health Micro.)	Micro.	1.0	Pers. 11,040 <b>Total 11,040</b>
		(Radiological monitoring)	Sr. Env. Chem.	1.0	Pers. 16,525 <b>Total 16,525</b>
		(Potable water)	Chemist	1.0	Pers. 10,213 <b>Total 10,213</b>
		(Genetic disease screening)	Med. Tech. I	1.0	Pers. 11,765 <b>Total 11,765</b>
		(Diagnostic virology)	Micro.	0.8	Pers. 8,654 <b>Total 8,654</b>
	<b>Maternal and Child Hygiene</b> (Streptococcus cultures)	Lab. Helper	1.0	Pers. 8,263 <b>Total 8,263</b>	
	(Genetic disease screening)	Lab. Helper	0.4	Pers. 3,384 <b>Total 3,384</b>	
	(Lead screening)	Biochem.	1.0	Pers. 12,790 <b>Total 12,790</b>	
	(PKU)	Med. Tech. I	0.4	Pers. 5,166 <b>Total 5,166</b>	
	(V.D. Control)	Sr. Micro.	1.0	Pers. 15,609 <b>Total 15,609</b>	
D.C. ....	<b>Federal</b>				
	<b>Lead Poisoning Prevention</b> (Chemistry assays on human specimens)	Chemist	2.0	Pers. 67,860	
		Technician	2.0	Supp. 5,000 <b>Total 72,860</b>	
	<b>MIC/C + Y</b> (Various clinical tests on various specimens)	Chemist	1.0	Pers. 80,281	
		Technician	5.0	<b>Total 80,281</b>	

**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			
D.C. (Cont.)	<b>GC Testing Program</b> (Microbiological testing of male/female specimens)	Technician	2.0	Pers.	32,810		
		Clerk	0.5	Supp.	32,000		
				<b>Total</b>	<b>64,810</b>		
Ga. ....	<b>Federal</b> <b>Sexually Transmitted Disease Unit</b> (GC culture program)	Lab. Manager	1.0	Pers.	103,635		
		Sr. Lab. Sci.	1.0	Supp.	39,500		
		Sr. Lab. Tech.	3.0				
		Clerical	2.0	<b>Total</b>	<b>143,135</b>		
		<b>Division of Mental Health</b> (Urine testing for abuse drugs)	Lab. Manager	1.0	Pers.	125,012	
			Lab. Associate	1.0	Supp.	38,000	
			Prin. Lab. Tech.	2.0	Other	18,540	
			Sr. Lab. Tech.	2.0			
			Clerical	1.0	<b>Total</b>	<b>181,552</b>	
		<b>Adult Health Unit</b> (Hypertension Screening Program)	Lab. Scientist	1.0	Pers.	14,488	
					Supp.	4,500	
					<b>Total</b>	<b>18,988</b>	
Ida. ....	<b>State</b> <b>Traffic Safety Commission</b> (Analysis — blood/breath for alcohol & drugs (DWI))	Criminalists (Chemists)	1.65	Pers.	40,372		
		Secretaries	0.6	Equip.	18,154		
					25,785		
				<b>Total</b>	<b>84,311</b>		
		<b>Department of Law Enforcement</b> (Handling reports associated with alcohol testing)	Secretaries	1.5	<b>Total</b>	<b>28,000</b>	
		<b>Law Enforcement Planning Commission</b> (Support of satellite forensic lab services in two branch laboratories)	Criminalists	0.5	Pers.	7,886	
					Supp.	8,500	
					Equip.	1,134	
					<b>Total</b>	<b>17,520</b>	
		Federal	<b>Environmental Protection Agency</b> (Establish and maintain certification program for water testing laboratories)	Microbiologist	0.25	Pers.	15,377
				Chemist	0.25	Supp.	1,669
Secretary	0.5			<b>Total</b>	<b>17,046</b>		
<b>Environmental Protection Agency</b> (Studies of human effects due to pesticides and related products)	Coordinator			1.0	Pers.	151,897	
	Chemist			5.0	Supp.	39,240	
	Support			1.0	Equip.	290	
	Secretary			1.0	<b>Total</b>	<b>191,427</b>	
<b>CDC — USPHS — Laboratory Improvement (2 grants)</b> (To provide training, consultation & proficiency testing to physician office & other small laboratories)	Lab surveyor			2.0	Pers.	62,066	
	Lab. Tech.			1.0	Supp.	42,129	
	Sec. & Support			3.0	<b>Total</b>	<b>104,195</b>	
Ill. ....	<b>Federal</b> (Laboratory Training Workshop (CDC))			Micro. III	1.0	Pers.	29,500
				Micro. I	1.0	Supp.	4,500
				Equip.	1,200		
				Other	7,000		
				<b>Total</b>	<b>42,200</b>		
Ia. ....	<b>Federal</b> <b>Center for Disease Control</b> (Continuing education contracts (2) to provide a continuing education program via a mobile library and through loaner training packets throughout Iowa)	—	2.3	Pers.	41,639		
				Supp.	5,833		
				Equip.	592		
				Other	26,449		
				<b>Total</b>	<b>74,513</b>		
Federal	(Proficiency testing contracts (2) to continue and expand existing proficiency testing programs)	—	1.0	Pers.	16,851		
				Supp.	18,528		
				Other	9,920		
				<b>Total</b>	<b>45,299</b>		

**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	
la. (Cont.)	<b>Medicare</b> (Surveys of hospital laboratories to insure compliance w/Medicare standards)	—	1.6	Pers.	45,041
				Supp.	170
				Other	16,137
				<b>Total</b>	<b>61,348</b>
	<b>NIOSH</b> (Analytical services as part of a subcontract for a coal liquefaction study)	—	1.4	Pers.	22,928
				Supp.	17,936
				Equip.	12,227
				Other	8,008
				<b>Total</b>	<b>61,099</b>
	<b>FDA</b> (To provide field testing of diagnostic x-ray system for standards compliance)	—	0.2	Pers.	4,591
			Supp.	44	
			Other	3,547	
			<b>Total</b>	<b>8,182</b>	
<b>EPA</b> (Water Quality/Bladder Cancer Study—Providing field sampling of water supplies and related data)	—	0.8	Pers.	11,187	
			Supp.	891	
			Other	4,522	
			<b>Total</b>	<b>16,600</b>	
<b>State</b>					
<b>DEQ</b> (Providing laboratory services for water quality surveillance)	—	7.2	Pers.	104,390	
			Supp.	57,312	
			Equip.	83,602	
			Other	43,142	
			<b>Total</b>	<b>288,446</b>	
<b>DEQ</b> (Providing laboratory services for air quality surveillance)	—	3.0	Pers.	60,634	
			Supp.	18,496	
			Equip.	107,835	
			Other	33,798	
			<b>Total</b>	<b>220,763</b>	
<b>Rubella Screening</b> (Screening of prenatal sera for rubella-susceptible mothers)	—	1.8	Pers.	27,828	
			Supp.	8,885	
			Other	804	
			<b>Total</b>	<b>37,517</b>	
<b>Gonorrhea Culture Program</b> (Providing culture services to physicians to detect asymptomatic patients)	—	1.0	Pers.	13,279	
			Supp.	7,705	
			Other	15,727	
			<b>Total</b>	<b>36,711</b>	
<b>Industrial Hygiene</b> (Providing laboratory services for Iowa Bureau of Labor)	—	3.5	Pers.	68,718	
			Supp.	9,298	
			Equip.	5,089	
			Other	18,684	
			<b>Total</b>	<b>101,789</b>	
<b>Kans. .... Federal</b>					
<b>Venereal Disease Control Project</b> (Gonorrhea culture screening of OB/GYN patients in private & public clinics for gonorrhea detection & control)	Micro. I Lab. Tech. Clerical	1.0 0.5 0.2	Supp.	7,000	
			<b>Total</b>	<b>7,000</b>	
<b>Water Pollution Control Project</b> (EPA laboratory support for National Pollution Discharge Elimination System (PL 92-500))	Chem. II Chem. I Micro. I Lab. Tech.	.5 1.0 1.0 1.0	Pers. Supp.	43,053 38,112	
			<b>Total</b>	<b>81,165</b>	
<b>Water Supply Program</b> (EPA laboratory support for Safe Drinking Water Act (PL 93-523) requirements in form of equipment grant from Federal funds)	Chem. III Chem. II Micro. I Rad. Chem. Lab. Tech.	1.0 1.5 1.0 1.0 1.0	Pers. Supp.	34,883 73,320	
			<b>Total</b>	<b>108,203</b>	

**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		
Kans. (Cont.)	<b>Air Quality Program — EPA laboratory</b> (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 state.)	Chem. II Clerical	0.75 0.1	Pers. <b>Total</b>	17,556 <b>17,556</b>	
	<b>Occupational Health Consultation</b> (Provide analytical support for onsite consultation services at employers work-site in accordance with the requirements of 29 CFR 1908.)	Chem. II Chem. I	.35 1.0	Pers. Supp. <b>Total</b>	18,370 1,000 <b>19,370</b>	
	<b>314d Funds — Public Health</b> (Laboratory Support)	Micro. III Micro. II Micro. I Chem. III Chem. II Chem. I Lab. Tech.	1.0 3.0 3.0 1.0 1.0 2.0 1.0	Pers. <b>Total</b>	168,210 <b>168,210</b>	
	<b>Title 18 Medicare Funds</b> (Surveys of hospital laboratories to insure compliance with Medicare standards.)	Lab. Cert. Supervisor Micro.	0.50  0.25	Pers. <b>Total</b>	13,225 <b>13,225</b>	
	<b>Private</b>					
	<b>Harvard Air/Lung Study</b> (Laboratory analytical services related to ambient air monitoring)	Chem. II	0.25	Other <b>Total</b>	7,000 <b>7,000</b>	
	Ky. ....	<b>Federal</b>				
		<b>Division for Maternal and Child Health</b> (PKU, Rh, Galactosemia and T4 testing.)	Microbiologist	7.0	Pers. Supp. Equip. Other <b>Total</b>	71,480 18,578 67,333 3,950 <b>161,341</b>
		<b>T&amp;A funds from Department of Natural Resources &amp; Environmental Protection</b> (Bacterial and chemical testing of private and public water)	Microbiologist Chemist Surveyor	3.0 3.0 1.0	Pers. Supp. <b>Total</b>	61,475 61,474 <b>122,949</b>
		<b>T&amp;A funds from Department of Labor</b> (Analysis of occupational samples)	Chemist Lab. Aide	2.5 0.5	Pers. Supp. <b>Total</b>	37,500 37,500 <b>75,000</b>
<b>Proficiency Testing</b> (Proficiency testing for approximately 210 laboratories.)		Lab. Aide Clerk Microbiologist Microbiologist Consultant	1.0 1.0 1.0 1.0 0.5	Pers. Supp. Equip. Other <b>Total</b>	37,166 11,140 1,420 523 <b>50,249</b>	
<b>Laboratory Training</b> (Training workshops for several clinical labs throughout the State.)		Microbiologist Consultant	1.0 0.5	Pers. Supp. Other <b>Total</b>	10,976 2,130 812 <b>13,918</b>	
Me. ....		<b>Federal/State</b>				
		<b>Medicare/Medicaid</b> (Laboratory surveillance for hospital licensure and services)		1.5	Pers. Supp. <b>Total</b>	22,569 850 <b>23,419</b>
	<b>State</b>					
	<b>Racing Comm.</b> (Urine analysis—harness racing)		1.5	Pers. <b>Total</b>	15,000 <b>15,000</b>	
Md. ....	<b>Federal</b>					
	<b>Cervical Cancer Screening Program</b> (Pap Smear screening of women who are ineligible for other public health programs)	Lab. Sci. III Lab. Sci. II Typ. Ck.	1.0 1.0 1.0	Pers. Supp. <b>Total</b>	30,532 3,606 <b>34,138</b>	
	<b>Air Pollution Act, Air Quality Control Program</b> (Constant monitoring of air throughout the state for pollutants)	Lab. Sci. Lab. Asst.	1.0 1.0	Pers. <b>Total</b>	21,819 <b>21,819</b>	

**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	
Md. (Cont.)	<b>Occupational and Safety Health Act, Division of Labor and Industry</b> (Laboratory testing of samples submitted by the MOSHA Program)	Lab. Sci. III	2.0	Pers.	43,722
		Lab. Sci. I	1.0	Supp.	4,389
		Lab. Asst.	3.0	Equip.	225
				Other	10,476
				<b>Total</b>	<b>58,812</b>
	<b>Crippled Childrens Program for laboratory supplies</b> (Testing for inborn errors of metabolism in newborns)	—	—	Supp.	75,852
				<b>Total</b>	<b>75,852</b>
	<b>Venereal Disease Control</b> (Testing for GC and Syphilis)	—	—	Supp.	69,560
				<b>Total</b>	<b>69,560</b>
	<b>Certification, Training and Field Services</b> (Licensure and inspection of laboratories for Medicare requirements)	Lab. Sci.	2.0	Pers.	36,300
				Supp.	7,970
				Equip.	2,000
				Other	11,000
				<b>Total</b>	<b>57,270</b>
Mass.....	<b>Federal</b>				
	<b>Center for Disease Control</b> (Laboratory Training Contract—MHRI#31660—9/22/78-3/21/80)	—	4.0	Pers.	72,700
				Supp.	6,800
				Other	15,845
				<b>Total</b>	<b>95,345</b>
	(Laboratory Training Contract—MHRI#31740—9/26/79-3/26/81)	—	4.0	Pers.	65,520
				Supp.	7,470
				Other	28,494
				<b>Total</b>	<b>101,484</b>
	(Technical Consultation Contract—MHRI#31670—9/25/78-3/24/80)	—	4.0	Pers.	74,417
				Supp.	1,500
				Other	10,356
				<b>Total</b>	<b>86,237</b>
	(Proficiency Testing Contract—MHRI#31690—7/12/79-1/12/81)	—	3.0	Pers.	64,776
				Supp.	20,000
				Other	26,871
				<b>Total</b>	<b>111,647</b>
Mich. ....	<b>Federal</b>				
	<b>Cancer Contract</b> (Special testing of cancer treatment drugs under development.)	Secret. 07	0.5	Pers.	51,711
		Micro. VII	1.0	Supp.	3,069
		Lab. Tech. III	1.0	Equip.	683
		Lab. Asst. II	0.5	<b>Total</b>	<b>55,463</b>
	<b>Brucellosis Contract</b> (Development of effective brucellosis vaccine.)	P.H. Lab. Sci. 13	1.0	Pers.	44,219
		Lab. Asst. II	1.0	Supp.	6,854
				Equip.	2,423
				<b>Total</b>	<b>53,496</b>
	<b>Rabies Vaccine Contract</b> (Research towards the improvement of rabies vaccine.)	Lab. Tech. 05	0.2	Pers.	2,283
				Supp.	500
				<b>Total</b>	<b>2,783</b>
	<b>PBB Contract</b> (Long term health study of persons exposed to PBB.)	Secret. IV B	1.0	Pers.	229,235
		Med. Lab. Tech. 07	3.0	Supp.	52,175
		Typist II B	1.0	Equip.	5,872
		Chem. 10	1.0	Other	14,011
		Lab. Tech. III	2.0	<b>Total</b>	<b>301,293</b>
		Lab. Asst. II	2.0		
		Stat. II	0.4		
		Stat. 09	1.0		
		Stat. Tech. 07	1.0		
		Calc. Clerk IV B	0.2		
	<b>314d Funds</b> General support for provision of vaccines & public health laboratory services.)	various levels & classes	27.5*	Pers.	508,500
				<b>Total</b>	<b>508,500</b>

\*Based on average Lab. Diag. Program Salaries.

**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	
Mich. (Cont.)	<b>Veneral Disease Contract</b> (Enhanced case finding, education and treatment of V.D.)	Lab. Tech. IV B	1.0	Pers.	64,685
		Micro. VI B	1.0		
		Micro. VI B	1.0	<b>Total</b>	<b>64,685</b>
	<b>Pesticides Contract</b> (Analysis of tissues for pesticides for monitoring performance of studies concerning pesticide exposure.)	P.H. Adm. 16	0.6	Pers.	125,744
		Steno. 05	1.0	Supp.	26,551
		Evn. Sanit. IX	1.0	Equip.	2,397
		P.H. Field Rep. 09	1.0	Other	8,989
		Lab. Tech. III	2.0		
		Lab. Sci. IX	1.0	<b>Total</b>	<b>163,681</b>
		Lab. Asst. II	0.8		
	<b>Laboratory Training Contract</b> (Development, administration and evaluation of the effectiveness of a laboratory training program for clinical and public health laboratories.)	Lab. Eval. Spec. VI B	1.0	Pers.	28,370
		Typist Clerk II B	1.0	Supp.	1,876
				Other	1,167
		<b>Total</b>		<b>31,413</b>	
	<b>Local</b>				
<b>Kent County Agreement</b> (Provides certain local laboratory services for County.)	Micro. VII	1.0	Pers.	66,362	
	Micro. VI B	1.0	Supp.	305	
	Lab. Tech. III	1.0	<b>Total</b>	<b>66,667</b>	
<b>Private</b>					
<b>Philips Duphar Influenza Contract</b> (Test the conditions for the preservation of attenuated influenza vaccine by freeze-drying.)	—	—	Supp.	7,937	
			Equip.	1,219	
			<b>Total</b>	<b>9,156</b>	
<b>Red Cross Agreement</b> (Research to develop or improve blood fractions.)	Lab. Sci. VII	1.0	Pers.	44,846	
	Lab. Tech. 07	1.0	Supp.	9,605	
			Equip.	5,298	
			Other	498	
	<b>Total</b>		<b>60,247</b>		
<b>Brucellosis Vaccine Contract with Meat Packing Companies</b> (Development of effective brucellosis vaccine.)	Student Asst. 07	0.8	Pers.	9,898	
			Supp.	1,743	
			<b>Total</b>	<b>11,641</b>	
Minn. ....	<b>Federal</b>				
<b>HEW, CDC</b> (Continuing education for laboratory personnel.)	Med. Techno.	1.0	Pers.	18,332	
	Med. Techni.	1.0	Supp.	2,220	
	Clerk-Typist	1.0	Equip.	184	
			Other	8,111	
			<b>Total</b>	<b>28,847</b>	
Mo. ....	<b>Federal</b>				
<b>FDA</b> (Performance of lab tests on food samples.)	—	1.0	—	—	
	<b>State</b>				
<b>State Milk Board</b> (Laboratory inspection and approval. Performance of laboratory tests on milk.)	—	0.5	—	—	
<b>Dept. of Natural Resources</b> (Public water supply testing bacteriological and chemical. Laboratory inspection.)	—	4.0	—	—	
<b>Division of Highway Safety</b> (Breath alcohol maintenance and calibration program.)	—	4.0	—	—	
Mont. ....	<b>Federal</b>				
<b>(CDC Developmental Assistance Contract. Laboratory Training—traveling workshops—continuing education and training for clinical laboratory techs.)</b>	1 Med. Tech.	1.0	Pers.	13,385	
	1 clerical	1.0	Supp.	1,893	
			Equip.	4,179	
			Other	5,211	
			<b>Total</b>	<b>24,668</b>	
	<b>State</b>				
<b>Montana Air Pollution Study</b> (Chemical laboratory support analysis of field samples for particulates, sulfate, nitrate, metals.)	1 Chemist		Pers.	19,750	
	1 Lab. Tech.		Supp.	2,155	
			Other	4	
			<b>Total</b>	<b>21,909</b>	

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

Lab	Source of Funds Programs Served & Services Provided	Staff Utilized	FTE	Costs		
Nev. ....	<b>State</b>					
	<b>Environmental Air and Water</b> (Chemical and bacteriological tests on water and air.)	Chem. 1.5 M.B. 0.2 Lab. Asst. 1.0 Admin. 0.1 Stock Clerk 0.1 Clerical 0.1		Pers. 46,440 Supp. 10,610 <b>Total 57,050</b>		
	<b>Federal</b>					
	<b>EPA Safe Drinking Water</b> (Chemical and bacteriological exams of drinking water.)	M.B. 0.4 Chem. 1.5 Lab. Asst. 2.3 Clerical 0.2 Admin. 0.1 Stock Clerk 0.2		Pers. 66,270 Supp. 40,204 Equip. 40,000 <b>Total 146,474</b>		
	<b>314D</b> (Communicable disease service.)	(undesignated)	—	Other 35,198 <b>Total 35,198</b>		
	N.J. ....	<b>Federal</b>				
		<b>VD Casefinding</b>	—	—	Pers. 82,506 Other 16,842 <b>Total 99,348</b>	
		<b>Pesticides Program</b>	—	—	Pers. 2,328 Supp. 1,997 Equip. 845 Other 463 <b>Total 5,633</b>	
		<b>CETA Program</b>	—	—	Pers. 9,256 <b>Total 9,256</b>	
		<b>Immunization Project</b>	—	—	Pers. 5,963 Other 1,184 <b>Total 7,147</b>	
<b>General Health Section 314d</b>		—	—	Pers. 510,450 Supp. 9,500 <b>Total 519,950</b>		
<b>Spec. Child &amp; Health Service Program</b>		—	—	Pers. 18,905 <b>Total 18,905</b>		
<b>Maternal &amp; Child Health—Title V</b>		—	—	Pers. 10,282 <b>Total 10,282</b>		
<b>Private (Earned Funds)</b>						
<b>Rabies</b>		—	—	Pers. 56,862 Supp. 2,500 <b>Total 59,362</b>		
<b>Laboratory Revolving Funds</b>	—	—	Pers. 152,270 Supp. 10,439 Equip. 82,509 Other 30,480 <b>Total 275,698</b>			
<b>Drinking Water Certificate</b>	—	—	Pers. 47,374 Supp. 194 Other 3,196 <b>Total 50,764</b>			
	<b>State</b> (Total State Funds)	—	—	Pers. 2,571,761 Supp. 410,614 Equip. 55,730 Other 577,617 <b>Total 3,615,722</b>		

**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		
N.C. ....	<b>Federal</b>					
	<b>OSHA Program</b> (Analytical testing support to field engineers investigating OSHA complaints )	Chem I Lab Tech	1 0 1 0	Pers Supp Equip Other	27,398 2,874 11,885 1,258	
				<b>Total</b>	<b>43,415</b>	
	<b>VD Control Project</b> (Gonorrhea lab advisor provides training PT to participating local health departments )	Lab Imp Consult Med Lab Tech II	0.5 1 0	Pers	28,167	
				<b>Total</b>	<b>28,167</b>	
	<b>CDC Technical Assistance</b> (Field training provided to local hospital labs )	Lab Imp Consult Clerk Typist III	1 0 1 0	Pers Supp Equip Other	7,996 5,373 16,349 2,067	
				<b>Total</b>	<b>31,785</b>	
	<b>Highway Safety Program</b> (Preparation & distribution of ethyl alcohol calibration standard solution for breathalyzers )	An Chem II An Chem I Chem An I Lab Tech Lab Tech	0 05 0 05 0 05 0 05 0 05	Supp	4,046	
				<b>Total</b>	<b>4,046</b>	
	<b>Solid Waste Project</b> (Chemical analyses on land fill drainage )	An Chem I	1 0	Pers	19,854	
				<b>Total</b>	<b>19,854</b>	
	<b>Hazardous Waste Project</b> (Identification of toxic chemical wastes )	—	—	Equip	19,609	
				<b>Total</b>	<b>19,609</b>	
	<b>EPA</b> (Coliform analyses on public water systems)	Med Lab Tech I Med Lab Tech I Stock Clerk I	1.0 1.0 1 0	Pers Supp Equip Other	25,219 5,344 16,168 48,981	
			<b>Total</b>	<b>95,712</b>		
N.C. ....	<b>State</b>					
	<b>Hypothyroid Screening Project</b> (Diagnosis of neonatal hypothyroidism )	Med Lab Tech II Med Lab Tech II Clerk Typist II	1 0 1.0 1 0	Pers Supp	6,504 12,834	
				<b>Total</b>	<b>19,338</b>	
	<b>Perinatal Care Project</b> (Blood typing grouping, antibody screen on pregnant women )	Med Lab Tech II	1 0	Supp	13,992	
				<b>Total</b>	<b>13,992</b>	
N.C. ....	<b>Sickle Cell Screening</b> (Screening and diagnosis of hemoglobinopathies )	P H Micro II P H Micro I Clerk Typist III	0 8 1 0 1 0	Pers Equip Other	44,699 5,119 970	
				<b>Total</b>	<b>50,788</b>	
	N.D. ....	<b>State</b>				
		<b>N.D. State Dairy Commissioner</b> (Milk testing)	Tech	0 5	Pers Supp	4,200 300
				<b>Total</b>	<b>4,500</b>	
N.M. ....	<b>Federal</b>					
	<b>Highway Traffic Safety (Alcohol)</b> (Provide scientific and technical support to alcohol program of NM Traffic Safety Bureau (funded by National Highway Traffic Safety Admin grant) )	Chemist I-II Lab Tech Clerk IV	77 20 30	Pers Supp Equip Other	24,054 1,400 14,534 16,200	
				<b>Total</b>	<b>56,188</b>	
	Ohio .....	<b>Federal</b>				
<b>Maternal &amp; Child Health</b> (Newborn screening (Inborn errors Met )		Chem. Sup 1 Chem 1 Lab Tech 2 Lab Tech 1 Typist 2	1 0 1.0 2 0 2 0 1 0	Pers Supp Equip Other	94,071 27,395 1,032 493	
				<b>Total</b>	<b>122,991</b>	
<b>Sickle Cell</b> (Abnormal hemoglobin)		Micro 1	1 0	Pers Supp	14,000 2,500	
				<b>Total</b>	<b>16,500</b>	

**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.)	<b>Genetics</b> (Hypothyroid screening)	Micro 1	0.5	Pers 17,603
		Chem 1	0.5	Supp 32,013 Equip 705
		<b>Total</b>		<b>50,321</b>
	<b>S.T.D. (VD) Control</b> (V.D. testing)	Micro 3	1.0	Pers 91,758
		Micro 1	1.5	Supp 67,480
		Lab Tech 2	1.0	Equip 678
		Lab Tech 1	2.0	Other 55
		Lab Tech 1	1.0	<b>Total 159,971</b>
	<b>Public Water Supply</b> (Environmental chemistry)	—	—	Equip 9,912
				<b>Total 9,912</b>
	<b>ORSANCO</b> (Environmental chemistry)	—	—	Other 1,921
				<b>Total 1,921</b>
	<b>State</b>			
	<b>Encephalitis</b> (Viral test support)	—	—	Supp 18,276
				<b>Total 18,276</b>
<b>Federal &amp; State</b>				
<b>Ohio Env. Prot. Agency</b> (Environmental chemistry and microbiology)	Chem Sup 2	1.0	Pers 560,000	
	Chem Sup 1	4.25	Supp 107,459	
	Chem 3	1.0	Equip 33,020	
	Chem 2	2.5	Other 41,230	
	Chem 1	11.0	<b>Total 182,269</b>	
	Lab. Tech. 1	3.6		
	Lab. Asst.	3.0		
	Secret 1	1.0		
	Typist 2	3.5		
	Clerk 1	1.0		
	Micro Sup 1	0.8		
	Micro 2	2.4		
	Lab Tech 1	3.0		
<b>Industrial Commission</b> (Occupational chemistry)	Chem Sup 1	2.5	Pers 9,308	
	Lab Asst	2.5	Supp 4,308	
	Typist 2	2.5	Other 2,912	
			<b>Total 16,528</b>	
<b>Industrial Relations</b> (Occupational chemistry)	Chem Sup 1	2.5	Pers 9,308	
			Supp 684	
			Other 18,864	
			<b>Total 28,856</b>	
<b>Department of Natural Resources</b> (Environmental chemistry)	—	—	Other 157	
			<b>Total 157</b>	
<b>Okla..... Federal</b>				
<b>Family Planning—Oklahoma State Department of Health</b> (gonorrhea culture and syphilis serology)	—	—	—	
<b>Corps of Engineers</b> (Water microbiology)	—	—	—	
<b>State and Federal</b>				
<b>Veneral Disease Program—Oklahoma State Department of Health</b> (Gonorrhea culture)	—	—	—	
<b>Ore. .... Federal</b>				
<b>Toxicology</b>	—	4.0	Pers 17,781	
			Supp 5,831	
			Equip 2,649	
			Other 11,993	
			<b>Total 38,254</b>	
<b>Administration</b>	—	5.5	Pers 72,570	
			Supp 124	
			Other 27,406	
			<b>Total 100,100</b>	

**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	
Ore. (Cont.)	Lab. Inspection	—	3.3	Pers	42,398
				Supp	350
				Equip	109
				Other	13,972
				<b>Total</b>	<b>56,829</b>
	Med. Micro.	—	2.0	Pers	21,224
				Supp	3,472
				Other	342
				<b>Total</b>	<b>25,038</b>
	Metabolic	—	4.5	Pers	72,781
				Supp	2,200
				Other	7,544
				<b>Total</b>	<b>82,525</b>
	Syphilis Serology	—	2.0	Pers	34,355
				Supp.	1,063
				Other	289
				<b>Total</b>	<b>35,707</b>
	Water	—	1.0	Pers	35,366
		0.5	Supp	558	
			Other	3,681	
			<b>Total</b>	<b>39,605</b>	
State Administration	—	7.5	Pers	155,571	
			Supp	3,102	
			Equip	408	
			Other	61,229	
			<b>Total</b>	<b>220,310</b>	
Med. Micro.	—	6.75	Pers	130,477	
			Supp.	10,812	
			Equip	3,572	
			Other	43,712	
			<b>Total</b>	<b>188,573</b>	
Metabolic	—	1.0	Pers.	24,795	
			Supp.	7,346	
			Equip	69	
			Other	8,818	
			<b>Total</b>	<b>40,928</b>	
Syphilis Serology	—	7.0	Pers	123,074	
			Supp	49,990	
			Equip	1,699	
			Other	44,993	
			<b>Total</b>	<b>219,756</b>	
Water	—	2.5	Pers	50,778	
			Supp	5,317	
			Other	22,666	
			<b>Total</b>	<b>78,761</b>	
Virus	—	9.0	Pers	107,140	
			Supp	23,726	
			Equip	419	
			Other	25,216	
			<b>Total</b>	<b>156,501</b>	
Private Lab Inspection	—	2.0	Pers	33,356	
			Supp	202	
			Other	10,168	
			<b>Total</b>	<b>43,726</b>	
Other States Metabolic	—	3.5	Pers	47,085	
			Supp	26,474	
			Equip	61,312	
			Other	70,220	
			<b>Total</b>	<b>205,091</b>	

**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	
Pa. ....	<b>Federal</b> Statewide Virology Proficiency Testing Program (CDC)	Micro. 4 M.R.S. 1 Micro. 3	.10 .20 .20	Pers. Supp. Equip. Other	8,086 2,945 2,500 300
				<b>Total</b>	<b>13,831</b>
R.I. ....	<b>Federal</b> <b>Public Health Service</b> (Block grant for general laboratory services)	Micro. Chemist	6.0 1.0	Pers. Supp. Equip. (a)	150,475 11,000 (a)
	<b>Environmental Protection Agency</b> (Water supply testing)	Chemist Micro.	7.0 2.0	Pers. Supp. Equip. Other	144,026 25,815 (a) 164
	<b>Center for Disease Control</b> (Training contract—micro. training program)	—	—	Supp. Equip. Other	101 11,345 1,117
	<b>Environmental Protection Agency</b> (Hazardous waste testing)	—	—	Supp. Equip. (a)	17,896 (a)
				<b>Total</b>	<b>170,005</b>
S.C. ....	<b>Federal</b> (Pesticides Contract—EPA funds for pesticides study. Laboratory analysis of human, animal & environmental samples for pesticides & herbicides are provided under sub-contract with MUSC, which has major contract with EPA to develop data on baseline levels in humans, animals & the environment for these toxic substances)	Chemist IV Chemist III Chemist I Dir., Div. Environ. Health Labs.	1.0 1.0 2.0 0.05	Pers. Other	56,990 22,353
	<b>Forestry Contract</b> (Note: Contract began after middle of fiscal year. Laboratory analysis of pine tree samples (needles, etc.) and samples of surrounding environment (water, soil, etc.) for presence of pesticide carbofuran & its degradation products.)	Chemist I	1.0	Pers. Supp. Equip. Other	2,173 71 19,623 2,139
	<b>Blood Lead Agreement</b> (Laboratory analysis of serum samples from high risk populations.)	Chemist II	0.5	Pers. Supp. Equip. Other	8,460 4,701 170 218
				<b>Total</b>	<b>79,343</b>
S.D. ....	<b>Federal</b> CDC—Consultation Contract	Fac. Spec. II Stat. Clerk	1.0 0.5	Pers. Supp. Equip. Other	17,789 5,189 69 3,731
	<b>CDC—Training Contract</b>	—	—	<b>Total</b>	<b>26,778</b>
	<b>State</b> Dept. of Water and Natural Resources (Environmental testing)	Chem. III Chem. II Chem. I Micro. II Lab. Tech.	1.2 1.2 0.6 0.6 0.6	Pers. Supp. Equip. Other	62,529 7,972 1,159 3,247
				<b>Total</b>	<b>74,907</b>
Tenn. ....	<b>State</b> Department of Safety (Blood alcohol exams)	—	—	<b>Total</b>	<b>153,679</b>
	<b>U.T. Memphis</b> (Medical ecology and toxicology)	—	—	<b>Total</b>	<b>129,000</b>

(a) included with supplies.

**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	
Tenn. (Cont.)	<b>State Autopsy Fee Schedule</b> (Autopsy reimbursement to pathologists.)	—	—	<b>Total</b>	<b>64,000</b>
Tex. ....	<b>Federal</b>				
	<b>Safe Drinking Water Grant</b> (Chemical and bacteriological analysis of drinking water.)	Chemist Microbiologist Technician Clerical	8.0 1.0 5.0 1.0	Pers. Supp. Equip.	157,206 66,811 153,826
			<b>Total</b>	<b>Total</b>	<b>377,843</b>
	<b>Cooperative Meat Inspection</b>	Chemist Support	1.0 1.0	Pers.	22,686
			<b>Total</b>	<b>Total</b>	<b>22,686</b>
	<b>Health Maintenance</b> (Hypertension screening)	Med. Tech.	1.0	Pers.	16,876
			<b>Total</b>	<b>Total</b>	<b>16,876</b>
	<b>State</b>				
	<b>Interagency contract with Water Resources Board</b>	Microbiologist Chemist Technician Clerical Support	2.0 5.0 5.0 1.0 3.0	Pers.	146,037
			<b>Total</b>	<b>Total</b>	<b>146,037</b>
	<b>EPSDT</b>	Chemist Med. Tech. Technician Clerical Support	2.0 2.0 5.0 1.0 1.0	Pers. Supp. Equip. Other	145,100 23,391 3,400 1,455
	<b>(a) Included with Supplies.</b>		<b>Total</b>	<b>Total</b>	<b>173,346</b>
Utah .....	<b>Federal</b>				
	<b>Technical Consultation II Contract federal funds</b> (Serves laboratory improvement section—laboratory technical consultation.)	Microbiologist 21	1.0	Pers. Supp. Other	12,824 2,099 632
			<b>Total</b>	<b>Total</b>	<b>15,555</b>
	<b>Laboratory Training Contract federal funds</b> (Serves laboratory improvement program—laboratory training.)	Microbiologist 23 Microbiologist 19 Typist	1.0 1.0 1.0	Pers. Supp. Equip. Other	22,847 3,735 745 882
			<b>Total</b>	<b>Total</b>	<b>28,209</b>
	<b>Technical Consultation I Contract federal funds</b> (Serves laboratory improvement section—laboratory technical consultation.)	Microbiologist 21 Microbiologist 19 Typist	1.0 1.0 0.5	Pers. Supp. Other	18,112 3,550 641
			<b>Total</b>	<b>Total</b>	<b>22,303</b>
Wisc. ....	<b>State</b>				
	<b>Wisconsin Dept. of Transportation and U.S. Dept. of Transportation</b> (Implementing controlled substances analysis-WI implied consent program.)	—	0.2	Pers. Supp.	2,700 5,980
			<b>Total</b>	<b>Total</b>	<b>8,680</b>
	<b>Wisconsin Dept. of Health and Social Services</b> (Alpha-fetoprotein screening of material serum in mid-pregnancy.)	—	2.0	Pers. Supp. Other	35,800 12,300 660
			<b>Total</b>	<b>Total</b>	<b>48,760</b>
	<b>Wisconsin Dept. of Health and Social Services</b> (Operation of a cytogenetics unit)	—	2.0	Pers. Supp.	37,000 10,000
			<b>Total</b>	<b>Total</b>	<b>47,000</b>
	<b>Wisconsin Division of Highway Safety</b> (CNS depressants on WI Traffic fatalities.)	—	1.0	Pers. Supp. Other	16,325 2,669 109
			<b>Total</b>	<b>Total</b>	<b>19,103</b>
	<b>Federal</b>				
	<b>DHEW, PHS, Health Research Administration</b> (training grant)	—	1.0	Pers.	14,200
			<b>Total</b>	<b>Total</b>	<b>14,200</b>
	<b>DHSS, DHEW, PHS, CDC</b> (Erythrocyte protoporphyrin proficiency testing.)	—	1.0	Pers. Supp. Other	8,880 755 1,991
			<b>Total</b>	<b>Total</b>	<b>11,626</b>

**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	
Wisc. (Cont.)	DHEW, PHS, CDC (Proficiency testing)	—	2.0	Pers.	29,508
				Supp.	20,125
				Other	4,591
				<b>Total</b>	<b>54,224</b>
Wyo.....	<b>Federal</b>				
	<b>Gov. Off. H'way Safety</b> (Alcohol analyses, training of law enforcement personnel, court testimony.)	Chem. III	0.5	Pers.	37,502
		Chem. I	1.0	Supp.	746
		Sec.	0.5	Equip.	413
				Other	6,909
				<b>Total</b>	<b>45,570</b>
	<b>Medicare Survey</b> (Laboratory surveys for Medicare compliance.)	Med. Tech. III	0.3	Pers.	5,962
				<b>Total</b>	<b>5,962</b>

**Table 3-5  
STATES REPORTING CHARGES FOR LABORATORY SERVICES**

Lab	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Ala. ....	Pinworms	1.25	Test	72,632	Recycled to support services provided.
	Intestinal Parasites	3.58	Test		
	Sickle Cell	2.75	Test		
	Lead Initial	2.00	Test		
	Lead Confirmation	3.00			
Ariz. ....	—	—	—	124,000	State General Fund
Ark. ....	Pre-marital blood test certificates	1.00	Specimen	15,731	To pay off bonds on laboratory building.
Colo. ....	Drugs of Abuse	3.05	Specimen	59,000	Appropriated to the division to operate the program.
	Urine Screening				
Conn. ....	Environmental Chemistry	1.81	Rel. Value	500,000	State General Fund
	Strep. Mailers	1.00	Each mailer & Culture		
	Strep. Office Kits	.35	Each service		
Idaho ....	Purity Tests	5.00-7.00	Test	162,497	\$157,000 allotted to laboratories.  Remaining \$5,497 reverted to State General Fund.
	Most Probable Number Tests	6.50-10.00	Test		
	Water Pollution Testing—BOD	14.00	Test		
	Water Pollution Testing—COD	8.50	Test		
	Water Pollution Testing—TOC	25.00	Test		
	Water Pollution Testing—Total Aerobic plate count	4.00	Test		
	Water Chemistry tests (Includes alkalinity, ammonia, bicarbonate alkalinity, boron, calcium, carbonate alkalinity, chloride, dissolved oxygen, fluoride hardness, hydrogen sulfide, nitrate, odor, ortho phosphate, settleable solids, silica, specific conductance, sulfate, suspended solids, total dissolved solids, total solids, turbidity)	5.50	Test		
	Elemental analyses performed by atomic absorption spectrophotometry (Includes aluminum, barium, cadmium, chromium, copper, iron, magnesium, manganese, molybdenum, nickel, potassium, silver, sodium, vanadium, zinc).	6.50	Test		
	pH	2.50	Test		
	color	2.50	Test		
	Complete inorganic chemical testing for drinking water (Includes arsenic, barium, cadmium, chromium, fluoride lead, mercury, nitrate, selenium, silver)	75.00	Test		
	Individual tests for:				
	Arsenic	12.00	Test		
	Chlorophyll A	6.50	Test		
	Cyanide	15.00	Test		
	Fluoride, vegetation	25.00	Test		
	Kjeldahl Nitrogens	10.00	Test		
	Mercury	12.00	Test		
	Oil and grease	15.00	Test		
	Pesticide Residue Analysis	75.00	Test		
	Phenols	15.00	Test		
	Rad. Health (gross alpha-beta)	9.00	Test		
	Selenium	12.00	Test		
	Sulfur Dioxide (bubbler)	10.00	Test		
	Surfactants (detergents)	15.00	Test		
	Suspended Particulate	5.00	Test		
	Total or Inorganic Phosphorus	8.00	Test		
Tannin & Lignin	10.00	Test			
Trihalomethane	50.00	Test			
Volatile Petroleum Prod.	20.00	Test			
Mercury—Tissue, Urine, Blood, Foods	15.00	Test			
Lead—Tissue, Urine, Blood, Foods	12.00	Test			
Lead—Pottery	8.00	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.)	EPSDT Testing—Urine Culture	4.00	Test		
	EPSDT Testing—Urine Screen	1.00	Test		
	EPSDT Testing—Hematocrit	1.00	Test		
	Miscellaneous Tests				
	Throat Culture	6.00	Test		
	Urine drug screen	7.50	Test		
	Syphilis Serology	6.00	Test		
	Rubella Serology	6.00	Test		
	Cytogenetic Analysis	125.00	Test		
	Analysis of food sample for Salmonella	10.00	Test		
	Analysis of food sample for coliform	7.50	Test		
	Microscopy	25.00			
Ind. . . . .	Private Water Bact. (or chem)	2.50 + postage	Test	45,808	Money is forwarded to the State Treasury general fund — except for postage and handling fees (up to \$2.25) for sending out private water bact. sample bottles; these fees remain in a State Board of Health revolving fund.
	Public Water Bact.	10.00	Year		
	Premarital Syphilis Serology	2.50	Specimen		
Ia. . . . .	MPN Potable Water	3.00	Sample	450,900	Estimate of receipts is built into general operating budget.
	Membrane Filter Water	12.00	Sample		
	Nitrate/Iron—Hardness	3.00	Sample		
	BOD-Effluent	8.00	Sample		
	Trade Metals	10-14.00	Test		
	Radiation	10-40.50	Test		
	Pesticides	48-104.50	Test		
	Urine Screen—Abused Drugs	7.50	Specimen		
	Other Water Quality Parameters	4-48.00	Test		
Kans. . . . .	Environmental Lab. Cert.	20.00	Parameter	245,164	
	Water Microbiology	100.00	Micro		
	Water Chemistry	3.00	Sample		
	Partial Analysis	15.00	Sample		
	Complete Analysis	35.00	Sample		
	Complete chemical analysis consisting of:	35.00	Test		
	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				
	Complete heavy metals consisting of:	25.00	Test		
	iron, manganese, arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, zinc				
	Partial chemical analysis consisting of:	15.00	Test		
	calcium, magnesium, sodium, total alkalinity, chloride, sulfate, nitrate, fluoride, iron, manganese, total hardness				
	Total hardness consisting of:	6.00	Test		
	calcium, magnesium, chloride, and alkalinity				
	Complete solids consisting of:	15.00	Test		
	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				



**Table 3-5  
STATES REPORTING CHARGES FOR LABORATORY SERVICES – Continued**

Lab	Services Performed	Charge Per Unit	Unit	Estimated Annual Receipts	Disposition of Funds
Miss. . . . .	Medicare/Medicaid Patients	Medicaid Rate	Specimen	264,587	General Laboratory Budget
	Throat culture for Group A Strep	1.00	Specimen		
	TB cultures (Mental Hosp.)	3,600.00	Yearly		
	Sickle Cell	1.51	Specimen		
	Parasite	3.00	Specimen		
Mont. . . . .	Water microbiology	4.00	Sample	79,016	Placed in earmarked revenue account for laboratory testing of water, credited directly against laboratory expenses, or reverted back to those bureaus which have prepaid laboratory costs.
	Chem. analy. of private water supply	15.00	Sample		
	Analyses of drinking water samples:				
	Sanitary quality	4.00	Sample		
	Most Probable Number	10.00	Sample		
	Fecal Coliform Analysis	4.00	Sample		
	Standard Chemical Analy.	15.00	Sample		
	Individual Constituents				
	Acidity	15.00	Test		
	Alkalinity & pH	13.00	Test		
	Aluminum	8.00	Test		
	Ammonia	5.00	Test		
	Antimony	4.50	Test		
	Arsenic	15.00	Test		
	Barium	4.50	Test		
	Beryllium	4.50	Test		
	Bioalgal Assay	9.50	Flask		
	BOD	115.00	Test		
	Boron	10.50	Test		
	Cadmium	4.00	Test		
	Calcium	4.00	Test		
	Chloride	2.50	Test		
	Chromium	2.50	Test		
	Chromium Hex	55.00	Test		
	Cobalt	2.00	Test		
	COD	30.00	Test		
	Color (2 tests-pH adjusted)	26.00	Test		
	Copper	2.50	Test		
	Cyanide	135.00	Test		
	Dissolved Oxygen	2.50	Test		
	Fluoride	4.50	Test		
	Hardness	2.00	Test		
	Iron	4.00	Test		
	Lead	2.00	Test		
	Lithium	4.50	Test		
	Manganese	2.50	Test		
	Mercury	7.00	Test		
	Metals Digestion	11.00	Test		
	Metals Extraction	15.50	Test		
	Molybdenum	4.50	Test		
	Nickel	2.50	Test		
	Nitrate	4.00	Test		
	Nitrite	4.00	Test		
	Nitrogen Kjeldahl	9.00	Test		
	Oil and Grease	38.00	Test		
	TOC	47.00	Test		
	Ortho-P	2.00	Test		
	pH	5.00	Test		
	Phenols	64.50	Test		
	Total-P	6.00	Test		
	Potassium	4.00	Test		
	Selenium	13.00	Test		
	Silica	44.00	Test		
	Silver	2.50	Test		
	Sodium	4.00	Test		
	Specific Conductance	2.50	Test		
	Strontium	4.50	Test		
	Sulfate	4.50	Test		
	Sulfide	71.00	Test		
	Tin	4.50	Test		
	TSS	10.50	Test		
	Turbidity	4.00	Test		
	Vanadium	9.00	Test		
	Zinc	2.50	Test		
	Lindane	29.00	Test		
	Endrin	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
Mont. (Cont.)	Toxaphene	29.00	Test		
	Methoxychlor	29.00	Test		
	2, 4-D	47.00	Test		
	Silvex	47.00	Test		
	All six organics	210.00	Test		
	Occupational Health Chem.				
	Metals by AAS	8.00	Test		
	As, Hg, Se by AAS	10.00	Test		
	Organic Solvents by G.C.	25.00	Test		
	Free Silica	60.00	Test		
	Coal tar pitch volatiles	40.00	Test		
	Gross $\alpha$ or $\beta$ -H <sub>2</sub> O	10.00	Test		
	Gross $\alpha$ or $\beta$ -H <sub>2</sub> O	15.00	Test		
	Air Quality Chemistry				
	Fluoride—plates	1.20	Test		
	Fluoride—paper	1.20	Test		
	Fluoride—vegetation	4.00	Test		
	Fluoride—coal	4.00	Test		
	Fluoride—soil	4.00	Test		
	Sulfur dioxide—bubblers	6.00	Test		
	Sulfur dioxide—plates	5.50	Test		
	Oxides of Nitrogen (NOx)	3.60	Test		
	Sulfate and Nitrate	4.50	Test		
	Particulates	1.25	Test		
	Sulfur—coal, soil	20.00	Test		
	Metals—coal, soil	—	Test		
	Nebr. . . . .	Mailing containers	.50		
	Forensic alcohol	8.00	Test		
	Water microbiology	4.00	Test		
	Water chemistry	5.00	Test		
	Water organics	10.00	Specimen		
Nev. . . . .	Water Bacteriology	5.00	Test	9,000	It is added to the operating account.
	Complete Water Chemistry	110.00	Specimen		
	Lab Licensor	10.00	Each		
	Personnel Certification	10.00	Each		
	Certification Renewal	1.00	—		
N.J. . . . .	VDRL	2.00	Specimen	156,789	Divisional revolving fund.
	Rubella	3.00	Specimen		
	Potable Water/Bact.	6.00	Sample		
	Lead Poisoning	6.00	Specimen		
N.M. . . . .	Analyses of all types provided for clients outside Health and Environment Dept (HED) and for federally assisted programs such as Safe Drinking Water Act.	Variable	Sample or Specimen	347,000	Become part of laboratory operating budget.
N.C. . . . .	Coliform Test Water	5.00	Test	284,728	State appropriation to laboratory is reduced by the amount of estimated receipts and in effect becomes part of annual operating budget. Receipts from N.C. Drinking Water Act used to fund positions and purchase supplies, postage, equipment, etc., necessary to perform analytical services.
	Inorganic Chemicals—Water	100.00	Sample		
	Organic Chemicals Water	120.00	Sample		
	Radiological	50.00	Sample		
	Sale of specimen collection outfits and biological products	Varies with type			
Ore. . . . .	Metabolic Disorders	3.00	Specimen	174,000	They assist the program but are not the sole support.
S.C. . . . .	Rh	5.00	Specimen	116,668	Salaries and operating expenses.
	Rubella serology	5.00	Specimen		
	STS (VDRL or RPR)	1.00	Specimen		
	Infectious Mono.	8.00	Specimen		
	FTA-ABS	8.00	Specimen		
	Toxoplasmosis (IFA)	14.00	Specimen		
	Blood Lead, qual.	3.00	Specimen		
	Blood Lead, quant.	7.00	Specimen		
	Drug Analysis, qual.	3.00	Specimen		
	Drug Analysis, quant.	10.00	Specimen		
S.D. . . . .	Environmental samples	1.23	RV	76,207	24,584 Returned to general fund 51,623 Revolving fund

**Table 3-5  
STATES REPORTING CHARGES FOR LABORATORY SERVICES – Continued**

<b>Lab</b>	<b>Services Performed</b>	<b>Charge Per Unit</b>	<b>Unit</b>	<b>Estimated Annual Receipts</b>	<b>Disposition of Funds</b>
Utah . . . . .	Newborn Screening	2.50	Kit	100,000	Used to offset the cost of the tests.
V.I. . . . .	Serology	3.00	—	—	Revolving funds.
	Parasitology	5.00			
	Toxicology	10.00			
	FTA	8.00			
	PKU	3.00			
	Cultures	10.00			
	Thyroids Profiles T <sub>3</sub> & T <sub>4</sub>	8.00			
	Sickle Cell	5.00			
Wash. . . . .	Metabolic	3.20	Test	125,000	Support laboratory operations
	Water Bacteriology	6.00	Test		
	Premarital	5.00	Test		
	Water Chemistries	2.00-85.00			
Wisc. . . . .	Specimen Testing	3.00	Test	1,427,614	Salaries, supplies, capital equipment



**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	B	C	D	E	F
		Nasopharyngeal Specimens	Mycobacterial Specimens	Enteric Specimens	Gonococcus Specimens	Anaerobic Specimens	Other Bacteriology Specimens
<b>Total</b> .....	<b>7,640,958</b>	<b>1,956,612</b>	<b>511,219</b>	<b>218,355</b>	<b>4,777,785</b>	<b>12,675</b>	<b>164,312</b>
Average .....	146,942	37,627	10,877	4,281	91,880	276	3,423
<b>New England</b> .....	<b>636,191</b>	<b>326,806</b>	<b>24,114</b>	<b>22,968</b>	<b>249,343</b>	<b>517</b>	<b>12,443</b>
Conn. ....	132,308	85,653	6,224	6,255	26,784	97	7,295
Mass. ....	172,445	97,907	—	10,270	61,803	128	2,337
Me. ....	46,695	3,925	4,507	664	37,439	150	—
N.H. ....	106,520	42,649	10,451	1,784	49,110	—	2,526
R.I. ....	139,030	75,253	1,347	2,498	59,627	20	285
Vt. ....	39,193	21,419	1,585	1,497	14,580	112	—
<b>Middle Atlantic</b> .....	<b>262,081</b>	<b>78</b>	<b>30,148</b>	<b>18,680</b>	<b>211,290</b>	<b>145</b>	<b>1,740</b>
N.J. ....	238,066	1	18,364	7,493	211,250	99	859
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	24,015	77	11,784	11,187	40	46	881
<b>East North Central</b> .....	<b>914,759</b>	<b>449,604</b>	<b>37,639</b>	<b>31,763</b>	<b>373,112</b>	<b>1,730</b>	<b>20,911</b>
Ill. ....	184,274	38,265	7,402	6,969	128,908	262	2,468
Ind. ....	11,907	54	3,763	2,338	4,742	185	825
Mich. ....	329,015	143,986	15,647	12,366	144,491	174	12,351
Ohio ....	343,739	252,810	5,860	2,673	77,623	460	4,313
Wisc. ....	45,824	14,489	4,967	7,417	17,348	649	954
<b>West North Central</b> .....	<b>635,362</b>	<b>230,084</b>	<b>31,176</b>	<b>17,496</b>	<b>324,994</b>	<b>1,251</b>	<b>30,361</b>
Ia. ....	133,958	48,170	2,896	1,381	75,661	316	5,534
Kans. ....	72,733	20,377	5,801	4,646	39,245	360	2,304
Minn. ....	124,023	2,023	13,716	5,145	102,577	159	403
Mo. ....	187,813	111,731	—	2,725	72,298	76	983
Nebr. ....	27,034	4,194	727	424	21,689	—	—
N.D. ....	56,820	23,516	4,235	2,246	6,032	239	20,552
S.D. ....	32,981	20,073	3,801	929	7,492	101	585
<b>South Atlantic</b> .....	<b>2,013,353</b>	<b>205,340</b>	<b>145,629</b>	<b>57,830</b>	<b>1,569,368</b>	<b>3,567</b>	<b>31,619</b>
Del. ....	32,282	796	—	697	29,769	—	1,020
D.C. ....	112,502	6,767	2,196	2,615	94,586	—	6,338
Fla. ....	656,372	38,117	52,412	25,003	530,713	904	9,223
Ga. ....	270,499	16,620	24,258	6,630	218,464	997	3,530
Md. ....	407,901	40,657	18,150	8,487	339,460	543	604
N.C. ....	22,924	1,220	14,563	4,666	365	351	1,759
S.C. ....	240,428	4,239	12,851	1,564	214,971	453	6,350
Va. ....	160,310	48,847	12,793	7,692	88,289	309	2,380
W. Va. ....	110,135	48,077	8,406	476	52,751	10	415
<b>East South Central</b> .....	<b>1,143,190</b>	<b>236,648</b>	<b>98,891</b>	<b>18,907</b>	<b>778,092</b>	<b>1,509</b>	<b>9,143</b>
Ala. ....	448,868	48,351	38,542	4,846	353,411	322	3,396
Ky. ....	30,383	2,878	15,459	1,727	9,651	35	633
Miss. ....	252,204	41,217	23,167	5,624	179,077	*	3,119
Tenn. ....	411,735	144,202	21,723	6,710	235,953	1,152	1,995
<b>West South Central</b> .....	<b>1,086,963</b>	<b>65,704</b>	<b>92,672</b>	<b>26,321</b>	<b>865,005</b>	<b>2,202</b>	<b>35,059</b>
Ark. ....	117,166	16,367	21,633	2,556	75,958	218	434
La. ....	111,419	4,529	12,467	5,309	86,334	1,115	1,665
Okla. ....	136,317	26,460	10,373	1,841	96,074	99	1,470
Tex. ....	722,061	18,348	48,199	16,615	606,639	770	31,490
<b>Mountain</b> .....	<b>653,580</b>	<b>379,739</b>	<b>25,288</b>	<b>10,772</b>	<b>229,640</b>	<b>941</b>	<b>7,200</b>
Ariz. ....	21,904	296	8,247	2,275	10,063	518	505
Colo. ....	178,702	138,614	1,864	1,656	36,037	96	435
Ida. ....	35,107	2,222	2,002	829	29,565	79	410
Mont. ....	18,946	1,126	2,873	407	13,877	150	513
Nev. ....	39,896	219	2,003	356	36,420	25	873
N.M. ....	101,015	8,017	6,548	2,616	79,568	52	4,214
Utah ....	61,473	35,978	1,471	2,586	21,167	21	250
Wyo. ....	196,537	193,267	280	47	2,943	—	—
<b>Pacific</b> .....	<b>251,304</b>	<b>50,804</b>	<b>23,710</b>	<b>13,179</b>	<b>155,026</b>	<b>605</b>	<b>7,980</b>
Alaska .....	—	—	—	—	—	—	—
Cal. ....	15,476	223	1,392	354	13,253	109	145
Hawaii ....	188,424	43,421	11,657	8,029	119,373	216	5,728
Ore. ....	13,312	6,066	3,275	2,010	1,472	59	430
Wash. ....	34,092	1,094	7,386	2,786	20,928	221	1,677
<b>Territories</b> .....	<b>44,175</b>	<b>11,805</b>	<b>1,952</b>	<b>439</b>	<b>21,915</b>	<b>208</b>	<b>7,856</b>
Guam .....	3,348	70	1,952	175	1,018	3	130
P.R. ....	24,364	1,123	—	264	18,289	83	4,605
V.I. ....	16,463	10,612	—	—	2,608	122	3,121

\*Included in Other Bacteriology Specimens, Table 4-10

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
<b>Total</b> .....	<b>1,878,203</b>						
Average .....	39,129						
<b>New England</b> .....	<b>325,864</b>						
Conn. ....	85,504	X	X	X	—	X	—
Mass. ....	97,682	X	X	—	—	—	—
Me. ....	3,439	X	X	X	—	X	Coagulase activity — staphylococci
N.H. ....	42,649	X	X	—	—	—	—
R.I. ....	75,193	X	X	—	—	—	—
Vt. ....	21,397	X	X	X	—	—	—
<b>Middle Atlantic</b> .....	<b>55</b>						
N.J. ....	—	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	55	X	—	X	—	—	—
<b>East North Central</b> .....	<b>442,123</b>						
Ill. ....	36,996	X	—	—	—	—	—
Ind. ....	—	—	—	—	—	—	—
Mich. ....	143,424	X	—	X	—	X	—
Ohio ....	247,430	X	X	X	—	—	—
Wisc. ....	14,218	X	X	—	—	X	—
<b>West North Central</b> .....	<b>222,888</b>						
Ia. ....	48,163	X	X	—	—	—	—
Kans. ....	20,162	X	X	—	—	—	—
Minn. ....	—	—	—	—	—	—	—
Mo. ....	111,321	X	X	X	—	X	—
Nebr. ....	4,133	X	X	X	X	X	—
N.D. ....	23,507	X	X	—	—	—	—
S.D. ....	15,602	X	X	—	—	—	—
<b>South Atlantic</b> .....	<b>164,906</b>						
Del. ....	796	X	X	—	—	X	—
D.C. ....	6,767	X	—	—	—	X	—
Fla. ....	18,960	X	—	—	—	X	—
Ga. ....	15,794	—	X	—	—	—	—
Md. ....	31,943	X	—	X	—	X	—
N.C. ....	1,036	X	X	X	—	—	—
S.C. ....	4,186	X	X	X	—	—	—
Va. ....	37,523	X	X	X	—	X	—
W. Va. ....	47,901	X	X	—	—	—	—
<b>East South Central</b> .....	<b>235,407</b>						
Ala. ....	48,082	X	X	—	—	—	—
Ky. ....	2,750	X	X	X	—	—	—
Miss. ....	41,180	X	X	—	—	—	—
Tenn. ....	143,395	—	X	—	—	—	—
<b>West South Central</b> .....	<b>56,063</b>						
Ark. ....	16,161	X	X	X	X	—	—
La. ....	3,827	X	X	X	—	—	—
Okla. ....	26,252	X	X	—	—	—	—
Tex. ....	9,823	X	X	X	—	X	—
<b>Mountain</b> .....	<b>379,426</b>						
Ariz. ....	246	X	X	X	X	—	Biochemicals
Colo. ....	138,600	X	X	—	—	—	—
Ida. ....	2,169	X	X	—	—	X	—
Mont. ....	1,041	X	—	X	—	—	—
Nev. ....	219	X	—	—	—	X	—
N.M. ....	7,964	X	X	X	—	X	—
Utah ....	35,920	X	X	—	—	—	—
Wyo. ....	193,267	X	X	—	—	—	—
<b>Pacific</b> .....	<b>49,730</b>						
Alaska ....	—	—	—	—	—	—	—
Cal. ....	—	X	X	X	X	—	—
Hawaii ....	43,310	X	X	X	X	X	—
Ore. ....	5,723	X	X	—	—	—	—
Wash. ....	697	X	X	—	—	—	—
<b>Territories</b> .....	<b>1,741</b>						
Guam ....	6	X	—	—	—	X	—
P.R. ....	1,123	—	X	—	—	—	—
V.I. ....	612	X	X	X	X	X	—

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	Other
<b>Total</b> .....	<b>25,549</b>					
Average .....	639					
<b>New England</b> .....	<b>43</b>					
Conn. ....	18	—	X	X	X	—
Mass. ....	10	—	—	—	—	FA
Me. ....	—	—	—	—	—	—
N.H. ....	—	—	—	—	—	—
R.I. ....	5	X	X	X	X	—
Vt. ....	10	X	X	X	X	—
<b>Middle Atlantic</b> .....	<b>1</b>					
N.J. ....	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	1	—	X	X	X	—
<b>East North Central</b> .....	<b>497</b>					
Ill. ....	128	X	X	X	X	—
Ind. ....	23	X	X	X	X	—
Mich. ....	2	—	X	X	X	—
Ohio ....	287	—	X	X	X	—
Wisc. ....	57	X	X	X	X	—
<b>West North Central</b> .....	<b>5,063</b>					
Ia. ....	2	X	X	X	X	—
Kans. ....	5	X	X	X	X	—
Minn. ....	31	—	X	—	X	Smear of 18 hour culture
Mo. ....	26	X	X	X	X	—
Nebr. ....	38	X	X	X	X	—
N.D. ....	2	—	X	—	—	—
S.D. ....	4,418	X	X	X	X	—
<b>South Atlantic</b> .....	<b>18,996</b>					
Del. ....	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—
Fla. ....	18,960	—	X	X	X	—
Ga. ....	—	—	—	—	—	—
Md. ....	4	X	X	X	X	—
N.C. ....	*	X	X	X	—	—
S.C. ....	—	—	—	—	—	—
Va. ....	32	X	X	X	X	—
W. Va. ....	3	—	X	—	—	FA
<b>East South Central</b> .....	<b>302</b>					
Ala. ....	246	X	X	—	X	—
Ky. ....	37	X	X	X	X	—
Miss. ....	9	—	X	X	X	—
Tenn. ....	10	X	X	X	X	—
<b>West South Central</b> .....	<b>72</b>					
Ark. ....	19	X	X	X	—	—
La. ....	40	—	X	—	—	—
Okla. ....	5	X	X	X	X	—
Tex. ....	8	—	X	—	X	—
<b>Mountain</b> .....	<b>144</b>					
Ariz. ....	47	X	X	X	X	—
Colo. ....	12	X	X	X	X	—
Ida. ....	12	X	X	X	X	—
Mont. ....	12	—	X	X	—	—
Nev. ....	—	X	X	X	—	—
N.M. ....	53	X	X	X	X	—
Utah ....	8	X	X	X	X	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>430</b>					
Alaska ....	—	—	—	—	—	—
Cal. ....	5	X	X	X	X	—
Hawaii ....	15	X	X	X	X	—
Ore. ....	16	X	X	X	X	—
Wash. ....	394	X	X	X	X	—
<b>Territories</b> .....	<b>1</b>					
Guam ....	1	—	X	—	—	—
P.R. ....	—	—	—	—	—	—
V.I. ....	—	X	X	—	—	—

\*Included in Other Bacteriology Specimens, Table 4-10

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

Lab & Region	3. Pertussis					
	Number of Specimens	Culture	FA	Serological	Biochemicals	Other
<b>Total</b> .....	<b>16,070</b>					
Average .....	374					
<b>New England</b> .....	<b>325</b>					
Conn. ....	52	X	X	X	X	—
Mass. ....	174	X	X	—	X	—
Me. ....	82	—	X	—	—	—
N.H. ....	—	—	—	—	—	—
R.I. ....	5	X	X	—	X	—
Vt. ....	12	X	X	—	—	—
<b>Middle Atlantic</b> .....	<b>22</b>					
N.J. ....	1	X	—	—	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	21	X	X	—	X	—
<b>East North Central</b> .....	<b>2,054</b>					
Ill. ....	1,141	X	X	—	X	—
Ind. ....	31	—	X	—	—	—
Mich. ....	458	X	X	—	—	—
Ohio ....	188	X	X	—	X	—
Wisc. ....	214	X	X	—	X	—
<b>West North Central</b> .....	<b>545</b>					
Ia. ....	5	X	X	—	—	—
Kans. ....	26	X	X	X	X	—
Minn. ....	87	X	X	X	X	—
Mo. ....	348	X	X	X	—	—
Nebr. ....	23	X	X	X	X	—
N.D. ....	3	X	X	—	—	—
S.D. ....	53	X	—	—	—	—
<b>South Atlantic</b> .....	<b>1,353</b>					
Del. ....	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—
Fla. ....	197	—	X	—	—	—
Ga. ....	826	X	X	—	X	—
Md. ....	87	X	X	—	X	—
N.C. ....	184	X	X	—	X	—
S.C. ....	3	X	X	—	X	—
Va. ....	25	—	X	—	—	—
W. Va. ....	31	—	X	—	—	—
<b>East South Central</b> .....	<b>939</b>					
Ala. ....	23	X	X	—	—	—
Ky. ....	91	—	X	—	—	—
Miss. ....	28	—	X	—	—	—
Tenn. ....	797	X	X	—	—	Agglutinations
<b>West South Central</b> .....	<b>542</b>					
Ark. ....	187	X	—	—	X	—
La. ....	117	X	—	—	—	—
Okla. ....	186	X	X	—	—	—
Tex. ....	52	—	—	—	—	—
<b>Mountain</b> .....	<b>169</b>					
Ariz. ....	3	X	—	—	—	—
Colo. ....	2	X	X	—	—	—
Ida. ....	41	X	X	—	X	—
Mont. ....	73	—	—	—	—	—
Nev. ....	—	X	—	X	X	—
N.M. ....	*	X	X	—	X	—
Utah ....	50	X	X	—	X	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>121</b>					
Alaska ....	—	—	—	—	—	—
Cal. ....	—	X	X	X	X	—
Hawaii ....	3	X	X	—	—	—
Ore. ....	115	X	X	—	—	—
Wash. ....	3	X	X	—	—	—
<b>Territories</b> .....	<b>10,000</b>					
Guam ....	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—
V.I. ....	10,000	—	—	X	—	—

\*Included in Other Bacteriology Specimens, Table 4-10

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

**4. Other Nasopharyngeal Specimens**

Lab	Number of Specimens	Disease – Procedures Used
<b>Total</b> .....	<b>54,530</b>	
<b>Average</b> .....	<b>2,727</b>	
Cal. ....	218	Infant botulism — Culture, biochemicals, animal inoculation; Legionnaires' disease — culture, biochemicals, FA, animal inoculation; miscellaneous blood cultures
Conn. ....	79	Vincent's Infection — smear — Crystal Violet
Guam ....	63	Sputum for fungus sp. — Sabauraud, 37° and room temperature; Sputum for general bacteria — culture and sensitivity
Hawaii ....	93	Meningococcus — culture, identification; Staphylococcus — culture, coagulase; Leptospiae — culture, darkfield; H. influenzae — culture, identification
Kans. ....	184	Nasopharyngitis — smear, culture, biochemicals, serogrouping, serotyping
La. ....	545	Legionnaires' disease — FA; Plague — animal inoculation
Me. ....	404	Hemophilus influenzae — typing and factors; Neisseria meningitidis — culture and typing; Gram negative non-fermenters — biochemical identification; Miscellaneous streptococci — biochemical identification
Md. ....	8,623	Bacteremia — culture; Bacterial; other — culture
Mass. ....	41	Meningococcal contacts or infections — culture, biochemical, serogrouping
Mich. ....	102	Vincent's Angina — slide
Minn. ....	1,905	Referred cultures for identification — smear, biochemical, serological, animal patho/toxin
Mo. ....	36	B. lact. (H. influenzae) — iodometric
N.D. ....	4	Hemophilus — culture
Ohio ....	4,905	Staphylococcus — culture, phage typing; aerobic non-fermenters — culture; aerobic gram positive bacteria — culture
Okla. ....	17	Vincent's Angina — microscopic exam; Staphylococcal disease — culture
Ore. ....	212	Miscellaneous URI — isolation, culture identification
R.I. ....	50	Vincent's Angina — smear; N. meningitidis — culture, biochemical; Pneumococcus — culture, biochemical; Staphylococcus, culture, biochemical; H. influenzae — culture, biochemical
S.C. ....	50	Gram positive and gram negative rods, staphylococci — standard biochemical techniques
Tex. ....	8,465	Staphylococcus — phage typing
Va. ....	1,127	Meningitidis, Pneumococcus, H. influenzae, Staphylococcus (Phage)
V.I. ....	—	S. pneumoniae — culture
W. Va. ....	142	Staphylococcus, Meningococcus, Miscellaneous N-T-Culture

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 Bio-chemicals	Species Ident.	Other
<b>Total</b> .....	<b>511,219</b>								
Average .....	10,877								
<b>New England</b> .....	<b>20,011</b>								
Conn. ....	6,224	—	X	X	—	9	14	X	—
Mass. ....	—	—	—	—	—	—	—	—	—
Me. ....	4,507	—	X	X	X	X	X	X	Atypical and/or classified
N.H. ....	10,451	X	X	X	—	—	—	—	—
R.I. ....	1,347	—	X	X	—	7	12	X	—
Vt. ....	1,585	—	X	X	6	6	12	X	—
<b>Middle Atlantic</b> .....	<b>30,148</b>								
N.J. ....	18,364	X	X	X	4	4	11	X	—
N.Y. ....	—	—	—	—	—	—	—	—	—
Pa. ....	11,784	—	X	X	5	9	12	—	—
<b>East North Central</b> .....	<b>37,639</b>								
Ill. ....	7,402	X	X	X	—	5	9	X	—
Ind. ....	3,763	—	X	X	6	6	7	X	Growth, pigment formation
Mich. ....	15,647	—	X	X	—	—	—	X	—
Ohio ....	5,860	—	X	X	10	10	9	X	—
Wisc. ....	4,967	X	X	X	7	7	10	X	—
<b>West North Central</b> .....	<b>31,176</b>								
Ia. ....	2,896	X	X	X	8	8	14	X	—
Kans. ....	5,801	—	X	X	6	6	16	X	—
Minn. ....	13,716	—	X	X	X	3	15	X	Drug susceptibility
Mo. ....	—	—	—	—	—	—	—	—	—
Nebr. ....	727	X	X	X	5	5	11	X	—
N.D. ....	4,235	—	X	X	4	4	13	X	—
S.D. ....	3,801	X	X	X	3	3	5	X	—
<b>South Atlantic</b> .....	<b>145,629</b>								
Del. ....	—	—	—	—	—	—	—	—	—
D.C. ....	2,196	—	X	X	—	7	10	X	—
Fla. ....	52,412	—	X	X	—	7	12	X	—
Ga. ....	24,258	—	X	X	5	5	11	X	—
Md. ....	18,150	X	X	X	5	9	3-12	X	—
N.C. ....	14,563	—	X	X	4	4	8	X	—
S.C. ....	12,851	—	X	X	7	7	10	X	—
Va. ....	12,793	—	X	X	—	4	12	—	—
W. Va. ....	8,406	—	X	X	5	5	7	X	—
<b>East South Central</b> .....	<b>98,891</b>								
Ala. ....	38,542	X	X	X	9	9	14	X	Animal inoculation
Ky. ....	15,459	—	X	X	9	9	9	X	Fluorochrome smear
Miss. ....	23,167	—	X	X	—	7	6	X	—
Tenn. ....	21,723	X	X	X	—	6	10	X	—
<b>West South Central</b> .....	<b>92,672</b>								
Ark. ....	21,633	—	X	X	6	6	10	X	—
La. ....	12,467	X	X	X	—	5	14	X	—
Okla. ....	10,373	—	X	X	—	5	12	X	—
Tex. ....	48,199	—	X	X	7	7	10	X	—
<b>Mountain</b> .....	<b>25,288</b>								
Ariz. ....	8,247	X	X	X	8	8	10	X	—
Colo. ....	1,864	—	X	X	—	—	2	X	—
Ida. ....	2,002	X	X	X	6	6	11	X	—
Mont. ....	2,873	X	X	X	7	7	9	X	—
Nev. ....	2,003	X	X	X	—	11	5	X	—
N.M. ....	6,548	—	X	X	4	4	6	X	—
Utah ....	1,471	X	X	X	3	6	12	X	—
Wyo. ....	280	X	X	X	—	—	—	—	—
<b>Pacific</b> .....	<b>23,710</b>								
Alaska ....	—	—	—	—	—	—	—	—	—
Cal. ....	1,392	—	X	X	5	5-9	10	X	—
Hawaii ....	11,657	X	X	X	5	5	10	X	—
Ore. ....	3,275	X	X	X	—	—	13	X	—
Wash. ....	7,386	—	X	X	84	74	222	X	—
<b>Territories</b> .....	<b>1,952</b>								
Guam ....	1,952	X	—	X	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—	—
V.I. ....	—	X	X	X	—	—	4	—	—

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

Lab & Region	Number of Specimens	Procedures Used							
		Primary Plating	Enrichment Plating	Bio-chemicals	FA	Sero-grouping	Sero-typing	Phage Typing, S. Typhi	Other
<b>Total</b> .....	<b>218,355</b>								
Average .....	4,281								
<b>New England</b> .....	<b>22,968</b>								
Conn. ....	6,255	X	X	X	X	X	X	—	Mouse Toxicity Testing (anaerobe)
Mass. ....	10,270	X	X	X	—	X	X	—	—
Me. ....	664	X	X	X	—	X	—	—	—
N.H. ....	1,784	X	X	X	X	X	—	—	—
R.I. ....	2,498	X	X	X	—	X	X	—	—
Vt. ....	1,497	X	X	X	—	X	X	—	—
<b>Middle Atlantic</b> .....	<b>18,680</b>								
N.J. ....	7,493	X	X	X	—	X	X	—	Kirby Bauer Susceptibility
N.Y. ....	—	—	—	—	—	—	—	—	—
Pa. ....	11,187	X	X	X	—	X	X	X	—
<b>East North Central</b> ....	<b>31,763</b>								
Ill. ....	6,969	X	X	X	—	X	X	X	—
Ind. ....	2,338	X	X	X	—	X	X	X	—
Mich. ....	12,366	X	X	X	—	X	X	—	—
Ohio ....	2,673	X	X	X	—	X	X	—	—
Wisc. ....	7,417	X	X	X	—	X	X	—	—
<b>West North Central</b> ...	<b>17,496</b>								
Ia. ....	1,381	X	X	X	X	X	X	—	—
Kans. ....	4,646	X	X	X	—	X	X	—	—
Minn. ....	5,145	X	X	X	—	X	X	X	Microscopic
Mo. ....	2,725	X	X	X	—	X	X	—	—
Nebr. ....	424	X	X	X	—	X	—	—	—
N.D. ....	2,246	X	X	X	—	X	X	—	—
S.D. ....	929	X	X	X	—	X	X	—	—
<b>South Atlantic</b> .....	<b>57,830</b>								
Del. ....	697	X	X	X	—	X	X	—	—
D.C. ....	2,615	X	X	X	—	X	X	—	—
Fla. ....	25,003	X	X	X	—	X	X	—	—
Ga. ....	6,630	X	X	X	—	X	X	—	—
Md. ....	8,487	X	X	X	—	X	X	—	Sensitivities
N.C. ....	4,666	X	X	X	—	X	X	—	—
S.C. ....	1,564	X	X	X	—	X	X	—	—
Va. ....	7,692	X	X	X	—	X	X	—	—
W. Va. ....	476	X	X	X	—	X	X	—	—
<b>East South Central</b> ....	<b>18,907</b>								
Ala. ....	4,846	X	X	X	—	X	X	—	—
Ky. ....	1,727	X	X	X	—	X	X	X	—
Miss. ....	5,624	X	X	X	X	X	X	—	Subculture
Tenn. ....	6,710	X	X	X	—	X	X	—	—
<b>West South Central</b> ...	<b>26,321</b>								
Ark. ....	2,556	X	X	X	—	X	X	—	—
La. ....	5,309	X	X	X	—	X	X	X	—
Okla. ....	1,841	X	X	X	—	X	X	—	—
Tex. ....	16,615	X	X	X	—	X	X	X	—
<b>Mountain</b> .....	<b>10,772</b>								
Ariz. ....	2,275	X	X	X	X	X	X	—	—
Colo. ....	1,656	X	X	X	—	X	X	—	—
Ida. ....	829	X	X	X	—	X	X	—	—
Mont. ....	407	X	X	X	—	X	—	—	—
Nev. ....	356	X	X	X	—	X	—	—	—
N.M. ....	2,616	X	X	X	—	X	X	—	—
Utah ....	2,586	X	X	X	—	X	X	—	Antibiotic sensitivities
Wyo. ....	47	X	X	X	—	X	—	—	—
<b>Pacific</b> .....	<b>13,179</b>								
Alaska ....	—	—	—	—	—	—	—	—	—
Cal. ....	354	X	X	X	X	X	X	X	S. typhi bacteriophage typing, sensitivity tests, Campylobacter isolation
Hawaii ....	8,029	X	X	X	—	X	X	X	—
Ore. ....	2,010	X	X	X	X	X	X	—	—
Wash. ....	2,786	X	X	X	—	X	X	—	—
<b>Territories</b> .....	<b>439</b>								
Guam ....	175	X	X	X	—	X	X	—	—
P.R. ....	264	X	X	X	X	X	—	—	—
V.I. ....	—	X	X	X	—	X	X	—	—

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
<b>Total</b> .....	<b>4,777,785</b>							
Average .....	91,880							
<b>New England</b> .....	<b>249,343</b>							
Conn. ....	26,784	X	X	X	X	X	X	—
Mass. ....	61,803	X	X	X	X	X	X	—
Me. ....	37,439	X	X	X	X	X	X	—
N.H. ....	49,110	X	X	X	X	X	X	—
R.I. ....	59,627	X	X	X	X	X	X	—
Vt. ....	14,580	X	X	X	X	X	X	—
<b>Middle Atlantic</b> .....	<b>211,290</b>							
N.J. ....	211,250	X	X	X	—	X	X	—
N.Y. ....	—	—	—	—	—	—	—	—
Pa. ....	40	X	X	X	—	X	—	—
<b>East North Central</b> ....	<b>373,112</b>							
Ill. ....	128,908	X	X	X	—	X	—	—
Ind. ....	4,742	X	X	X	X	X	X	—
Mich. ....	144,491	X	X	X	—	X	X	—
Ohio ....	77,623	X	X	X	X	X	X	—
Wisc. ....	17,348	X	X	X	—	X	X	—
<b>West North Central</b> ....	<b>324,994</b>							
Ia. ....	75,661	X	X	X	X	X	—	Kirby Bauer
Kans. ....	39,245	X	X	X	X	X	X	—
Minn. ....	102,577	X	X	X	X	X	X	—
Mo. ....	72,298	X	X	X	X	X	X	—
Nebr. ....	21,689	X	X	X	X	X	X	Phadebact
N.D. ....	6,032	X	X	X	—	X	X	—
S.D. ....	7,492	X	X	X	X	X	X	—
<b>South Atlantic</b> .....	<b>1,569,368</b>							
Del. ....	29,769	X	X	X	—	X	X	—
D.C. ....	94,586	X	X	—	—	—	—	Phadebact co-agglutination
Fla. ....	530,713	X	X	X	—	X	X	—
Ga. ....	218,464	X	X	X	X	X	X	—
Md. ....	339,460	X	X	X	X	X	X	—
N.C. ....	365	X	X	X	X	X	X	—
S.C. ....	214,971	X	X	X	X	X	X	—
Va. ....	88,289	X	X	—	—	—	—	—
W. Va. ....	52,751	X	X	X	X	X	X	—
<b>East South Central</b> ....	<b>778,092</b>							
Ala. ....	353,411	X	X	X	X	X	X	X
Ky. ....	9,651	X	X	X	X	X	X	—
Miss. ....	179,077	X	X	X	—	X	X	Gram stain and culture, drug susceptibility
Tenn. ....	235,953	X	X	X	X	—	—	—
<b>West South Central</b> ....	<b>865,005</b>							
Ark. ....	75,958	X	X	X	—	X	X	—
La. ....	86,334	X	X	X	—	X	X	—
Okla. ....	96,074	X	X	X	X	X	X	—
Tex. ....	606,639	X	X	X	X	X	X	—
<b>Mountain</b> .....	<b>229,640</b>							
Ariz. ....	10,063	X	X	X	X	X	—	—
Colo. ....	36,037	X	X	X	X	X	X	—
Ida. ....	29,565	X	X	X	X	X	X	—
Mont. ....	13,877	X	X	X	X	X	X	—
Nev. ....	36,420	X	X	X	—	X	X	—
N.M. ....	79,568	X	X	X	X	X	X	—
Utah ....	21,167	X	X	X	X	X	X	—
Wyo. ....	2,943	X	X	X	X	X	—	—
<b>Pacific</b> .....	<b>155,026</b>							
Alaska ....	—	—	—	—	—	—	—	—
Cal. ....	13,253	X	X	X	X	X	X	—
Hawaii ....	119,373	X	X	X	X	X	X	—
Ore. ....	1,472	X	X	X	X	X	X	—
Wash. ....	20,928	X	X	X	X	X	X	—
<b>Territories</b> .....	<b>21,915</b>							
Guam ....	1,018	X	X	X	—	X	—	Penicillin 10 units sensitivity testing
P.R. ....	18,289	X	X	X	X	X	X	—
V.I. ....	2,608	X	X	X	—	X	—	—

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
<b>Total</b> .....	<b>13,579</b>									
Average .....	295									
<b>New England</b> .....	<b>517</b>									
Conn. ....	97	—	X	X	X	X	X	X	X	—
Mass. ....	128	X	X	X	X	X	X	—	X	—
Me. ....	160	X	X	X	X	X	X	—	X	—
N.H. ....	—	—	—	—	—	—	—	—	—	—
R.I. ....	20	X	—	X	X	X	X	—	—	—
Vt. ....	112	X	X	X	X	X	X	X	X	—
<b>Middle Atlantic</b> .....	<b>145</b>									
N.J. ....	99	—	—	X	X	—	X	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—	—	—
Pa. ....	46	—	—	X	X	X	X	—	X	—
<b>East North Central</b> .....	<b>1,730</b>									
Ill. ....	262	—	X	X	X	X	X	—	X	—
Ind. ....	185	—	—	X	—	—	X	—	X	—
Mich. ....	174	X	X	X	X	X	X	—	X	—
Ohio ....	460	X	X	X	X	X	X	—	X	Sensitivity testing, animal inoculation
Wisc. ....	649	X	X	X	X	X	X	X	X	—
<b>West North Central</b> .....	<b>1,251</b>									
Ia. ....	316	X	X	X	X	X	X	X	X	—
Kans. ....	360	X	X	X	X	X	X	—	X	—
Minn. ....	159	—	—	X	X	X	X	—	—	Animal toxogenicity, Serology
Mo. ....	76	—	X	X	X	X	X	—	X	—
Nebr. ....	—	—	—	—	—	—	—	—	—	—
N.D. ....	239	X	—	X	X	X	X	—	—	—
S.D. ....	101	X	—	X	X	X	X	—	—	—
<b>South Atlantic</b> .....	<b>3,567</b>									
Del. ....	—	—	—	—	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—	—	—
Fla. ....	904	X	X	X	X	X	X	—	X	—
Ga. ....	997	—	X	X	X	X	X	—	X	—
Md. ....	543	X	X	X	X	X	X	—	X	—
N.C. ....	351	X	X	X	X	X	X	—	X	—
S.C. ....	453	X	X	X	X	X	X	X	X	Flagellar stains
Va. ....	309	X	—	X	X	X	X	—	—	—
W. Va. ....	10	X	—	—	—	—	—	—	—	—
<b>East South Central</b> .....	<b>1,509</b>									
Ala. ....	322	—	—	X	X	X	X	X	—	Animal inoculation
Ky. ....	35	—	X	X	X	X	X	—	X	—
Miss. ....	*	X	—	X	X	X	X	—	—	—
Tenn. ....	1,152	X	X	X	X	X	X	—	X	Toxin Studies
<b>West South Central</b> .....	<b>2,202</b>									
Ark. ....	218	X	X	X	X	X	X	—	X	—
La. ....	1,115	X	—	X	X	X	X	—	—	—
Okla. ....	99	X	X	X	X	X	X	X	X	—
Tex. ....	770	X	X	X	X	X	X	X	X	—
<b>Mountain</b> .....	<b>941</b>									
Ariz. ....	518	X	X	X	X	X	X	X	X	—
Colo. ....	96	X	—	X	X	X	X	—	—	—
Ida. ....	79	X	X	X	X	X	X	—	X	—
Mont. ....	150	—	—	—	—	—	—	—	—	—
Nev. ....	25	X	—	X	X	X	X	—	—	—
N.M. ....	52	X	X	X	X	X	—	—	X	—
Utah ....	21	X	—	X	—	X	X	—	—	Identification of referred cultures
Wyo. ....	—	—	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>605</b>									
Alaska ....	—	—	—	—	—	—	—	—	—	—
Cal. ....	109	X	X	X	X	X	X	X	X	—
Hawaii ....	216	—	—	X	X	X	X	—	X	—
Ore. ....	59	X	X	X	X	X	X	X	X	—
Wash. ....	221	X	X	X	X	X	X	—	X	Antibiograms, mouse toxicity testing
<b>Territories</b> .....	<b>208</b>									
Guam ....	3	X	—	X	X	X	X	—	—	—
P.R. ....	83	X	—	X	X	X	X	—	—	—
V.I. ....	122	X	—	X	X	X	X	—	X	—

\*Included in other bacteriology specimens, Table 4-10

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

Lab	Number Of Specimens	Disease — Procedures Used
<b>Total</b> .....	<b>166,312</b>	
Average .....	3,423	
Ala. ....	3,396	Pathogenic E. coli — FA; Staphylococcus, reference bacteriology, Brucella — culture
Ark. ....	434	Blood culture, Spinal fluids, Staphylococcus, Legionnaires' Disease
Ariz. ....	505	Miscellaneous bacteria — culture, isolation, biopsy, identification
Cal. ....	7,514	Plague — culture, animal inoculation, bacteriophage, FA; relapsing fever — stained smears, animal inoculation Reference cultures for identification — Mycobacteriology, including drug susceptibility tests; Mycology; enteric bacteriology, including drug susceptibility tests; aerobic bacteriology
Colo. ....	435	Miscellaneous reference specimens, e.g., Pasteurella sp., N. meningitis, Listeria, Haemophilus, Campylobacter — Gram Stain, plating, subcultures, biochemical, Serogrouping.
Conn. ....	7,295	Phage — Staph phage typing; Trichomonas/Candida-Smear, Giemsa; Clinical specimens (misc.) — Culture, Biochemicals; Referred Cultures — Culture, Biochemicals, Serology
Del. ....	1,020	Urine cultures, reference cultures for identification.
D.C. ....	6,338	Urinary tract infections — Culture ("Testuris"), miscellaneous exudates, skin lesions, vaginals (non-GC), etc.
Fla. ....	9,223	Miscellaneous infections
Ga. ....	3,530	Miscellaneous clinical specimens, Referred cultures for identification — Gram stain, plating, subculture, biochemical, GLC.
Guam ....		Urine — general bacterial culture; vaginal, cervical, urethral — general bacterial culture; miscellaneous (wounds, etc.) general bacterial culture; cervical — T and M
Hawaii ....	5,728	Staph phage; antibiotic sensitivity — Kirby Bauer; non-human enterics — culture, identification; leptospirosis — culture, identification; reference specimens — sub-culture, appropriate identification procedures
Ida. ....	410	Most communicable diseases — most cultural and serological techniques
Ill. ....	2,468	Miscellaneous infections — Smear, biochemicals; Staphylococcus infections — phage typing
Ind. ....	825	Nosocomial Staphylococcal infections — phage typing, aerobic bacterial infections — culture identification
Ia. ....	5,534	Miscellaneous wounds, infections-famicroscopy; body fluids, urine — serotyping; toxin studies, gas chromatography; Salmonella, Flagellar strains — Kirby Bauer
Kans. ....	2,304	Staphylococcal infections — culture, coagulase, biochemicals, phage typing; Vincent's Angina — smear; bacterial meningitis and pneumonias, septicemia and other miscellaneous infections — smear, culture, biochemicals, serogrouping, serotyping, and when requested antibiotic sensitivities; Legionnaires' Disease — smear, culture, direct FA, biochemicals
Ky. ....	633	Staph bacteriophage — Smear, Coagulase, phage typing miscellaneous cultures — smear, biochemicals, coagulase, serogrouping
La. ....	1,665	Cultures for identification — biochemical, serotyping
Md. ....	604	Referred cultures for identification.
Mass. ....	2,337	Miscellaneous infections and reference cultures — microscopic, culture, biochemicals, serogrouping, serotyping, FA, special stains; Legionnaires' disease — culture, FA.
Mich. ....	12,351	Transudates/exudates — isolation; saliva cultures — Lactobacilli; urine cultures — culture; staphylococci — phage typing; aerobic referred cultures — identification; miscellaneous — culture
Minn. ....	403	Leptospirosis — microscopic; botulism — culture; Vincent's angina — serology; Blood, spinal fluid, tissues, etc., food poisoning (bacterial) — animal patho/toxins

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

Lab	Number Of Specimens	Disease — Procedures Used
Miss. ....	3,119	Salmonella (waters) — primary plating, enrichment plating, biochemicals, serotyping, subculture. Miscellaneous cultures — plating, selective subculture, biochemicals Blood cultures — culture, plating, biochemicals Urine cultures — plating, subculture, biochemicals, bacterial sensitivity testing Spinal fluid — plating, biochemicals, Gram stain, agglutination
Mo. ....	983	Reference cultures — Gram stain, plating, subculture, biochemicals, FH when applicable, enrichment plating, serotyping, serotyping
Mont. ....	513	Special determinative bacteriology
Nev. ....	873	Urine infection; eye, ear, etc. infection; vaginitis — culture
N.H. ....	2,526	Miscellaneous cultures for various bacteria — variable, but use CDC procedures.
N.J. ....	859	NFB predominantly — all organisms not GC, TB, enteric, or mycology — oxidative or fermentative biochemicals; Hemophilus infections — modified Kirby Bauer.
N.M. ....	4,214	Pertussis — direct FA; plaque — direct FA; Staphylococcal infections — cultures, with phage typing if indicated; nosocomial infections (monitoring — preventive) — sterility spore test.
N.C. ....	1,759	Reference specimens (all types) — smear culture, biochemicals, serotyping; clinical specimens (all types) other than fecal and throat swab for strep. — smear culture, biochemicals, serotyping.
N.D. ....	20,552	Blood and urine, susceptibility tests, miscellaneous, reference
Okla. ....	1,470	Urinary tract infections — culture Bacteremia — culture and serology Meningitis — culture and serology Wounds — culture and serology Legionnaires' Disease — direct FA Hemophilus infections — culture and serology Tularemia — culture and direct FA Leptospirosis — culture and darkfield exam
Ohio ....	4,313	Mycoplasma inf. — culture; urea plasma inf. — culture; Legionnaires' disease — culture, FA; Leptospirosis — culture, referred cultures — culture, biochemical; aerobic — serological
Ore. ....	430	Miscellaneous specimens for identification
Pa. ....	881	Bacterial infections other than mycobacteria — standard bacteriologic techniques; Food poisoning — Bacterial analytical manual (BAM); Botulism — Mouse neutralization.
R.I. ....	285	Miscellaneous reference cultures — culture, biochemical
S.C. ....	6,350	Diseases caused by miscellaneous Gram positive and Gram negative organisms — FA, biochemicals, serological tests, special stains, antibiograms
S.D. ....	585	—
Tenn. ....	1,995	Aerobic identification — primary plating, enrichment plating, biochemical differentiation, serotyping, serotyping, serotyping, toxin studies, Gram stain
Tex. ....	31,490	Reference cultures — aerobic; urine cultures — aerobic; miscellaneous wounds and lesions — aerobic
Utah ....	250	Meningitis — culture, typing (agglutination); Legionnaires' disease — direct FA; infant botulism — culture, mouse inoculation, toxin neutralization; referred cultures for identification.
Va. ....	2,380	Dental caries, wounds, lesions, body fluid, sputum, urine, autopsy, misc. (blood), animal inoculation, H. ducreyii (smears), environmental, food
V.I. ....	3,121	Wound fluid exudates — aerobic and anaerobic primary plates, subculture, biochemicals; urine — primary plates, biochemicals; Sensitivity — aerobic and anaerobic biochemicals

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

Lab	Number Of Specimens	Disease – Procedures Used
Wash. ....	1,677	Legionnaires' disease — stains, plating, embryonated eggs, Guinea pigs; meningitis — Gram stain, plating, serogrouping, subculture; paralytic shellfish poison — mouse inoculation
W. Va. ....	515	Urinary tract infection, Legionnaires' Disease, Leptospirosis, miscellaneous — culture
Wisc. ....	954	Legionnaires' disease — IFA, DFA, Culture, foodborne disease — smear, culture, toxin testing.

Table 4-11  
II. MYCOLOGY

Lab & Region	Number of Specimens	Procedures Used						
		Micro. Wet Mounts	Micro. Stains	Culture	FA	Bio-chemicals	Animal Inoculation	Other
<b>Total</b> .....	<b>59,566</b>							
Average .....	1,267							
<b>New England</b> .....	<b>2,904</b>							
Conn. ....	1,532	X	X	X	—	X	X	Differential Media
Mass. ....	671	X	X	X	—	X	—	—
Me. ....	271	X	X	X	—	X	—	—
N.H. ....	85	X	X	X	—	X	—	—
R.I. ....	88	X	X	X	—	X	—	—
Vt. ....	257	X	X	X	—	X	—	Slide culture
<b>Middle Atlantic</b> .....	<b>1,506</b>							
N.J. ....	1,238	X	X	X	—	X	—	—
N.Y. ....	—	—	—	—	—	—	—	—
Pa. ....	268	—	—	—	—	—	—	—
<b>East North Central</b> .....	<b>7,391</b>							
Ill. ....	1,210	X	X	X	—	X	X	—
Ind. ....	730	X	X	X	—	X	—	—
Mich. ....	1,915	X	X	X	—	X	X	—
Ohio ....	764	X	X	X	—	X	X	—
Wisc. ....	3,772	X	X	X	X	X	X	Susceptibility testing, drug bioassays
<b>West North Central</b> .....	<b>7,006</b>							
Ia. ....	1,120	X	X	X	X	X	X	—
Kans. ....	764	X	X	X	—	X	X	—
Minn. ....	3,923	X	X	X	—	X	X	Assimilation tests
Mo. ....	466	X	X	X	—	X	X	—
Nebr. ....	55	—	—	—	—	—	—	—
N.D. ....	523	—	—	—	—	—	—	—
S.D. ....	155	X	X	X	—	—	—	—
<b>South Atlantic</b> .....	<b>10,903</b>							
Del. ....	—	—	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—
Fla. ....	2,292	X	X	X	—	X	—	—
Ga. ....	807	X	X	X	—	X	X	—
Md. ....	2,343	X	X	X	—	X	—	—
N.C. ....	1,697	X	X	X	—	X	—	—
S.C. ....	1,683	X	X	X	X	X	X	Sensitivities (MIC), exoantigen (extract prep.), lysozyme test
Va. ....	1,632	X	X	X	—	X	X	X
W. Va. ....	449	X	X	X	—	X	X	—
<b>East South Central</b> .....	<b>8,660</b>							
Ala. ....	3,873	X	X	X	—	X	X	—
Ky. ....	276	X	X	X	—	X	X	—
Miss. ....	2,196	X	X	X	—	X	—	Hair culture
Tenn. ....	2,315	X	X	X	—	X	X	—
<b>West South Central</b> .....	<b>13,378</b>							
Ark. ....	1,836	X	X	X	—	X	—	—
La. ....	2,698	X	X	X	—	X	—	—
Okla. ....	3,925	X	X	X	—	X	X	—
Tex. ....	4,919	X	X	X	X	X	X	Micro. concentration, gel diffusion
<b>Mountain</b> .....	<b>5,155</b>							
Ariz. ....	1,502	X	X	X	—	X	X	In-vitro conversion
Colo. ....	262	X	X	X	—	—	—	—
Ida. ....	1,917	X	X	X	—	X	—	—
Mont. ....	344	X	X	X	—	X	—	—
Nev. ....	81	X	X	X	—	X	—	—
N.M. ....	751	X	X	X	—	X	X	—
Utah ....	298	X	X	X	—	X	X	—
Wyo. ....	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>1,335</b>							
Alaska ....	—	—	—	—	—	—	—	—
Cal. ....	55	X	X	X	X	X	X	—
Hawaii ....	776	X	X	X	—	X	—	—
Ore. ....	266	X	X	X	—	X	—	—
Wash. ....	238	—	X	X	—	X	X	Tease mounts
<b>Territories</b> .....	<b>1,328</b>							
Guam ....	—	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—
V.I. ....	1,328	X	X	X	—	X	—	—

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

Lab & Region	Total Parasitology Specimens	A	B
		Intestinal Specimens	Other Specimens
<b>Total</b> .....	<b>297,285</b>	<b>282,230</b>	<b>13,919</b>
Average .....	5,717	5,428	324
<b>New England</b> .....	<b>17,011</b>	<b>15,811</b>	<b>55</b>
Conn. ....	10,751	10,720	31
Mass. ....	33	21	12
Me. ....	183	183	—
N.H. ....	1,145	1,142	3
R.I. ....	2,307	2,305	2
Vt. ....	1,447	1,440	7
<b>Middle Atlantic</b> .....	<b>3,314</b>	<b>3,163</b>	<b>160</b>
N.J. ....	2,893	2,858	44
N.Y. ....	—	—	—
Pa. ....	421	305	116
<b>East North Central</b> .....	<b>13,306</b>	<b>13,211</b>	<b>95</b>
Ill. ....	1,139	1,121	18
Ind. ....	2,323	2,310	13
Mich. ....	3,712	3,708	4
Ohio ....	1,494	1,481	13
Wisc. ....	4,638	4,591	47
<b>West North Central</b> .....	<b>21,411</b>	<b>21,128</b>	<b>283</b>
Ia. ....	2,033	2,012	21
Kans. ....	5,230	5,214	16
Minn. ....	10,798	10,567	231
Mo. ....	1,362	1,351	11
Nebr. ....	399	397	2
N.D. ....	1,177	1,175	2
S.D. ....	412	412	—
<b>South Atlantic</b> .....	<b>125,259</b>	<b>122,485</b>	<b>2,774</b>
Del. ....	210	204	6
D.C. ....	294	293	1
Fla. ....	59,700	59,677	23
Ga. ....	22,749	20,126	2,623
Md. ....	8,140	8,083	57
N.C. ....	5,863	5,821	42
S.C. ....	13,489	13,488	1
Va. ....	12,186	12,184	2
W. Va. ....	2,628	2,609	19
<b>East South Central</b> .....	<b>45,682</b>	<b>45,383</b>	<b>299</b>
Ala. ....	28,377	28,098	279
Ky. ....	688	683	5
Miss. ....	10,206	10,200	6
Tenn. ....	6,411	6,402	9
<b>West South Central</b> .....	<b>36,355</b>	<b>26,269</b>	<b>10,086</b>
Ark. ....	1,387	1,382	5
La. ....	18,767	18,763	4
Okla. ....	5,616	2,832	2,784
Tex. ....	10,585	3,292	7,293
<b>Mountain</b> .....	<b>8,092</b>	<b>8,064</b>	<b>28</b>
Ariz. ....	249	231	18
Colo. ....	1,350	1,344	6
Ida. ....	1,163	1,162	1
Mont. ....	997	997	—
Nev. ....	145	145	—
N.M. ....	467	467	—
Utah ....	3,648	3,645	3
Wyo. ....	73	73	—
<b>Pacific</b> .....	<b>12,466</b>	<b>12,328</b>	<b>138</b>
Alaska ....	—	—	—
Cal. ....	942	825	117
Hawaii ....	5,901	5,889	12
Ore. ....	974	974	11
Wash. ....	4,649	4,640	9
<b>Territories</b> .....	<b>14,389</b>	<b>11,865</b>	<b>1</b>
Guam ....	985	985	—
P.R. ....	2,523	2,523	—
V.I. ....	10,881	10,880	1

Table 4-13  
 III. PARASITOLOGY  
 A. Intestinal Specimens

Lab & Region	Number of Specimens	Procedures Used				
		Gross	Direct (Incl. Pinworms)	Concentrate Smear	Stained Smear	Other
<b>Total</b> .....	<b>282,230</b>					
Average .....	5,428					
<b>New England</b> .....	<b>15,811</b>					
Conn. ....	10,720	X	X	X	X	—
Mass. ....	21	X	X	X	X	Schistosome egg hatching—2
Me. ....	183	X	X	X	X	—
N.H. ....	1,142	X	X	X	X	—
R.I. ....	2,305	X	X	X	—	—
Vt. ....	1,440	X	X	X	X	—
<b>Middle Atlantic</b> .....	<b>3,163</b>					
N.J. ....	2,858	X	X	X	X	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	305	X	X	X	X	Clearing adult helminths; egg counting of Schistosomes
<b>East North Central</b> .....	<b>13,211</b>					
Ill. ....	1,121	X	X	X	X	—
Ind. ....	2,310	X	X	X	X	—
Mich. ....	3,708	X	X	X	X	—
Ohio ....	1,481	X	X	X	—	Worm for identification
Wisc. ....	4,591	X	X	X	X	—
<b>West North Central</b> .....	<b>21,128</b>					
Ia. ....	2,012	X	X	X	X	—
Kans. ....	5,214	X	X	X	X	—
Minn. ....	10,567	X	X	X	—	—
Mo. ....	1,351	X	X	X	X	—
Nebr. ....	397	X	X	X	X	—
N.D. ....	1,175	X	X	X	X	—
S.D. ....	412	X	X	X	X	—
<b>South Atlantic</b> .....	<b>122,485</b>					
Del. ....	204	X	X	X	X	—
D.C. ....	293	X	X	X	X	—
Fla. ....	59,677	X	X	X	X	—
Ga. ....	20,126	X	X	X	X	—
Md. ....	8,083	X	X	X	X	—
N.C. ....	5,821	X	X	X	X	—
S.C. ....	13,488	X	X	X	X	Trichrome stain
Va. ....	12,814	X	X	—	—	—
W. Va. ....	2,609	X	X	X	X	—
<b>East South Central</b> .....	<b>45,383</b>					
Ala. ....	28,098	X	X	X	X	—
Ky. ....	683	X	X	X	X	—
Miss. ....	10,200	—	X	X	X	—
Tenn. ....	6,402	X	X	X	X	—
<b>West South Central</b> .....	<b>26,269</b>					
Ark. ....	1,382	X	X	X	X	—
La. ....	18,763	X	X	X	—	—
Okla. ....	2,832	X	X	X	X	—
Tex. ....	3,292	X	X	X	X	—
<b>Mountain</b> .....	<b>8,064</b>					
Ariz. ....	231	—	X	X	X	—
Colo. ....	1,344	—	X	X	X	PVA
Ida. ....	1,162	X	X	X	X	—
Mont. ....	997	X	X	X	X	—
Nev. ....	145	X	X	X	X	—
N.M. ....	467	X	X	X	X	—
Utah ....	3,645	X	X	X	X	—
Wyo. ....	73	X	X	X	—	—
<b>Pacific</b> .....	<b>12,328</b>					
Alaska ....	—	—	—	—	—	—
Cal. ....	825	X	X	X	X	—
Hawaii ....	5,889	X	X	X	X	—
Ore. ....	974	X	X	X	X	—
Wash. ....	4,640	X	X	X	X	—
<b>Territories</b> .....	<b>11,865</b>					
Guam ....	985	—	X	—	—	—
P.R. ....	2,523	X	X	X	X	—
V.I. ....	10,880	—	X	X	—	—

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

Lab & Region	Number of Specimens	Types of Specimens			
		Malaria	Trichinosis	Toxoplasmosis	Other (Disease Entity-Procedures Used)
<b>Total</b> .....	<b>13,919</b>				
Average .....	324				
<b>New England</b> .....	<b>55</b>				
Conn. ....	31	X	X	—	Materials mistaken for parasites
Mass. ....	12	X	—	—	Amebiasis — Smear
Me. ....	—	—	—	—	—
N.H. ....	3	X	X	—	—
R.I. ....	2	—	X	—	—
Vt. ....	7	X	X	—	—
<b>Middle Atlantic</b> .....	<b>160</b>				
N.J. ....	44	X	X	—	Identifications and examinations of water for Giardia
N.Y. ....	—	—	—	—	—
Pa. ....	116	X	X	—	Arthropod identification
<b>East North Central</b> .....	<b>95</b>				
Ill. ....	18	X	—	—	—
Ind. ....	13	X	—	—	Arthropods
Mich. ....	4	X	—	—	—
Ohio ....	13	X	X	—	Occult blood
Wisc. ....	47	X	—	—	Insect identification
<b>West North Central</b> .....	<b>283</b>				
Ia. ....	21	X	—	—	—
Kans. ....	16	X	—	—	Arthropods
Minn. ....	231	X	—	—	Pinworm slide, tape worm and insect identification
Mo. ....	11	X	—	—	Miscellaneous invert
Nebr. ....	2	X	—	—	—
N.D. ....	2	—	X	—	—
S.D. ....	—	—	—	—	—
<b>South Atlantic</b> .....	<b>2,774</b>				
Del. ....	6	—	—	—	Vincent's angina
D.C. ....	1	X	—	—	—
Fla. ....	23	X	—	—	—
Ga. ....	2,623	X	—	X	—
Md. ....	57	X	—	—	—
N.C. ....	42	X	—	—	Insect identification, water
S.C. ....	1	X	—	—	—
Va. ....	2	X	—	—	Parasites for identification
W. Va. ....	19	—	—	—	Insect identification
<b>East South Central</b> .....	<b>299</b>				
Ala. ....	279	X	—	—	Insects, mosquito larvae, spiders
Ky. ....	5	X	—	—	—
Miss. ....	6	X	—	—	—
Tenn. ....	9	X	—	—	—
<b>West South Central</b> .....	<b>10,086</b>				
Ark. ....	5	X	—	—	—
La. ....	4	—	X	—	—
Okla. ....	2,784	X	—	—	Arthropod identification, vaginal wet preps
Tex. ....	7,293	—	—	—	Mosquito and tick identification, Trichomonas exam
<b>Mountain</b> .....	<b>28</b>				
Ariz. ....	18	X	—	—	—
Colo. ....	6	X	—	—	—
Ida. ....	1	X	—	—	—
Mont. ....	—	—	—	—	—
Nev. ....	—	—	—	—	Toxoplasma serologies referred to CDC
N.M. ....	—	—	—	—	—
Utah ....	3	X	—	—	—
Wyo. ....	—	—	—	—	—
<b>Pacific</b> .....	<b>138</b>				
Alaska ....	—	—	—	—	—
Cal. ....	117	X	X	X	Tissue parasites
Hawaii ....	12	X	—	X	Insect identification
Ore. ....	—	X	X	X	—
Wash. ....	9	X	—	—	Microfilariae
<b>Territories</b> .....	<b>1</b>				
Guam ....	—	—	—	—	—
P.R. ....	—	—	—	—	—
V.I. ....	1	X	—	—	—

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
<b>Total</b> .....	<b>186,170</b>	<b>66,737</b>	<b>86,504</b>	<b>9,206</b>	<b>23,993</b>
Average .....	3,723	1,420	2,218	767	2,666
<b>New England</b> .....	<b>15,750</b>	<b>1,907</b>	<b>14,383</b>	—	—
Conn. ....	9,178	584	9,134	—	—
Mass. ....	5,284	576	4,708	—	—
Me. ....	858	349	509	—	—
N.H. ....	188	188	—	—	—
R.I. ....	72	72	—	—	—
Vt. ....	170	138	32	—	—
<b>Middle Atlantic</b> .....	<b>10,555</b>	<b>2,343</b>	<b>8,095</b>	<b>35</b>	<b>82</b>
N.J. ....	9,056	2,031	6,938	5	82
N.Y. ....	—	—	—	—	—
Pa. ....	1,499	312	1,157	30	—
<b>East North Central</b> .....	<b>49,733</b>	<b>10,539</b>	<b>20,702</b>	<b>2,103</b>	<b>16,389</b>
Ill. ....	11,548	2,436	9,112	—	—
Ind. ....	3,324	2,720	604	—	—
Mich. ....	4,386	1,154	3,063	—	169
Ohio ....	23,708	2,591	2,794	2,103	16,220
Wisc. ....	6,767	1,638	5,129	—	—
<b>West North Central</b> .....	<b>13,796</b>	<b>5,883</b>	<b>7,628</b>	<b>10</b>	<b>5</b>
Ia. ....	2,857	636	1,946	—	5
Kans. ....	597	—	597	—	—
Minn. ....	5,335	1,197	4,138	—	—
Mo. ....	3,686	2,865	821	—	—
Nebr. ....	600	600	—	—	—
N.D. ....	452	442	—	10	—
S.D. ....	269	143	126	—	—
<b>South Atlantic</b> .....	<b>37,364</b>	<b>12,596</b>	<b>10,434</b>	<b>6,905</b>	<b>7,429</b>
Del. ....	1,192	229	963	—	—
D.C. ....	63	63	—	—	—
Fla. ....	5,511	3,472	2,039	—	—
Ga. ....	11,523	2,509	1,591	—	7,423
Md. ....	4,597	2,130	2,457	9	1
N.C. ....	3,112	1,396	1,716	—	—
S.C. ....	8,631	1,639	906	6,086	—
Va. ....	1,971	602	559	810	—
W. Va. ....	764	556	203	—	5
<b>East South Central</b> .....	<b>9,193</b>	<b>7,235</b>	<b>1,909</b>	<b>1</b>	<b>48</b>
Ala. ....	4,073	3,052	972	1	48
Ky. ....	1,977	1,642	335	—	—
Miss. ....	702	702	—	—	—
Tenn. ....	2,441	1,839	602	—	—
<b>West South Central</b> .....	<b>32,159</b>	<b>21,029</b>	<b>11,109</b>	<b>21</b>	—
Ark. ....	2,282	2,282	—	—	—
La. ....	2,262	2,230	32	—	—
Okla. ....	4,786	3,201	1,585	—	—
Tex. ....	22,829	13,316	9,492	21	—
<b>Mountain</b> .....	<b>8,123</b>	<b>3,668</b>	<b>4,448</b>	<b>7</b>	—
Ariz. ....	3,440	1,506	1,934	—	—
Colo. ....	626	626	—	—	—
Ida. ....	247	120	127	—	—
Mont. ....	380	10	363	7	—
Nev. ....	—	—	—	—	—
N.M. ....	1,174	722	452	—	—
Utah ....	1,816	244	1,572	—	—
Wyo. ....	440	440	—	—	—
<b>Pacific</b> .....	<b>9,241</b>	<b>1,281</b>	<b>7,796</b>	<b>124</b>	<b>40</b>
Alaska ....	—	—	—	—	—
Cal. ....	4,144	663	3,329	112	40
Hawaii ....	1,741	7	1,734	—	—
Ore. ....	2,413	218	2,195	—	—
Wash. ....	943	393	538	12	—
<b>Territories</b> .....	<b>256</b>	<b>256</b>	—	—	—
Guam ....	8	8	—	—	—
P.R. ....	248	248	X	—	—
V.I. ....	—	—	—	—	—

Table 4-16  
IV. VIROLOGY  
A. Rabies Specimens

Lab & Region	Number of Specimens	Procedures Used			
		Stained Smear	FRA	Animal Inoculation	Other
<b>Total</b> .....	<b>66,737</b>				
Average .....	1,420				
<b>New England</b> .....	<b>1,907</b>				
Conn. ....	584	X	X	X	—
Mass. ....	576	—	—	—	—
Me. ....	349	—	X	X	—
N.H. ....	188	X	X	X	—
R.I. ....	72	—	X	X	—
Vt. ....	138	—	X	X	—
<b>Middle Atlantic</b> .....	<b>2,343</b>				
N.J. ....	2,031	—	X	X	—
N.Y. ....	—	—	—	—	—
Pa. ....	312	—	X	X	—
<b>East North Central</b> .....	<b>10,539</b>				
Ill. ....	2,436	—	X	—	—
Ind. ....	2,720	X	X	—	—
Mich. ....	1,154	—	X	X	—
Ohio ....	2,591	X	X	X	—
Wisc. ....	1,638	—	X	X	—
<b>West North Central</b> .....	<b>5,883</b>				
Ia. ....	636	—	X	X	—
Kans. ....	—	—	—	—	—
Minn. ....	1,197	—	X	X	—
Mo. ....	2,865	X	X	X	—
Nebr. ....	600	—	X	—	—
N.D. ....	442	X	X	—	—
S.D. ....	143	—	X	X	—
<b>South Atlantic</b> .....	<b>12,596</b>				
Del. ....	229	X	X	—	—
D.C. ....	63	—	X	—	—
Fla. ....	3,472	X	X	—	—
Ga. ....	2,509	—	X	X	—
Md. ....	2,130	X	X	X	—
N.C. ....	1,396	X	X	—	—
S.C. ....	1,639	X	X	X	—
Va. ....	602	X	X	X	—
W. Va. ....	556	—	X	X	—
<b>East South Central</b> .....	<b>7,235</b>				
Ala. ....	3,052	X	X	X	—
Ky. ....	1,642	X	X	X	—
Miss. ....	702	X	X	—	—
Tenn. ....	1,839	X	X	X	—
<b>West South Central</b> .....	<b>21,029</b>				
Ark. ....	2,282	X	X	—	—
La. ....	2,230	—	X	X	—
Okla. ....	3,201	—	X	X	—
Tex. ....	13,316	—	X	X	—
<b>Mountain</b> .....	<b>3,668</b>				
Ariz. ....	1,506	—	X	—	—
Colo. ....	626	—	X	X	—
Ida. ....	120	—	X	—	—
Mont. ....	10	—	—	—	—
Nev. ....	—	—	—	—	—
N.M. ....	722	—	X	X	—
Utah ....	244	X	X	X	—
Wyo. ....	440	—	X	—	—
<b>Pacific</b> .....	<b>1,281</b>				
Alaska ....	—	—	—	—	—
Cal. ....	663	—	X	X	—
Hawaii ....	7	X	X	—	—
Ore. ....	218	X	X	X	—
Wash. ....	393	—	X	X	—
<b>Territories</b> .....	<b>256</b>				
Guam ....	8	—	X	—	—
P.R. ....	248	—	X	—	—
V.I. ....	—	—	—	—	—

Mouse neutralization test for antibody

Check specimens, FA

Sellers Stain

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	HAst/HAst	Other
Total	86,504																
Average	2,218																
Ala.	972	X	—	—	X	—	Body tissues	X	X	X	X	—	X	—	—	X	—
Ariz.	1,934	X	X	—	X	X	Misc., e.g., CNS	X	X	—	—	—	X	—	—	—	—
Cal.	3,329	X	X	X	X	X	Isolates for identification, urine, autopsy tissues, birds, mosquitoes, animal tissues (other than rabies specimens).	X	X	X	X	X	X	X	X	X	X
Conn.	9,134	X	X	—	X	X	Cytomegalovirus	X	X	X	X	X	X	—	X	X	—
Del.	963	X	X	—	X	X	—	X	X	X	X	X	X	X	X	X	—
Fla.	2,039	X	X	X	X	X	CNS	X	X	X	X	X	X	X	X	X	—
Ga.	1,591	X	X	X	X	X	CMV, Chlamydia	X	X	X	X	X	X	X	X	X	—
Hawaii	1,734	X	—	—	X	X	Skin lesions, tissue fluids	X	X	—	X	X	X	X	—	X	—
Ica.	127	—	—	—	X	X	—	X	X	X	X	X	—	X	X	X	—
Ill.	9,112	X	X	X	X	X	—	X	X	X	X	X	X	—	—	X	—
Ind.	604	X	—	—	X	X	—	X	—	—	X	X	X	—	—	—	—
Ia.	1,946	X	X	X	X	—	Blood, SF, tissue	X	X	X	X	—	X	—	—	—	—
Kans.	597	X	X	X	X	X	Cytomegalovirus	X	X	X	X	X	X	—	—	X	—
Ky.	335	X	X	—	X	X	Autopsy Material	X	X	—	X	X	X	—	—	X	—
La.	32	—	X	X	X	—	—	—	X	X	X	X	—	—	—	—	—
Me.	509	X	—	—	X	X	Vesicles	X	X	—	X	—	—	—	X	—	—
Md.	2,457	X	X	X	X	X	Venereal—genital, ocular, urinary tract	X	X	X	X	X	X	X	X	X	X
Mass.	4,708	X	X	X	X	X	CNS	X	X	—	X	—	X	—	—	X	—
Mich.	3,063	X	—	—	X	X	CNS, autopsy/biopsy, blood	X	X	X	X	X	X	X	X	X	X
Minn.	4,138	X	—	—	X	X	Urine, CSF	X	X	X	X	X	X	X	X	X	—
Mo.	821	X	X	X	X	X	Mycoplasma	X	X	X	X	X	X	—	X	X	—
Mont.	363	X	—	—	X	X	CNS, glu, etc.	X	—	—	X	X	X	—	—	X	—
N.J.	6,938	X	X	X	X	X	CNS Specimens (non-arbovirus) mosquito pools	X	X	X	X	—	X	X	X	X	—
N.M.	452	X	—	—	X	X	—	X	X	X	X	X	X	—	X	—	—
N.C.	1,716	X	X	X	X	X	—	X	X	X	X	X	X	—	X	X	—
Okla.	1,585	X	—	—	X	X	Lesion, urine, tissue, CSF	X	X	X	X	—	X	—	—	X	—
Ohio	2,794	X	X	—	X	X	Tissues	X	X	X	X	X	X	X	X	X	—
Ore.	2,195	X	—	—	X	X	Biopsy/autopsy tissues	X	X	—	X	X	X	—	—	X	—
Pa.	1,157	X	X	—	X	X	—	X	X	X	X	X	X	X	—	X	—
S.C.	906	X	—	—	X	X	Urine, tissue, vaginal swabs, body fluids	X	X	X	X	X	X	X	X	X	—
S.D.	126	X	X	—	X	X	—	X	X	X	X	X	X	—	—	X	—
Tenn.	602	X	—	—	X	X	—	X	X	X	X	—	X	—	—	X	—
Tex.	9,492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Utah	1,572	X	X	X	X	X	CMV-urine, Herpes-lesion, Psittacosis—birds	X	X	X	X	X	X	X	—	X	—
Va.	559	X	—	—	X	X	Tissue, isolates	X	X	X	—	X	X	—	—	—	—
Vt.	32	—	—	—	X	—	—	—	X	—	X	—	—	—	—	—	—
Wash.	538	X	—	X	X	X	Chlamydia—Psittacosis in birds	X	X	X	X	—	X	—	—	X	—
Wisc.	5,129	X	X	X	X	X	Biopsy, autopsy	X	X	X	X	X	X	X	X	X	X
W. Va.	203	X	—	—	X	X	CNS—other than arbovirus	X	X	X	X	—	X	X	X	X	—

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

Lab & Region	Number of Specimens	Type of Specimens		Procedures Used		
		Tick	Other	Hemolymph	FA	Other
<b>Total</b> .....	<b>9,206</b>					
Average .....	767					
<b>New England</b>						
Conn. ....	—	—	—	—	—	—
Mass. ....	—	—	—	—	X	X
Me. ....	—	—	—	—	—	—
N.H. ....	—	—	—	—	—	—
R.I. ....	—	—	—	—	—	—
Vt. ....	—	—	—	—	—	—
<b>Middle Atlantic</b>						
N.J. ....	5	X	X	X	X	Gimenez stain, egg inoculation (yolk sac), Guinea pig inoculation
N.Y. ....	—	—	—	—	—	—
Pa. ....	30	X	—	X	—	—
<b>East North Central</b>						
Ill. ....	—	—	—	—	—	—
Ind. ....	—	—	—	—	—	—
Mich. ....	—	—	—	—	—	—
Ohio ....	2,103	X	—	X	X	—
Wisc. ....	—	—	—	—	—	—
<b>West North Central</b>						
Ia. ....	—	—	—	—	—	—
Kans. ....	—	—	—	—	—	—
Minn. ....	—	—	—	—	—	—
Mo. ....	—	—	—	—	—	—
Nebr. ....	—	—	—	—	—	—
N.D. ....	10	X	—	—	X	—
S.D. ....	—	—	—	—	—	—
<b>South Atlantic</b>						
Del. ....	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—
Fla. ....	—	—	—	—	—	—
Ga. ....	—	—	—	—	—	—
Md. ....	9	X	X	X	X	ELISA
N.C. ....	—	—	—	—	—	—
S.C. ....	6,086	X	—	X	X	—
Va. ....	810	—	X	—	—	—
W. Va. ....	—	—	—	—	—	—
<b>East South Central</b>						
Ala. ....	1	X	—	—	—	—
Ky. ....	—	—	—	—	—	—
Miss. ....	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—
<b>West South Central</b>						
Ark. ....	—	X	—	X	—	—
La. ....	—	—	—	—	—	—
Okla. ....	—	—	—	—	—	—
Tex. ....	21	X	X	X	X	Microtus inoculations
<b>Mountain</b>						
Ariz. ....	—	—	—	—	—	—
Colo. ....	—	—	—	—	—	—
Ida. ....	—	—	—	—	—	—
Mont. ....	7	X	—	X	—	—
Nev. ....	—	—	—	—	—	—
N.M. ....	—	—	—	—	—	—
Utah ....	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b>						
Alaska ....	—	—	—	—	—	—
Cal. ....	112	X	X	X	X	Animal inoculation
Hawaii ....	—	—	—	—	—	—
Ore. ....	—	X	—	—	—	—
Wash. ....	12	X	—	—	—	—
<b>Territories</b>						
Guam ....	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—

Table 4-19  
**V. VIROLOGY**  
**D. Other Virology Specimens**

Lab	Number of Specimens	Disease Entity — Procedures Used
<b>Total</b> .....	<b>22,993</b>	
Average .....	2,666	
Ala. ....	48	SLE — HA/AI, Herpes serology — NI
Cal. ....	40	Water waste effluent — large volume virus concentrations, virus isolations in cell cultures
Ga. ....	7,423	Rubella — PHA
Ia. ....	5	Influenza — Kirby Bauer
Md. ....	1	Environmental sample — tissue culture
Mich. ....	169	Referred viruses — identification
N.J. ....	82	Legionnaires' Disease — FA; Psittacosis — Gimenez; Hepatitis — ELISA; Smallpox — Vaccinia HAI test; EB virus — Slide/FA.
Ohio ....	16,220	Arbovirus mosquito pools — Cell culture, mouse inoculation; bird blood — HI.
Tex. ....	—	Mycoplasma, psittacosis, arbovirus (bird blood)
W. Va. ....	5	Mycoplasma pneumoniae — FA, isolation on solid media

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	Parasitological Serology	Viral and Rickettsial Serology	Other
<b>Total</b> .....	<b>8,514,630</b>	<b>6,727,757</b>	<b>56,195</b>	<b>120,269</b>	<b>171,560</b>	<b>1,295,052</b>	<b>88,801</b>
Average .....	163,743	129,380	1,196	3,645	4,766	26,430	6,831
<b>New England</b> .....	<b>580,148</b>	<b>411,849</b>	<b>12,720</b>	<b>706</b>	<b>8,176</b>	<b>88,714</b>	<b>2,987</b>
Conn. ....	168,572	81,272	634	—	2,971	26,276	2,423
Mass. ....	202,356	191,168	265	279	2,275	8,369	—
Me. ....	28,237	10,376	296	322	2,882	14,361	—
N.H. ....	40,383	40,383	—	—	—	—	—
R.I. ....	94,320	57,613	10,034	—	40	26,633	—
Vt. ....	46,280	31,037	1,491	105	8	13,075	564
<b>Middle Atlantic</b> .....	<b>259,993</b>	<b>202,360</b>	<b>613</b>	<b>488</b>	<b>2,014</b>	<b>51,417</b>	<b>3,101</b>
N.J. ....	249,370	201,648	512	—	1,626	44,137	1,447
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	10,623	712	101	488	388	7,280	1,654
<b>East North Central</b> .....	<b>751,188</b>	<b>583,148</b>	<b>7,164</b>	<b>18,535</b>	<b>20,449</b>	<b>115,964</b>	<b>5,928</b>
Ill. ....	121,870	105,804	417	5,722	1,465	8,462	—
Ind. ....	64,762	58,601	664	3,432	814	1,251	—
Mich. ....	328,596	244,914	3,355	4,343	3,395	72,589	—
Ohio ....	104,651	84,796	287	2,546	3,137	12,404	1,481
Wisc. ....	131,309	89,033	2,441	2,492	11,638	21,258	4,447
<b>West North Central</b> .....	<b>847,090</b>	<b>600,575</b>	<b>11,556</b>	<b>11,221</b>	<b>7,921</b>	<b>214,941</b>	<b>876</b>
Ia. ....	240,879	150,115	6,394	1,885	4,481	77,194	810
Kans. ....	102,622	75,530	175	1,350	—	25,567	—
Minn. ....	207,197	148,759	1,328	3,732	2,014	51,364	—
Mo. ....	144,986	103,598	291	4,236	1,282	35,579	—
Nebr. ....	66,473	54,355	1,383	—	—	10,669	66
N.D. ....	47,553	44,896	1,153	—	144	1,360	—
S.D. ....	37,380	23,322	832	18	—	13,208	—
<b>South Atlantic</b> .....	<b>2,333,300</b>	<b>1,954,142</b>	<b>10,159</b>	<b>11,433</b>	<b>20,524</b>	<b>333,231</b>	<b>3,811</b>
Del. ....	39,569	34,525	—	—	—	5,044	—
D.C. ....	118,611	115,251	10	—	12	442	2,896
Fla. ....	664,342	566,953	1,576	—	1,293	74,520	—
Ga. ....	461,293	447,309	664	3,287	2,610	7,423	—
Md. ....	372,100	232,642	2,256	3,276	11,597	121,563	766
N.C. ....	236,038	181,590	358	1,925	2,402	49,763	—
S.C. ....	238,579	189,533	852	1,417	1,010	45,618	149
Va. ....	168,870	139,210	4,433	1,289	1,242	22,696	—
W. Va. ....	53,898	47,129	10	239	358	6,162	—
<b>East South Central</b> .....	<b>1,189,246</b>	<b>1,031,057</b>	<b>3,191</b>	<b>16,157</b>	<b>3,794</b>	<b>135,047</b>	<b>—</b>
Ala. ....	471,417	441,453	84	2,817	2,158	25,205	—
Ky. ....	142,167	116,968	87	3,453	1,636	20,023	—
Miss. ....	271,188	265,775	895	2,333	—	2,185	—
Tenn. ....	304,174	206,861	2,125	7,554	—	87,634	—
<b>West South Central</b> .....	<b>1,490,861</b>	<b>1,240,561</b>	<b>3,905</b>	<b>23,483</b>	<b>6,930</b>	<b>144,484</b>	<b>71,498</b>
Ark. ....	123,901	110,529	497	2,960	623	9,292	—
La. ....	284,721	144,776	369	1,720	1,536	64,822	71,498
Okla. ....	133,211	127,106	772	1,631	—	3,702	—
Tex. ....	949,028	858,150	2,267	17,172	4,771	66,668	—
<b>Mountain</b> .....	<b>557,970</b>	<b>399,277</b>	<b>2,879</b>	<b>25,310</b>	<b>5,016</b>	<b>124,888</b>	<b>600</b>
Ariz. ....	69,298	39,340	42	24,844	1,379	3,693	—
Colo. ....	208,058	147,600	110	—	—	60,348	—
Ida. ....	19,967	10,916	63	199	2,875	5,642	272
Mont. ....	56,041	29,168	393	267	242	25,971	—
Nev. ....	24,065	23,671	51	—	—	15	328
N.M. ....	90,174	76,249	—	—	—	13,925	—
Utah ....	69,503	61,006	2,123	—	520	5,854	—
Wyo. ....	20,864	11,327	97	—	—	9,440	—
<b>Pacific</b> .....	<b>358,975</b>	<b>164,335</b>	<b>3,466</b>	<b>12,936</b>	<b>96,736</b>	<b>81,502</b>	<b>—</b>
Alaska ....	—	—	—	—	—	—	—
Cal. ....	47,584	21,301	1,971	12,188	2,603	9,521	—
Hawaii ....	48,783	32,253	397	—	—	16,133	—
Ore. ....	228,369	78,112	827	748	94,133	54,549	—
Wash. ....	34,239	32,669	271	—	—	1,299	—
<b>Territories</b> .....	<b>145,859</b>	<b>140,453</b>	<b>542</b>	<b>—</b>	<b>—</b>	<b>4,864</b>	<b>—</b>
Guam ....	1,579	1,579	—	—	—	—	—
P.R. ....	133,060	127,654	542	—	—	4,864	—
V.I. ....	11,220	11,220	—	—	—	—	—

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

Lab & Region	Number of Specimens	Procedures Used											
		VDRL	RPR	ART	USR	RST	FTA-ABS	APTA-ABS	FTA-ABS (IgM)	DEATP	MHA-TP	Dark-field	Other
<b>Total</b> .....	<b>6,727,757</b>												
Average .....	129,380												
<b>New England</b> .....	<b>411,849</b>												
Conn. ....	81,272	X	X	-	-	-	-	-	-	-	-	-	-
Mass. ....	191,168	X	X	-	-	-	-	X	-	-	-	-	-
Me. ....	10,376	X	X	-	-	-	-	-	-	-	-	-	-
N.H. ....	40,383	X	X	-	-	-	-	X	-	-	-	-	-
R.I. ....	57,613	X	-	-	-	-	-	-	X	-	-	-	-
Vt. ....	31,037	-	-	X	-	-	-	X	-	-	-	X	FA darkfield
<b>Middle Atlantic</b> .....	<b>202,360</b>												
N.J. ....	201,648	X	X	-	-	-	-	X	-	-	-	-	-
N.Y. ....	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa. ....	712	X	X	-	-	-	-	X	-	-	-	-	-
<b>East North Central</b> .....	<b>583,148</b>												
Ill. ....	105,804	X	X	-	-	-	-	X	-	-	X	X	-
Ind. ....	58,601	X	X	X	-	-	-	X	-	-	-	-	-
Mich. ....	244,914	X	-	-	-	-	-	X	-	X	X	X	-
Ohio ....	84,796	X	-	-	-	-	-	X	-	-	-	-	-
Wisc. ....	89,033	X	-	-	-	-	-	X	-	X	X	X	-
<b>West North Central</b> .....	<b>600,575</b>												
Ia. ....	150,115	X	-	-	-	-	-	X	X	X	-	X	Spinal fluid, Kirby Bauer
Kans. ....	75,530	X	-	-	-	-	-	X	-	-	-	-	-
Minn. ....	148,759	X	-	-	-	-	-	X	-	-	-	X	-
Mo. ....	103,598	X	X	-	-	-	-	X	-	-	-	X	-
Nebr. ....	54,355	X	-	-	X	-	-	X	-	-	-	X	-
N.D. ....	44,896	-	X	-	-	-	-	X	-	-	-	X	-
S.D. ....	23,322	X	X	-	-	-	-	X	-	-	X	-	-
<b>South Atlantic</b> .....	<b>1,954,142</b>												
Del. ....	34,525	-	X	-	-	-	-	X	-	-	-	X	-
D.C. ....	115,251	X	-	-	X	-	-	X	-	-	X	-	-
Fla. ....	566,953	X	-	-	-	-	-	X	-	X	-	-	FTA - CSF (experimental for other neurologists)
Ga. ....	447,309	X	X	-	-	-	-	X	-	-	-	-	-
Md. ....	232,642	X	X	-	-	-	-	X	-	X	-	X	-
N.C. ....	181,590	X	-	-	-	-	-	X	-	X	-	-	-
S.C. ....	189,533	X	X	-	-	-	-	X	-	-	-	-	Direct FA
Va. ....	139,210	X	-	-	-	-	-	X	-	-	-	-	-
W. Va. ....	47,129	X	X	-	-	-	-	X	-	-	-	-	-
<b>East South Central</b> .....	<b>1,031,057</b>												
Ala. ....	441,453	X	-	-	-	-	-	X	-	-	-	-	-
Ky. ....	116,968	X	X	-	-	-	-	X	-	-	-	X	-
Miss. ....	265,775	X	X	-	-	-	-	X	-	-	-	-	-
Tenn. ....	206,861	X	X	-	-	-	-	X	-	-	X	-	-
<b>West South Central</b> .....	<b>1,240,561</b>												
Ark. ....	110,529	X	-	-	-	-	-	X	-	-	X	-	-
La. ....	144,776	X	-	-	-	-	-	X	-	-	-	-	-
Okla. ....	127,106	X	X	-	-	-	-	X	-	-	-	X	-
Tex. ....	858,150	X	X	-	-	-	-	X	-	-	X	X	-
<b>Mountain</b> .....	<b>399,277</b>												
Ariz. ....	39,340	X	X	-	-	-	-	X	-	-	-	-	-
Colo. ....	147,600	X	-	-	-	-	-	X	-	-	-	-	-
Ida. ....	10,916	-	X	-	-	-	-	X	-	-	-	X	-
Mont. ....	29,168	X	-	-	-	-	-	X	-	-	-	-	Direct FA
Nev. ....	23,671	X	X	-	-	-	-	X	-	-	-	X	-
N.M. ....	76,249	X	X	-	-	-	-	X	-	-	-	-	-
Utah ....	61,006	X	X	-	-	-	-	X	-	-	-	X	-
Wyo. ....	11,327	X	-	-	-	-	-	X	-	-	-	-	-
<b>Pacific</b> .....	<b>164,335</b>												
Alaska ....	-	-	-	-	-	-	-	-	-	-	-	-	-
Cal. ....	21,301	X	-	-	-	-	-	X	-	-	X	X	-
Hawaii ....	32,253	X	X	-	-	-	-	X	-	-	-	X	-
Ore. ....	78,112	X	-	X	-	-	-	X	-	X	-	X	-
Wash. ....	32,669	X	X	-	-	-	-	X	-	-	-	-	-
<b>Territories</b> .....	<b>140,453</b>												
Guam ....	1,579	X	-	-	-	-	-	X	-	-	-	X	CRP, ASO, RA
P.R. ....	127,654	X	-	-	-	-	-	X	-	-	-	-	-
V.I. ....	11,220	X	-	X	-	-	-	X	-	-	-	X	-

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

Lab & Region	Number of Specimens	Types of Specimens					
		Brucellosis	Tularemia	Strept. Antibodies	Leptospirosis	Salmonella	Other
<b>Total</b> .....	<b>56,195</b>						
Average .....	1,196						
<b>New England</b> .....	<b>12,720</b>						
Conn. ....	634	X	X	X	—	X	—
Mass. ....	265	X	X	—	—	X	Seroconversion Bord-pertussis
Me. ....	296	X	—	X	—	X	Shigella, Hemophilus, N. meningitidis
N.H. ....	—	—	—	—	—	—	—
R.I. ....	10,034	X	X	—	—	X	Legionnaires' Disease
Vt. ....	1,491	X	X	—	—	X	Legionnaires' Disease
<b>Middle Atlantic</b> .....	<b>613</b>						
N.J. ....	512	X	X	—	X	—	—
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	101	X	X	—	X	—	Tetanus, Diphtheria
<b>East North Central</b> .....	<b>7,164</b>						
Ill. ....	417	X	X	—	—	X	Weil-Felix
Ind. ....	664	X	X	—	X	X	—
Mich. ....	3,355	X	X	—	X	—	Legionellosis, Pertussis
Ohio ....	287	X	X	—	X	—	—
Wisc. ....	2,441	X	X	X	—	X	—
<b>West North Central</b> .....	<b>11,556</b>						
Ia. ....	6,394	X	X	X	X	—	—
Kans. ....	175	X	X	—	X	—	—
Minn. ....	1,328	X	X	X	—	X	—
Mo. ....	291	X	X	X	—	—	—
Nebr. ....	1,383	X	X	—	X	—	—
N.D. ....	1,153	X	X	X	—	X	—
S.D. ....	832	X	X	X	—	X	—
<b>South Atlantic</b> .....	<b>10,159</b>						
Del. ....	—	—	—	—	—	—	—
D.C. ....	10	X	X	—	—	—	—
Fla. ....	1,576	X	—	—	X	—	Typhoid
Ga. ....	664	X	X	—	X	X	OX-19
Md. ....	2,256	X	X	X	X	X	Pasteurella multocida, tetanus antitoxin, diphtheria antitoxin, pertussis
N.C. ....	358	X	X	X	—	—	Legionellosis
S.C. ....	852	X	X	X	—	X	Legionnaires' Disease; Proteus OX19, OXK, OX2
Va. ....	4,433	X	X	X	X	X	Weil-Felix, Typhoid O, Paratyphi 8
W. Va. ....	10	—	—	X	—	—	—
<b>East South Central</b> .....	<b>3,191</b>						
Ala. ....	84	X	X	—	—	—	—
Ky. ....	87	X	X	—	—	X	Typhoid O, H, Vi
Miss. ....	895	X	X	X	—	—	—
Tenn. ....	2,125	X	X	—	—	—	Legionella pneumophila
<b>West South Central</b> .....	<b>3,905</b>						
Ark. ....	497	X	X	—	X	X	—
La. ....	369	X	X	—	X	—	—
Okla. ....	772	X	X	—	X	—	—
Tex. ....	2,267	X	X	—	X	X	Legionnaires' Disease IFA
<b>Mountain</b> .....	<b>2,879</b>						
Ariz. ....	42	X	X	—	—	—	—
Colo. ....	110	X	X	—	—	—	—
Ida. ....	63	X	X	—	—	—	—
Mont. ....	393	X	X	—	X	—	—
Nev. ....	51	X	X	—	—	X	—
N.M. ....	—	—	—	—	—	—	—
Utah ....	2,123	X	X	—	—	—	Cold agglutination, Weil-Felix
Wyo. ....	97	X	X	—	—	—	—
<b>Pacific</b> .....	<b>3,466</b>						
Alaska ....	—	—	—	—	—	—	—
Cal. ....	1,971	X	X	—	X	X	Yersinia enterocolitica, Yersinia pseudotuberculosis, Legionnaires' Disease.
Hawaii ....	397	X	X	X	X	X	—
Ore. ....	827	X	X	—	X	—	—
Wash. ....	271	X	X	—	X	—	Proteus OX2, OX11, OX19
<b>Territories</b> .....	<b>542</b>						
Guam ....	—	—	—	—	—	—	—
P.R. ....	542	X	—	X	—	X	—
V.I. ....	—	X	—	X	—	X	—

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

Lab & Region	Number of Specimens	Types of Specimens						Other
		Blastomycosis	Coccidioidomycosis	Histoplasmosis	Cryptococcus	Aspergillus	Candidiasis	
<b>Total</b> .....	<b>120,269</b>							
Average .....	3,645							
<b>New England</b> .....	<b>706</b>							
Conn. ....	—	—	—	—	—	—	—	—
Mass. ....	279	—	—	—	X	—	—	—
Me. ....	322	X	X	X	X	X	—	—
N.H. ....	—	—	—	—	—	—	—	—
R.I. ....	—	—	—	—	—	—	—	—
Vt. ....	105	X	X	X	—	—	—	—
<b>Middle Atlantic</b> .....	<b>488</b>							
N.J. ....	—	—	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—
Pa. ....	488	X	X	X	—	X	X	—
<b>East North Central</b> .....	<b>18,535</b>							
Ill. ....	5,722	X	X	X	—	—	—	—
Ind. ....	3,432	X	X	X	X	—	—	—
Mich. ....	4,343	X	X	X	—	—	—	—
Ohio ....	2,546	X	X	X	X	X	—	—
Wisc. ....	2,492	X	X	X	X	—	—	—
<b>West North Central</b> .....	<b>11,221</b>							
Ia. ....	1,885	X	X	X	X	—	—	—
Kans. ....	1,350	X	X	X	—	—	—	—
Minn. ....	3,732	X	X	X	X	—	—	—
Mo. ....	4,236	X	X	X	—	—	—	—
Nebr. ....	—	—	—	—	—	—	—	—
N.D. ....	—	—	—	—	—	—	—	—
S.D. ....	18	X	X	X	—	—	—	—
<b>South Atlantic</b> .....	<b>11,433</b>							
Del. ....	—	—	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—
Fla. ....	—	—	—	—	—	—	—	—
Ga. ....	3,287	X	X	X	X	X	X	Sporotrichosis, Actinomycosis
Md. ....	3,276	X	X	X	X	X	X	—
N.C. ....	1,925	X	X	X	—	—	—	—
S.C. ....	1,417	X	X	X	X	X	X	Sporotrichosis
Va. ....	1,289	X	X	X	—	—	—	—
W. Va. ....	239	X	X	X	—	—	—	—
<b>East South Central</b> .....	<b>16,157</b>							
Ala. ....	2,817	X	X	X	—	X	—	—
Ky. ....	3,453	X	X	X	—	—	—	—
Miss. ....	2,333	X	X	X	—	—	—	—
Tenn. ....	7,554	X	—	X	—	—	—	—
<b>West South Central</b> .....	<b>23,483</b>							
Ark. ....	2,960	X	X	X	X	X	—	—
La. ....	1,720	X	X	X	X	—	—	—
Okla. ....	1,631	X	X	X	X	X	—	—
Tex. ....	17,172	X	X	X	X	—	—	—
<b>Mountain</b> .....	<b>25,310</b>							
Ariz. ....	24,844	X	X	X	—	—	—	—
Colo. ....	—	—	—	—	—	—	—	—
Ida. ....	199	X	X	X	—	—	—	—
Mont. ....	267	—	—	—	—	—	—	—
Nev. ....	—	—	—	—	—	—	—	—
N.M. ....	—	—	—	—	—	—	—	—
Utah ....	—	—	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>12,936</b>							
Alaska ....	—	—	—	—	—	—	—	—
Cal. ....	12,188	X	X	X	X	—	—	—
Hawaii ....	—	—	—	—	—	—	—	—
Ore. ....	748	X	X	X	—	—	—	—
Wash. ....	—	—	—	—	—	—	—	—
<b>Territories</b> .....	<b>—</b>							
Guam ....	—	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—	—

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

Lab & Region	Number of Specimens	Types of Specimens					
		Trichinosis	Toxoplasmosis	Amebiasis	Echinococcosis	Trypanosomiasis	Other
<b>Total</b> .....	<b>171,560</b>						
Average .....	4,766						
<b>New England</b> .....	<b>8,176</b>						
Conn. ....	2,971	X	X	—	—	—	—
Mass. ....	2,275	X	X	X	—	—	—
Me. ....	2,882	—	X	—	—	—	—
N.H. ....	—	—	—	—	—	—	—
R.I. ....	40	—	X	—	—	—	—
Vt. ....	8	X	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>2,014</b>						
N.J. ....	1,626	X	X	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	388	X	X	X	X	X	Filariasis, Giardiasis, Malaria, Strongyloides, Schistosomiasis, Pneumocystosis, Paragoniniasis
<b>East North Central</b> ....	<b>20,449</b>						
Ill. ....	1,465	—	X	—	—	—	—
Ind. ....	814	X	X	—	—	—	—
Mich. ....	3,395	—	X	—	—	—	—
Ohio ....	3,137	—	X	X	—	—	—
Wisc. ....	11,638	—	X	—	—	—	—
<b>West North Central</b> ....	<b>7,921</b>						
Ia. ....	4,481	X	X	—	—	—	—
Kans. ....	—	—	—	—	—	—	—
Minn. ....	2,014	—	X	—	—	—	—
Mo. ....	1,282	X	X	—	—	—	—
Nebr. ....	—	—	—	—	—	—	—
N.D. ....	144	—	X	—	—	—	—
S.D. ....	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>20,524</b>						
Del. ....	—	—	—	—	—	—	—
D.C. ....	12	—	X	—	—	—	—
Fla. ....	1,293	—	X	—	—	—	—
Ga. ....	2,610	—	X	—	—	—	—
Md. ....	11,597	X	X	X	X	—	—
N.C. ....	2,402	—	X	—	—	—	—
S.C. ....	1,010	—	X	X	—	—	—
Va. ....	1,242	X	X	—	—	—	—
W. Va. ....	358	—	X	—	—	—	—
<b>East South Central</b> ....	<b>3,794</b>						
Ala. ....	2,158	—	X	X	—	—	—
Ky. ....	1,636	—	X	—	—	—	—
Miss. ....	—	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—
<b>West South Central</b> ....	<b>6,930</b>						
Ark. ....	623	X	X	X	—	—	—
La. ....	1,536	—	X	—	—	—	—
Okla. ....	—	—	—	—	—	—	—
Tex. ....	4,771	—	X	X	—	—	—
<b>Mountain</b> .....	<b>5,016</b>						
Ariz. ....	1,379	—	X	—	—	—	—
Colo. ....	—	—	—	—	—	—	—
Ida. ....	2,875	—	X	—	—	—	—
Mont. ....	242	—	—	—	—	—	—
Nev. ....	—	—	—	—	—	—	—
N.M. ....	—	—	—	—	—	—	—
Utah ....	520	—	X	—	—	—	—
Wyo. ....	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>96,736</b>						
Alaska ....	—	—	—	—	—	—	—
Cal. ....	2,603	X	X	—	—	—	—
Hawaii ....	—	—	—	—	—	—	—
Ore. ....	94,133	—	X	—	—	—	—
Wash. ....	—	—	—	—	—	—	—
<b>Territories</b> .....	—						
Guam ....	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—

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

Lab & Region	Number of Specimens	Procedures Used												Other	
		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
<b>Total</b> .....	<b>1,295,052</b>														
Average .....	26,430														
<b>New England</b> .....	<b>88,714</b>														
Conn. ....	26,276	X	X	X	-	X	-	X	X	X	X	-	-	-	-
Mass. ....	8,369	X	X	-	-	X	-	X	X	-	-	X	-	-	-
Me. ....	14,361	X	X	X	-	-	-	X	-	X	X	-	-	-	-
N.H. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R.I. ....	26,633	-	X	X	-	-	-	-	-	-	-	X	X	X	-
Vt. ....	13,075	X	X	-	-	-	-	-	-	-	-	X	-	-	-
<b>Middle Atlantic</b> .....	<b>51,417</b>														
N.J. ....	44,137	X	X	-	-	X	-	X	-	X	-	X	X	X	-
N.Y. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa. ....	7,280	X	X	X	-	X	-	X	-	-	-	-	-	-	-
<b>East North Central</b> .....	<b>115,964</b>														
Ill. ....	8,462	X	X	X	-	X	-	X	-	X	X	-	-	X	-
Ind. ....	1,251	X	X	-	-	X	-	-	-	-	-	X	-	X	-
Mich. ....	72,589	X	X	X	-	X	-	-	-	X	-	-	-	-	-
Ohio ....	12,404	X	X	X	X	-	-	-	-	X	-	X	X	-	-
Wisc. ....	21,258	X	-	-	-	-	-	X	X	X	-	X	-	-	-
<b>West North Central</b> .....	<b>214,941</b>														
Ia. ....	77,194	X	X	-	-	X	-	-	X	-	-	-	-	X	-
Kans. ....	25,567	X	X	-	-	-	-	-	X	X	-	-	-	-	-
Minn. ....	51,364	X	X	X	-	X	-	X	X	-	-	X	-	-	-
Mo. ....	35,579	X	X	X	-	-	-	X	X	X	-	X	X	X	-
Nebr. ....	10,669	-	-	-	-	-	-	-	-	X	-	-	X	X	-
N.D. ....	1,360	X	-	-	-	-	-	X	-	-	-	X	-	X	-
S.D. ....	13,208	X	X	-	-	-	-	-	-	-	-	X	X	X	-
<b>South Atlantic</b> .....	<b>333,231</b>														
Del. ....	5,044	X	X	X	-	X	-	X	-	-	-	-	-	-	-
D.C. ....	442	X	X	-	-	-	-	-	-	-	-	-	-	X	-
Fla. ....	74,520	X	X	X	-	X	-	X	X	-	X	-	X	X	-
Ga. ....	7,423	X	X	-	-	X	-	-	-	X	-	-	-	-	-
Md. ....	121,563	X	X	X	X	X	X	X	X	X	-	X	X	X	-
N.C. ....	49,763	X	X	-	-	X	-	-	X	-	-	X	-	X	-
S.C. ....	45,618	X	X	-	-	-	-	-	-	X	X	X	X	-	-
Va. ....	22,696	X	X	X	-	X	-	X	-	X	-	X	X	X	-
W. Va. ....	6,162	X	X	-	-	-	-	-	-	-	-	-	X	X	-
<b>East South Central</b> .....	<b>135,047</b>														
Ala. ....	25,205	X	X	-	-	X	-	-	-	-	-	-	-	-	-
Ky. ....	20,023	X	X	-	-	-	-	-	-	-	-	-	-	X	-
Miss. ....	2,185	-	X	-	-	-	-	-	-	-	-	-	-	-	-
Tenn. ....	87,634	X	X	-	-	X	-	X	-	-	-	-	-	-	-
<b>West South Central</b> .....	<b>144,484</b>														
Ark. ....	9,292	X	X	-	X	-	-	-	X	X	-	-	X	X	-
La. ....	64,822	X	X	-	-	-	-	-	-	X	-	-	-	-	-
Okla. ....	3,702	X	X	-	X	-	-	-	-	X	-	-	X	X	-
Tex. ....	66,668	X	X	-	-	X	-	-	-	-	X	-	-	-	-
<b>Mountain</b> .....	<b>124,888</b>														
Ariz. ....	3,693	X	X	-	-	-	-	-	-	-	-	-	-	-	-
Colo. ....	60,348	X	X	-	-	-	-	-	-	-	-	X	-	X	-
Ida. ....	5,642	X	X	X	-	-	-	X	-	-	-	-	-	-	-
Mont. ....	25,971	X	X	X	-	X	-	-	-	-	-	-	-	-	-
Nev. ....	15	-	-	-	-	-	-	-	-	-	-	-	-	X	-
N.M. ....	13,925	X	X	-	-	X	-	X	-	X	X	-	X	-	-
Utah ....	5,854	X	X	-	-	X	-	-	-	-	-	-	-	X	-
Wyo. ....	9,440	-	X	-	-	-	-	-	-	-	-	-	X	-	-
<b>Pacific</b> .....	<b>81,502</b>														
Alaska ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cal. ....	9,521	X	X	X	-	X	X	X	X	X	-	-	-	-	-
Hawaii ....	16,133	X	X	X	-	X	-	X	-	X	X	-	X	X	-
Ore. ....	54,549	X	X	X	-	X	X	-	-	-	-	-	-	X	-
Wash. ....	1,299	X	X	-	-	-	-	-	-	-	-	-	-	-	-
<b>Territories</b> .....	<b>4,864</b>														
Guam ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P.R. ....	4,864	-	X	-	-	-	-	-	-	-	-	-	-	-	-
V.I. ....	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-

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

Lab	Number Of Specimens	Disease Entity — Procedures Used
<b>Total</b> .....	<b>88,801</b>	
Average .....	6,831	
Conn. ....	2,423	Legionnaires' — IFA; Bipertussis — Agglutination
D.C. ....	2,896	Rubella — HAI
Ida. ....	272	Hepatitis — Elisa
Ia. ....	810	RA — latex agglutination, nonspecific — CKP
La. ....	71,498	PKU — Guthrie Screen
Md. ....	766	Gammopathies, Complement —
Nebr. ....	66	Legionnaires' Disease — IFA
Nev. ....	328	Rubella — HAI
N.J. ....	1,447	Legionnaires' Disease — IFA
Ohio ....	1,481	Legionnaires' Disease — IFA
Pa. ....	1,654	Legionnaires' Disease — IFA
S.C. ....	149	Systemic fungal disease — exoantigen (immunodiffusion)
Vt. ....	564	Legionnaires' Disease — IFA
Wisc. ....	4,447	Rheumatoid arthritis — latex agglutination, antinuclear antibody — FA, thyroid antibody — PHA

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
<b>Total</b> .....	<b>1,453,047</b>	<b>690,882</b>	<b>238,372</b>	<b>523,793</b>
Average .....	41,516	32,899	9,168	19,400
<b>New England</b> .....	<b>16,949</b>	<b>7,270</b>	<b>600</b>	<b>9,079</b>
Conn. ....	15,524	6,929	15	8,580
Mass. ....	—	—	—	—
Me. ....	—	—	—	—
N.H. ....	—	—	—	—
R.I. ....	1,425	341	585	499
Vt. ....	—	—	—	—
<b>Middle Atlantic</b> .....	<b>430</b>	<b>352</b>	<b>44</b>	<b>34</b>
N.J. ....	—	—	—	—
N.Y. ....	—	—	—	—
Pa. ....	430	352	44	34
<b>East North Central</b> .....	<b>48,559</b>	<b>12,411</b>	<b>30,945</b>	<b>5,203</b>
Ill. ....	—	—	—	—
Ind. ....	—	—	—	—
Mich. ....	11,902	11,902	—	—
Ohio ....	4,798	—	—	4,798
Wisc. ....	31,859	509	30,945	405
<b>West North Central</b> .....	<b>25,549</b>	<b>—</b>	<b>17,992</b>	<b>7,557</b>
Ia. ....	—	—	—	—
Kans. ....	—	—	—	—
Minn. ....	—	—	—	—
Mo. ....	14,154	—	6,597	7,557
Nebr. ....	—	—	—	—
N.D. ....	11,395	—	11,395	—
S.D. ....	—	—	—	—
<b>South Atlantic</b> .....	<b>517,480</b>	<b>215,106</b>	<b>79,241</b>	<b>223,133</b>
Del. ....	1,972	—	—	1,972
D.C. ....	53,304	40,559	1,960	10,785
Fla. ....	150,298	71,192	20,299	58,807
Ga. ....	49,507	—	12,170	37,337
Md. ....	94,076	53,591	17,312	23,173
N.C. ....	53,951	2,789	2,299	48,863
S.C. ....	70,556	46,235	7,913	16,408
Va. ....	42,557	—	17,288	25,269
W. Va. ....	1,259	740	—	519
<b>East South Central</b> .....	<b>265,732</b>	<b>116,627</b>	<b>33,219</b>	<b>115,886</b>
Ala. ....	77,251	—	10,174	67,077
Ky. ....	19,376	4,148	6,938	8,290
Miss. ....	167,979	112,479	14,981	40,519
Tenn. ....	1,126	—	1,126	—
<b>West South Central</b> .....	<b>468,722</b>	<b>277,268</b>	<b>48,938</b>	<b>142,516</b>
Ark. ....	44,980	22,300	5,650	17,030
La. ....	—	—	—	—
Okla. ....	9,321	1,899	3,867	3,555
Tex. ....	414,421	253,069	39,421	121,931
<b>Mountain</b> .....	<b>40,291</b>	<b>5,676</b>	<b>18,514</b>	<b>16,101</b>
Ariz. ....	2,886	—	—	2,886
Colo. ....	29,100	—	16,600	12,500
Ida. ....	5,139	5,139	—	—
Mont. ....	—	—	—	—
Nev. ....	1,166	537	629	—
N.M. ....	2,000	—	1,285	715
Utah ....	—	—	—	—
Wyo. ....	—	—	—	—
<b>Pacific</b> .....	<b>3,101</b>	<b>43</b>	<b>175</b>	<b>2,883</b>
Alaska ....	—	—	—	—
Cal. ....	43	43	—	—
Hawaii ....	175	—	175	—
Ore. ....	—	—	—	—
Wash. ....	2,883	—	—	2,883
<b>Territories</b> .....	<b>66,234</b>	<b>56,129</b>	<b>8,704</b>	<b>1,401</b>
Guam ....	4,333	3,923	410	—
P.R. ....	60,735	52,206	8,294	235
V.I. ....	1,166	—	—	1,166

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
<b>Total</b> .....	<b>690,882</b>									
Average .....	32,899									
<b>New England</b> .....	<b>7,270</b>									
Conn. ....	6,929	X	X	X	X	X	X	X	--	Coulter CBC (7 Parameter)
Mass. ....	--	--	--	--	--	--	--	--	--	--
Me. ....	--	--	--	--	--	--	--	--	--	--
N.H. ....	--	--	--	--	--	--	--	--	--	--
R.I. ....	341	X	X	X	--	X	X	--	--	--
Vt. ....	--	--	--	--	--	--	--	--	--	--
<b>Middle Atlantic</b> .....	<b>352</b>									
N.J. ....	--	--	--	--	--	--	--	--	--	--
N.Y. ....	--	--	--	--	--	--	--	--	--	--
Pa. ....	352	X	X	X	X	--	X	X	--	MCV, MCH, MCHC, Photomicrographs
<b>East North Central</b> .....	<b>12,411</b>									
Ill. ....	--	--	--	--	--	--	--	--	--	--
Ind. ....	--	--	--	--	--	--	--	--	--	--
Mich. ....	11,902	X	X	X	X	X	X	X	X	--
Ohio ....	--	--	--	--	--	--	--	--	--	--
Wisc. ....	509	X	X	X	X	X	X	--	X	LE preps
<b>West North Central</b> .....	<b>--</b>									
Ia. ....	--	--	--	--	--	--	--	--	--	--
Kans. ....	--	--	--	--	--	--	--	--	--	--
Minn. ....	--	--	--	--	--	--	--	--	--	--
Mo. ....	--	--	--	--	--	--	--	--	--	--
Nebr. ....	--	--	--	--	--	--	--	--	--	--
N.D. ....	--	--	--	--	--	--	--	--	--	--
S.D. ....	--	--	--	--	--	--	--	--	--	--
<b>South Atlantic</b> .....	<b>215,106</b>									
Del. ....	--	--	--	--	--	--	--	--	--	--
D.C. ....	40,559	X	X	X	X	--	X	--	X	--
Fla. ....	71,192	X	X	--	--	--	--	--	--	--
Ga. ....	--	--	--	--	--	--	--	--	--	--
Md. ....	53,591	X	X	X	X	X	X	X	X	LE Prep
N.C. ....	2,789	X	X	X	--	--	X	--	--	--
S.C. ....	46,235	X	X	X	X	X	X	X	X	Bleeding time
Va. ....	--	--	--	--	--	--	--	--	--	--
W. Va. ....	740	X	X	X	X	--	X	--	--	--
<b>East South Central</b> .....	<b>116,627</b>									
Ala. ....	--	--	--	--	--	--	--	--	--	--
Ky. ....	4,148	X	X	X	--	--	X	--	--	--
Miss. ....	112,479	X	X	X	--	--	--	--	--	MCV, MCH, MCHC
Tenn. ....	--	--	--	--	--	--	--	--	--	--
<b>West South Central</b> .....	<b>277,268</b>									
Ark. ....	22,300	X	X	X	--	--	X	--	--	--
La. ....	--	--	--	--	--	--	--	--	--	--
Okla. ....	1,899	X	X	X	--	--	X	--	--	--
Tex. ....	253,069	X	X	X	X	--	X	--	--	--
<b>Mountain</b> .....	<b>5,676</b>									
Ariz. ....	--	--	--	--	--	--	--	--	--	--
Colo. ....	--	--	--	--	--	--	--	--	--	--
Ida. ....	5,139	X	--	--	X	--	--	--	--	--
Mont. ....	--	--	--	--	--	--	--	--	--	--
Nev. ....	537	X	X	X	--	--	X	--	--	--
N.M. ....	--	--	--	--	--	--	--	--	--	--
Utah ....	--	--	--	--	--	--	--	--	--	--
Wyo. ....	--	--	--	--	--	--	--	--	--	--
<b>Pacific</b> .....	<b>43</b>									
Alaska ....	--	--	--	--	--	--	--	--	--	--
Cal. ....	43	X	X	X	--	--	X	--	--	--
Hawaii ....	--	--	--	--	--	--	--	--	--	--
Ore. ....	--	--	--	--	--	--	--	--	--	--
Wash. ....	--	--	--	--	--	--	--	--	--	--
<b>Territories</b> .....	<b>56,129</b>									
Guam ....	3,923	X	X	X	X	X	X	--	X	RBC, Sperm count
P.R. ....	52,206	X	X	X	X	X	X	X	X	--
V.I. ....	--	--	--	--	--	--	--	--	--	--

Table 4-29  
**VI. HEMATOLOGY**  
**B. Immunohematology Specimens**

Lab & Region	Number of Specimens	Blood Grouping	Blood Typing	Other Test
<b>Total</b> .....	<b>238,372</b>			
Average .....	9,168			
<b>New England</b> .....	<b>600</b>			
Conn. ....	15	X	X	—
Mass. ....	—	—	—	—
Me. ....	—	—	—	—
N.H. ....	—	—	—	—
R.I. ....	585	—	X	X
Vt. ....	—	—	—	—
<b>Middle Atlantic</b> .....	<b>44</b>			
N.J. ....	—	—	—	—
N.Y. ....	—	—	—	—
Pa. ....	44	X	X	—
<b>East North Central</b> .....	<b>30,945</b>			
Ill. ....	—	—	—	—
Ind. ....	—	—	—	—
Mich. ....	—	—	—	—
Ohio ....	—	—	—	—
Wisc. ....	30,945	X	X	Atypical Blood Factor Antibody (antibody screening)
<b>West North Central</b> .....	<b>17,992</b>			
Ia. ....	—	—	—	—
Kans. ....	—	—	—	—
Minn. ....	—	—	—	—
Mo. ....	6,597	—	—	X
Nebr. ....	—	—	—	—
N.D. ....	11,395	X	X	—
S.D. ....	—	—	—	—
<b>South Atlantic</b> .....	<b>79,241</b>			
Del. ....	—	—	—	—
D.C. ....	1,960	X	X	X
Fla. ....	20,299	—	X	—
Ga. ....	12,170	—	—	Rh determination, irregular antibody screen
Md. ....	17,312	X	X	X
N.C. ....	2,299	X	X	X
S.C. ....	7,913	X	X	—
Va. ....	17,288	X	X	Du antigen, atypical antibody screens
W. Va. ....	—	—	—	—
<b>East South Central</b> .....	<b>33,219</b>			
Ala. ....	10,174	—	X	X
Ky. ....	6,938	X	X	Antibody identification
Miss. ....	14,981	X	X	Indirect Coombs (identification titration)
Tenn. ....	1,126	X	X	X
<b>West South Central</b> .....	<b>48,938</b>			
Ark. ....	5,650	X	X	X
La. ....	—	—	—	—
Okla. ....	3,867	X	X	—
Tex. ....	39,421	X	X	X
<b>Mountain</b> .....	<b>18,514</b>			
Ariz. ....	—	—	—	—
Colo. ....	16,600	—	—	X
Ida. ....	—	—	—	—
Mont. ....	—	—	—	—
Nev. ....	629	X	X	—
N.M. ....	1,285	X	X	X
Utah ....	—	—	—	—
Wyo. ....	—	—	—	—
<b>Pacific</b> .....	<b>175</b>			
Alaska ....	—	—	—	—
Cal. ....	—	—	—	—
Hawaii ....	175	X	—	—
Ore. ....	—	—	—	—
Wash. ....	—	—	—	—
<b>Territories</b> .....	<b>8,704</b>			
Guam ....	410	X	X	—
P.R. ....	8,294	X	X	Coombs
V.I. ....	—	—	—	—

Table 4-30  
VI. HEMATOLOGY  
C. Hemoglobinopathy Specimens

Lab & Region	Number of Specimens	Procedures Used						Other
		Hemoglobin Cellulose Acetate Electro.	Citrate Agar Electrophoresis	Solubility Testing	Fetal Hemoglobin Assay	Hemoglobin A <sub>2</sub> Quantitation	Densitometry	
<b>Total</b> .....	<b>523,793</b>							
Average .....	19,400							
<b>New England</b> .....	<b>9,079</b>							
Conn. ....	8,580	X	X	X	X	X	—	—
Mass. ....	—	—	—	—	—	—	—	—
Me. ....	—	—	—	—	—	—	—	—
N.H. ....	—	—	—	—	—	—	—	—
R.I. ....	499	X	—	X	X	X	X	—
Vt. ....	—	—	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>34</b>							
N.J. ....	—	—	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—
Pa. ....	34	X	X	X	—	—	X	—
<b>East North Central</b> .....	<b>5,203</b>							
Ill. ....	—	—	—	—	—	—	—	—
Ind. ....	—	—	—	—	—	—	—	—
Mich. ....	—	—	—	—	—	—	—	—
Ohio ....	4,798	X	X	X	—	—	—	—
Wisc. ....	405	X	—	X	—	—	—	—
<b>West North Central</b> .....	<b>7,557</b>							
Ia. ....	—	—	—	—	—	—	—	—
Kans. ....	—	—	—	—	—	—	—	—
Minn. ....	—	—	—	—	—	—	—	—
Mo. ....	7,557	—	X	X	—	—	—	—
Nebr. ....	—	—	—	—	—	—	—	—
N.D. ....	—	—	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>223,133</b>							
Del. ....	1,972	X	—	—	—	—	—	—
D.C. ....	10,785	X	—	X	—	—	—	—
Fla. ....	58,807	X	X	X	X	X	—	—
Ga. ....	37,337	X	—	X	—	—	—	—
Md. ....	23,173	X	X	X	X	X	X	—
N.C. ....	48,863	X	X	X	X	X	X	—
S.C. ....	16,408	X	X	X	—	—	—	—
Va. ....	25,269	X	—	X	—	—	—	—
W. Va. ....	519	X	X	X	—	—	—	—
<b>East South Central</b> .....	<b>115,886</b>							
Ala. ....	67,077	X	X	—	—	—	—	—
Ky. ....	8,290	X	X	X	X	X	X	—
Miss. ....	40,519	X	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—	—
<b>West South Central</b> .....	<b>142,516</b>							
Ark. ....	17,030	X	—	X	—	—	—	—
La. ....	—	—	—	—	—	—	—	—
Okla. ....	3,555	X	X	X	—	—	—	—
Tex. ....	121,931	X	X	X	X	—	X	—
<b>Mountain</b> .....	<b>16,101</b>							
Ariz. ....	2,886	X	X	—	—	—	X	—
Colo. ....	12,500	X	X	—	—	—	—	—
Ida. ....	—	—	—	—	—	—	—	—
Mont. ....	—	—	—	—	—	—	—	—
Nev. ....	—	—	—	—	—	—	—	—
N.M. ....	715	X	—	X	—	—	—	—
Utah ....	—	—	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>2,883</b>							
Alaska ....	—	—	—	—	—	—	—	—
Cal. ....	—	—	—	—	—	—	—	—
Hawaii ....	—	—	—	—	—	—	—	—
Ore. ....	—	—	—	—	—	—	—	—
Wash. ....	2,883	X	X	X	—	—	—	—
<b>Territories</b> .....	<b>1,401</b>							
Guam ....	—	—	—	—	—	—	—	—
P.R. ....	235	X	—	X	—	—	—	—
V.I. ....	1,166	X	—	—	—	—	—	—

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
<b>Total</b> .....	<b>4,068,096</b>	<b>481,756</b>	<b>170,621</b>	<b>3,047,686</b>	<b>224,390</b>	<b>144,010</b>
Average .....	88,437	19,270	8,125	74,334	28,049	36,003
<b>New England</b> .....	<b>388,202</b>	<b>18,176</b>	<b>2,359</b>	<b>241,498</b>	<b>1,115</b>	<b>125,411</b>
Conn. ....	116,324	7,196	2,348	106,022	1,115	—
Mass. ....	195,952	—	—	70,541	—	125,411
Me. ....	17,363	—	—	17,363	—	—
N.H. ....	21,310	—	—	21,310	—	—
R.I. ....	37,253	10,980	11	26,262	—	—
Vt. ....	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>262,004</b>	<b>961</b>	<b>44</b>	<b>261,009</b>	—	—
N.J. ....	97,063	—	—	97,063	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	164,941	961	44	163,946	—	—
<b>East North Central</b> .....	<b>619,304</b>	<b>46,022</b>	<b>8,908</b>	<b>555,003</b>	<b>9,319</b>	<b>52</b>
Ill. ....	12,311	—	—	12,311	—	—
Ind. ....	—	—	—	—	—	—
Mich. ....	225,743	16,588	8,908	200,247	—	—
Ohio ....	282,585	4,123	—	271,319	7,143	—
Wisc. ....	98,665	25,311	—	71,126	2,176	52
<b>West North Central</b> .....	<b>222,931</b>	<b>2,232</b>	—	<b>220,699</b>	—	—
Ia. ....	2,985	—	—	2,985	—	—
Kans. ....	50,584	—	—	50,584	—	—
Minn. ....	68,565	—	—	68,565	—	—
Mo. ....	58,811	2,232	—	56,579	—	—
Nebr. ....	2,772	—	—	2,772	—	—
N.D. ....	39,214	—	—	39,214	—	—
S.D. ....	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>1,198,327</b>	<b>192,891</b>	<b>102,411</b>	<b>684,380</b>	<b>207,027</b>	<b>11,618</b>
Del. ....	8,602	—	421	8,181	—	—
D.C. ....	41,629	—	30,011	—	—	11,618
Fla. ....	308,112	69,194	458	87,283	151,177	—
Ga. ....	112,479	10,438	—	102,041	—	—
Md. ....	201,565	62,788	28,936	109,841	—	—
N.C. ....	151,318	20,955	52	90,108	40,203	—
S.C. ....	155,276	3,439	41,976	100,552	9,309	—
Va. ....	150,471	17,409	—	133,062	—	—
W. Va. ....	68,875	8,668	557	53,312	6,338	—
<b>East South Central</b> .....	<b>361,407</b>	<b>85,403</b>	<b>1,277</b>	<b>260,869</b>	<b>6,929</b>	<b>6,929</b>
Ala. ....	151,933	5,516	—	146,417	—	—
Ky. ....	54,161	7,371	1,277	45,513	—	—
Miss. ....	86,374	72,516	—	—	6,929	6,929
Tenn. ....	68,939	—	—	68,939	—	—
<b>West South Central</b> .....	<b>620,291</b>	<b>108,575</b>	<b>36,046</b>	<b>475,670</b>	—	—
Ark. ....	71,641	5,047	53	66,541	—	—
La. ....	54,732	—	—	54,732	—	—
Okla. ....	50,139	1,503	1,970	46,666	—	—
Tex. ....	443,779	102,025	34,023	307,731	—	—
<b>Mountain</b> .....	<b>83,969</b>	<b>44</b>	<b>5,721</b>	<b>78,204</b>	—	—
Ariz. ....	—	—	—	—	—	—
Colo. ....	29,600	—	—	29,600	—	—
Ida. ....	4,579	—	4,455	124	—	—
Mont. ....	—	—	—	—	—	—
Nev. ....	8,925	—	1,266	7,659	—	—
N.M. ....	21,686	44	—	21,642	—	—
Utah ....	19,179	—	—	19,179	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>278,486</b>	<b>466</b>	<b>7,926</b>	<b>270,094</b>	—	—
Alaska ....	—	—	—	—	—	—
Cal. ....	510	466	12	32	—	—
Hawaii ....	7,914	—	7,914	—	—	—
Ore. ....	180,807	—	—	180,807	—	—
Wash. ....	89,255	—	—	89,255	—	—
<b>Territories</b> .....	<b>33,175</b>	<b>26,986</b>	<b>5,929</b>	<b>260</b>	—	—
Guam ....	3,640	638	3,002	—	—	—
P.R. ....	28,653	25,726	2,927	—	—	—
V.I. ....	882	622	—	260	—	—



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

Lab & Region	Number of Specimens	Procedures Used			
		Routine	Microscopic	Pregnancy Test	Other
<b>Total</b> .....	<b>170,621</b>				
Average .....	8,125				
<b>New England</b> .....	<b>2,359</b>				
Conn. ....	2,348	X	X	—	—
Mass. ....	—	—	—	—	—
Me. ....	—	—	—	—	—
N.H. ....	—	—	—	—	—
R.I. ....	11	X	X	—	—
Vt. ....	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>44</b>				
N.J. ....	—	—	—	—	—
N.Y. ....	—	—	—	—	—
Pa. ....	44	X	X	X	—
<b>East North Central</b> .....	<b>8,908</b>				
Ill. ....	—	—	—	—	—
Ind. ....	—	—	—	—	—
Mich. ....	8,908	X	X	—	—
Ohio ....	—	—	—	—	—
Wisc. ....	—	—	—	—	—
<b>West North Central</b> .....	<b>—</b>				
Ia. ....	—	—	—	—	—
Kans. ....	—	—	—	—	—
Minn. ....	—	—	—	—	—
Mo. ....	—	—	—	—	—
Nebr. ....	—	—	—	—	—
N.D. ....	—	—	—	—	—
S.D. ....	—	—	—	—	—
<b>South Atlantic</b> .....	<b>102,411</b>				
Del. ....	421	X	X	—	—
D.C. ....	30,011	X	X	X	—
Fla. ....	458	X	—	X	—
Ga. ....	—	—	—	—	—
Md. ....	28,936	X	X	X	—
N.C. ....	52	X	X	—	—
S.C. ....	41,976	X	X	X	—
Va. ....	—	—	—	—	—
W. Va. ....	557	X	X	—	—
<b>East South Central</b> .....	<b>1,277</b>				
Ala. ....	—	—	—	—	—
Ky. ....	1,277	X	X	X	—
Miss. ....	—	—	—	—	—
Tenn. ....	—	—	—	—	—
<b>West South Central</b> .....	<b>36,046</b>				
Ark. ....	53	X	X	—	—
La. ....	—	—	—	—	—
Okla. ....	1,970	X	X	X	—
Tex. ....	34,023	X	X	X	—
<b>Mountain</b> .....	<b>5,721</b>				
Ariz. ....	—	—	—	—	—
Colo. ....	—	—	—	—	—
Ida. ....	4,455	X	—	X	X
Mont. ....	—	—	—	—	—
Nev. ....	1,266	X	X	—	—
N.M. ....	—	—	—	—	—
Utah ....	—	—	—	—	—
Wyo. ....	—	—	—	—	—
<b>Pacific</b> .....	<b>7,926</b>				
Alaska ....	—	—	—	—	—
Cal. ....	12	X	—	X	—
Hawaii ....	7,914	—	—	—	INH
Ore. ....	—	—	—	—	—
Wash. ....	—	—	—	—	—
<b>Territories</b> .....	<b>5,929</b>				
Guam ....	3,002	X	X	X	—
P.R. ....	2,927	X	X	—	—
V.I. ....	—	—	—	—	—

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

Lab & Region	Number of Specimens	Inborn Error Assays								Other
		PKU	Tyrosinemia	Galactosemia	MSUD	Hyperthyroidism	Amino Acid Chromatography	Homocystinuria	Maternal PKU	
<b>Total</b> .....	<b>3,047,686</b>									
Average .....	74,334									
<b>New England</b> .....	<b>241,498</b>									
Conn. ....	106,022	X	—	X	—	X	—	—	—	Tay Sachs (serum and leucocytes)
Mass. ....	70,541	X	—	X	X	—	—	X	—	
Me. ....	17,363	X	X	X	X	X	—	X	X	—
N.H. ....	21,310	X	—	—	—	—	—	—	—	—
R.I. ....	26,262	X	X	X	—	—	—	X	—	—
Vt. ....	—	—	—	—	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>261,009</b>									
N.J. ....	97,063	X	—	—	—	X	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—	—	—
Pa. ....	163,946	X	X	—	—	X	—	—	X	—
<b>East North Central</b> .....	<b>555,003</b>									
Ill. ....	12,311	X	—	—	—	X	—	—	—	—
Ind. ....	—	—	—	—	—	—	—	—	—	—
Mich. ....	200,247	X	—	—	—	X	—	—	—	—
Ohio ....	271,319	X	—	X	—	X	—	X	X	—
Wisc. ....	71,126	X	—	X	X	X	—	—	—	—
<b>West North Central</b> .....	<b>220,699</b>									
Ia. ....	2,985	X	—	—	—	—	—	—	—	—
Kans. ....	50,584	X	—	—	—	X	—	—	—	—
Minn. ....	68,565	X	—	X	—	X	—	—	—	—
Mo. ....	56,579	X	—	—	—	X	—	—	—	—
Nebr. ....	2,772	X	—	—	—	X	—	—	—	—
N.D. ....	39,214	X	—	—	—	X	—	—	—	—
S.D. ....	—	—	—	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>684,380</b>									
Del. ....	8,181	X	—	—	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—	—	—
Fla. ....	87,283	X	—	—	—	—	—	—	—	—
Ga. ....	102,041	X	X	X	X	X	—	X	—	—
Md. ....	109,841	X	X	X	X	X	—	X	X	—
N.C. ....	90,108	X	X	—	—	X	—	—	—	—
S.C. ....	100,552	X	—	—	—	X	—	—	—	—
Va. ....	133,062	X	X	—	—	X	—	—	X	—
W. Va. ....	53,312	X	—	—	—	X	X	—	—	—
<b>East South Central</b> .....	<b>260,869</b>									
Ala. ....	146,417	X	—	—	—	X	X	—	X	—
Ky. ....	45,513	X	—	X	—	—	—	—	—	—
Miss. ....	—	—	—	—	—	—	—	—	—	—
Tenn. ....	68,939	X	—	—	—	—	—	—	—	—
<b>West South Central</b> .....	<b>475,670</b>									
Ark. ....	66,541	X	—	—	—	X	—	—	X	—
La. ....	54,732	X	—	—	—	—	—	—	—	Hemoglobin electrophoresis (Sickle cell)
Okla. ....	46,666	X	X	—	—	X	—	—	—	—
Tex. ....	307,731	X	X	X	—	—	—	—	—	—
<b>Mountain</b> .....	<b>78,204</b>									
Ariz. ....	—	—	—	—	—	—	—	—	—	—
Colo. ....	29,600	X	—	X	X	X	—	X	—	—
Ida. ....	124*	X	—	—	—	—	—	—	—	—
Mont. ....	—*	—	—	—	—	—	—	—	—	—
Nev. ....	7,659	X	—	—	—	—	—	—	—	—
N.M. ....	21,642	X	—	—	—	—	—	—	—	—
Utah ....	19,179	X	—	X	—	X	—	—	—	—
Wyo. ....	—	—	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>270,094</b>									
Alaska ....	—*	—	—	—	—	—	—	—	—	—
Cal. ....	32	X	—	—	—	—	—	—	—	—
Hawaii ....	—	—	—	—	—	—	—	—	—	—
Ore. ....	180,807*	X	X	X	X	X	X	X	X	—
Wash. ....	89,255	X	—	—	—	X	—	—	—	—
<b>Territories</b> .....	<b>260</b>									
Guam ....	—	—	—	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—	—	—
V.I. ....	260	X	—	—	—	—	—	—	—	—

\*Oregon State Laboratory serves as regional metabolic testing center for the states of Alaska, Idaho, and Montana.

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

Lab & Region	Number of Specimens	Procedures Used				
		Single or Discrete Analyzer	2 Channel Anal.	3-6 Channel Anal.	7-12 Channel Anal.	Other Multichannel Analyzers
<b>Total</b> .....	<b>224,390</b>					
Average .....	28,049					
<b>New England</b> .....	<b>1,115</b>					
Conn. ....	1,115	X	X	X	—	—
Mass. ....	—	—	—	—	—	—
Me. ....	—	—	—	—	—	—
N.H. ....	—	—	—	—	—	—
R.I. ....	—	—	—	—	—	—
Vt. ....	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>					
N.J. ....	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—
<b>East North Central</b> . . . .	<b>9,319</b>					
Ill. ....	—	—	—	—	—	—
Ind. ....	—	—	—	—	—	—
Mich. ....	—	—	—	—	—	—
Ohio ....	7,143	—	—	—	X	—
Wisc. ....	2,176	X	—	—	—	—
<b>West North Central</b> . . . .	<b>—</b>					
Ia. ....	—	—	—	—	—	—
Kans. ....	—	—	—	—	—	—
Minn. ....	—	—	—	—	—	—
Mo. ....	—	—	—	—	—	—
Nebr. ....	—	—	—	—	—	—
N.D. ....	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>207,027</b>					
Del. ....	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—
Fla. ....	151,177	—	X	—	—	—
Ga. ....	—	—	—	—	—	—
Md. ....	—	—	—	—	—	—
N.C. ....	40,203	—	—	X	X	—
S.C. ....	9,309	X	—	—	—	—
Va. ....	—	—	—	—	—	—
W. Va. ....	6,338	—	—	—	X	—
<b>East South Central</b> . . . .	<b>6,929</b>					
Ala. ....	—	—	—	—	—	—
Ky. ....	—	—	—	—	—	—
Miss. ....	6,929	—	—	X	—	—
Tenn. ....	—	—	—	—	—	—
<b>West South Central</b> . . . .	<b>—</b>					
Ark. ....	—	—	—	—	—	—
La. ....	—	—	—	—	—	—
Okla. ....	—	—	—	—	—	—
Tex. ....	—	—	—	—	—	—
<b>Mountain</b> .....	<b>—</b>					
Ariz. ....	—	—	—	—	—	—
Colo. ....	—	—	—	—	—	—
Ida. ....	—	—	—	—	—	—
Mont. ....	—	—	—	—	—	—
Nev. ....	—	—	—	—	—	—
N.M. ....	—	—	—	—	—	—
Utah ....	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>—</b>					
Alaska ....	—	—	—	—	—	—
Cal. ....	—	—	—	—	—	—
Hawaii ....	—	—	—	—	—	—
Ore. ....	—	—	—	—	—	—
Wash. ....	—	—	—	—	—	—
<b>Territories</b> .....	<b>—</b>					
Guam ....	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—

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

Lab	Number of Specimens	Type – Procedures Used
<b>Total</b> .....	<b>144,010</b>	
<b>Average</b> .....	<b>36,003</b>	
D.C. ....	11,618	Sickle cell anemia — electrophoresis, solubility test
Mass. ....	125,411	Umbilical cord blood (filter paper) — Phenylalanine (Guthrie) for maternal PKU, Histidine (Guthrie) for maternal histidinemia; Urine (filter paper) — AA chromatography (for methylmalonic aciduria)
Miss. ....	6,929	Electrolytes — flame photometer, chloride meter
Wisc. ....	52	Renal calculi (Stones) — qualitative analysis

Table 4-37  
VIII. PATHOLOGY

Lab & Region	Total Pathology Specimens	Exfoliative Cytology Specimens	Cytogenetic Specimens	Other Pathology Specimens	
				Number of Specimens	Types
<b>Total</b> .....	<b>512,730</b>	<b>495,931</b>	<b>2,093</b>	<b>14,706</b>	
Average .....	39,441				
<b>New England</b> .....	<b>3,082</b>	<b>3,082</b>	—	—	—
Conn. ....	3,082	3,082	—	—	—
Mass. ....	—	—	—	—	—
Me. ....	—	—	—	—	—
N.H. ....	—	—	—	—	—
R.I. ....	—	—	—	—	—
Vt. ....	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
N.J. ....	—	—	—	—	—
N.Y. ....	—	—	—	—	—
Pa. ....	—	—	—	—	—
<b>East North Central</b> .....	<b>100,134</b>	<b>86,879</b>	<b>1,598</b>	<b>11,657</b>	—
Ill. ....	—	—	—	—	—
Ind. ....	—	—	—	—	—
Mich. ....	—	—	—	—	—
Ohio ....	—	—	—	—	—
Wisc. ....	100,134	86,879	1,598	11,657	Surgical pathology
<b>West North Central</b> .....	<b>204</b>	<b>—</b>	<b>204</b>	<b>—</b>	<b>—</b>
Ia. ....	—	—	—	—	—
Kans. ....	—	—	—	—	—
Minn. ....	204	—	204	—	—
Mo. ....	—	—	—	—	—
Nebr. ....	—	—	—	—	—
N.D. ....	—	—	—	—	—
S.D. ....	—	—	—	—	—
<b>South Atlantic</b> .....	<b>388,123</b>	<b>385,940</b>	<b>—</b>	<b>2,183</b>	—
Del. ....	47,441	45,313	—	2,128	Hemocult (occult blood)
D.C. ....	16,976	16,976	—	—	—
Fla. ....	—	—	—	—	—
Ga. ....	—	—	—	—	—
Md. ....	73,766	73,766	—	—	—
N.C. ....	204,633	204,633	—	—	—
S.C. ....	—	—	—	—	—
Va. ....	—	—	—	—	—
W. Va. ....	45,307	45,252	—	55	Breast, sputum, rectal, perineal, urine, penis
<b>East South Central</b> .....	<b>15,547</b>	<b>14,700</b>	<b>—</b>	<b>847</b>	—
Ala. ....	14,700	14,700	—	—	—
Ky. ....	847	—	—	847	Investigations of coroner's cases for cause of death
Miss. ....	—	—	—	—	—
Tenn. ....	—	—	—	—	—
<b>West South Central</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Ark. ....	—	—	—	—	—
La. ....	—	—	—	—	—
Okla. ....	—	—	—	—	—
Tex. ....	—	—	—	—	—
<b>Mountain</b> .....	<b>4,547</b>	<b>4,237</b>	<b>291</b>	<b>19</b>	—
Ariz. ....	—	—	—	—	—
Colo. ....	—	—	—	—	—
Ida. ....	1,480	1,170	291	19	Buccal Smears
Mont. ....	—	—	—	—	—
Nev. ....	—	—	—	—	—
N.M. ....	3,067	3,067	—	—	—
Utah ....	—	—	—	—	—
Wyo. ....	—	—	—	—	—
<b>Pacific</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Alaska ....	—	—	—	—	—
Cal. ....	—	—	—	—	—
Hawaii ....	—	—	—	—	—
Ore. ....	—	—	—	—	—
Wash. ....	—	—	—	—	—
<b>Territories</b> .....	<b>1,093</b>	<b>1,093</b>	<b>—</b>	<b>—</b>	<b>—</b>
Guam ....	1,093	1,093	—	—	—
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
<b>Total</b> .....	<b>2,629,005</b>	<b>2,117,215</b>	<b>378,229</b>	<b>49,782</b>	<b>8,850</b>
Average .....	53,653	47,049	10,506	1,106	590
<b>New England</b> .....	<b>178,864</b>	<b>74,929</b>	<b>22,147</b>	<b>6,212</b>	<b>647</b>
Conn. ....	23,467	11,918	10,842	691	16
Mass. ....	38	—	—	38	—
Me. ....	19,685	19,519	—	—	166
N.H. ....	—	—	—	—	—
R.I. ....	29,810	12,844	11,305	5,196	465
Vt. ....	30,935	30,648	—	287	—
<b>Middle Atlantic</b> .....	<b>16,906</b>	<b>12,696</b>	<b>3,245</b>	<b>959</b>	<b>6</b>
N.J. ....	16,906	12,696	3,245	959	6
N.y. ....	—	—	—	—	—
Pa. ....	—	—	—	—	—
<b>East North Central</b> .....	<b>360,266</b>	<b>330,687</b>	<b>25,267</b>	<b>3,862</b>	<b>450</b>
Ill. ....	57,620	42,534	13,584	1,232	—
Ind. ....	58,767	50,280	6,003	2,034	450
Mich. ....	101,848	96,155	5,362	331	—
Ohio ....	75,361	74,778	318	265	—
Wisc. ....	66,940	66,940	—	—	—
<b>West North Central</b> .....	<b>277,278</b>	<b>260,710</b>	<b>9,749</b>	<b>4,048</b>	<b>2,771</b>
Ia. ....	45,736	44,863	856	17	—
Kans. ....	51,274	51,063	—	211	—
Minn. ....	—	—	—	—	—
Mo. ....	125,059	119,051	2,186	3,755	67
Nebr. ....	23,896	23,896	—	—	—
N.D. ....	10,480	1,059	6,707	10	2,704
S.D. ....	20,833	20,778	—	55	—
<b>South Atlantic</b> .....	<b>528,236</b>	<b>471,622</b>	<b>45,444</b>	<b>10,356</b>	<b>814</b>
Del. ....	11,800	10,437	1,057	306	—
D.C. ....	1,191	78	386	727	—
Fla. ....	256,551	226,564	7,384	2,603	—
Ga. ....	163	—	—	163	—
Md. ....	103,569	86,972	15,150	1,447	—
N.C. ....	75,621	75,274	—	347	—
S.C. ....	15,160	—	11,348	3,812	—
Va. ....	53,586	46,831	5,115	826	814
W. Va. ....	30,595	25,466	5,004	125	—
<b>East South Central</b> .....	<b>318,532</b>	<b>224,010</b>	<b>92,718</b>	<b>1,778</b>	<b>26</b>
Ala. ....	125,284	86,811	37,475	998	—
Ky. ....	45,604	36,069	9,367	168	—
Miss. ....	77,157	56,183	20,472	502	—
Tenn. ....	70,487	44,947	25,404	110	26
<b>West South Central</b> .....	<b>653,116</b>	<b>507,377</b>	<b>134,520</b>	<b>8,470</b>	<b>2,749</b>
Ark. ....	61,972	53,538	7,592	842	—
La. ....	119,391	77,950	37,712	980	2,749
Okla. ....	67,211	57,118	9,649	444	—
Tex. ....	404,542	318,771	79,567	6,204	—
<b>Mountain</b> .....	<b>208,435</b>	<b>170,916</b>	<b>32,691</b>	<b>4,787</b>	<b>41</b>
Ariz. ....	24,890	18,136	6,235	519	—
Colo. ....	36,110	31,712	4,104	294	—
Ida. ....	41,039	23,230	15,859	1,909	41
Mont. ....	10,807	10,609	—	207	—
Nev. ....	22,259	19,127	2,810	322	—
N.M. ....	27,175	23,285	3,254	636	—
Utah ....	36,705	35,376	429	900	—
Wyo. ....	9,441	9,441	—	—	—
<b>Pacific</b> .....	<b>59,140</b>	<b>51,321</b>	<b>3,949</b>	<b>2,580</b>	<b>1,290</b>
Alaska ....	—	—	—	—	—
Cal. ....	14,629	13,416	360	282	571
Hawaii ....	11,447	6,612	3,589	544	702
Ore. ....	26,480	26,419	—	44	17
Wash. ....	6,584	4,874	—	1,710	—
<b>Territories</b> .....	<b>28,232</b>	<b>12,947</b>	<b>8,499</b>	<b>6,730</b>	<b>56</b>
Guam ....	302	—	80	222	—
P.R. ....	19,352	7,584	5,460	6,252	56
V.I. ....	8,578	5,363	2,959	256	—

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	
<b>Total</b> .....	<b>2,117,215</b>													
Average .....	47,049													
<b>New England</b> .....	<b>74,929</b>													
Conn. ....	11,918	X	X	X	X	X	X	—	X	—	—	X	—	
Mass. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Me. ....	19,519	X	X	—	X	X	—	X	X	—	X	X	—	
N.H. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
R.I. ....	12,844	—	X	—	—	X	—	—	X	X	—	X	—	
Vt. ....	30,648	X	—	—	—	—	—	X	—	—	—	—	—	
<b>Middle Atlantic</b> .....	<b>12,696</b>													
N.J. ....	12,696	X	—	—	—	X	—	X	—	—	—	X	—	
N.Y. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pa. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>East North Central</b> .....	<b>330,687</b>													
Ill. ....	42,534	X	X	—	X	X	—	X	X	—	X	X	—	
Ind. ....	50,280	X	X	—	X	X	—	—	X	X	X	—	—	
Mich. ....	96,155	X	—	—	X	—	—	X	—	—	X	—	—	
Ohio ....	74,778	X	X	—	X	X	X	X	X	—	X	X	—	
Wisc. ....	66,940	X	X	—	X	X	—	X	X	—	X	X	—	
<b>West North Central</b> .....	<b>260,710</b>													
Ia. ....	44,863	—	X	—	X	—	—	—	X	—	—	—	—	
Kans. ....	51,063	X	—	—	X	—	—	X	—	—	—	—	—	
Minn. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mo. ....	119,051	X	—	—	X	X	X	—	—	X	—	—	—	
Nebr. ....	23,896	X	X	—	—	—	—	—	—	—	—	—	—	
N.D. ....	1,059	X	X	—	—	—	—	X	—	—	—	X	—	
S.D. ....	20,778	X	X	—	X	X	—	X	X	—	X	X	—	
<b>South Atlantic</b> .....	<b>471,622</b>													
Del. ....	10,437	X	X	—	—	X	—	X	—	—	—	—	—	
D.C. ....	78	X	—	—	—	X	—	X	—	—	—	X	—	
Fla. ....	226,564	X	X	—	—	X	—	X	—	—	—	X	—	
Ga. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Md. ....	86,972	X	—	—	—	X	—	—	X	—	—	X	—	
N.C. ....	75,274	X	X	—	X	X	—	X	X	—	—	X	—	
S.C. ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Va. ....	46,831	X	X	—	X	X	—	X	X	—	X	X	—	
W. Va. ....	25,466	X	X	—	X	X	—	—	X	—	—	X	—	
<b>East South Central</b> .....	<b>224,010</b>													
Ala. ....	86,811	X	X	—	X	X	—	X	—	—	—	X	—	
Ky. ....	36,069	X	X	X	—	X	X	—	X	—	—	—	—	
Miss. ....	56,183	X	X	—	—	X	—	—	—	—	—	—	—	
Tenn. ....	44,947	X	—	—	X	—	—	X	—	—	—	—	—	
<b>West South Central</b> .....	<b>507,377</b>													
Ark. ....	53,538	X	—	—	X	—	—	X	—	—	—	—	—	
La. ....	77,950	X	X	—	—	X	—	—	—	—	—	X	—	
Okla. ....	57,118	X	X	—	X	X	—	X	—	—	X	X	—	
Tex. ....	318,771	X	X	—	X	X	—	—	—	—	—	—	—	
<b>Mountain</b> .....	<b>170,916</b>													
Ariz. ....	18,136	X	X	X	X	X	X	—	X	X	X	X	X	
Colo. ....	31,712	X	—	—	X	X	—	—	X	—	—	X	—	
Ida. ....	23,230	X	—	—	X	X	—	—	—	—	X	X	—	
Mont. ....	10,609	—	X	—	X	X	—	—	—	—	X	X	—	
Nev. ....	19,127	X	X	—	X	X	—	X	X	—	X	X	—	
N.M. ....	23,285	X	—	—	X	X	—	X	X	—	—	X	—	
Utah ....	35,376	X	X	—	X	X	—	X	—	—	—	X	—	
Wyo. ....	9,441	—	X	—	—	—	—	—	X	—	—	—	—	
<b>Pacific</b> .....	<b>51,321</b>													
Alaska ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cal. ....	13,416	X	X	X	—	X	X	—	—	X	—	X	X	
Hawaii ....	6,612	X	X	X	X	X	X	—	—	—	X	X	X	
Ore. ....	26,419	—	—	—	—	—	—	—	—	—	—	—	—	
Wash. ....	4,874	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Territories</b> .....	<b>12,947</b>													
Guam ....	—	—	—	—	—	—	—	—	—	—	—	—	—	
P.R. ....	7,584	X	X	X	—	X	—	—	—	—	—	—	—	
V.I. ....	5,363	X	—	—	X	—	—	X	—	—	X	—	—	

Table 4-40  
IX. ENVIRONMENTAL MICROBIOLOGY  
B. Dairy Product Samples

Lab & Region	Number of Samples	Types of Samples					Other
		Milk & Cream	Ice Cream	Cheese	Other Dairy Products	Frozen Desserts	
<b>Total</b> .....	<b>378,229</b>						
Average .....	10,506						
<b>New England</b> .....	<b>22,147</b>						
Conn. ....	10,842	X	X	X	X	X	Yogurt, empty containers
Mass. ....	—	—	—	—	—	—	—
Me. ....	—	—	—	—	—	—	—
N.H. ....	—	—	—	—	—	—	—
R.I. ....	11,305	X	X	X	X	X	X
Vt. ....	—	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>3,245</b>						
N.J. ....	3,245	X	X	X	X	X	Non-dairy creamers, reconstituted powdered dairy products
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—
<b>East North Central</b> ....	<b>25,267</b>						
Ill. ....	13,584	X	X	X	X	X	—
Ind. ....	6,003	X	X	X	X	X	—
Mich. ....	5,362	X	X	X	X	—	—
Ohio ....	318	X	X	X	X	—	—
Wisc. ....	—	—	—	—	—	—	—
<b>West North Central</b> ...	<b>9,749</b>						
Ia. ....	856	X	—	—	X	—	—
Kans. ....	—	—	—	—	—	—	—
Minn. ....	—	—	—	—	—	—	—
Mo. ....	2,186	X	X	X	X	X	—
Nebr. ....	—	—	—	—	—	—	—
N.D. ....	6,707	X	X	X	X	X	—
S.D. ....	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>45,444</b>						
Del. ....	1,057	X	X	—	—	—	—
D.C. ....	386	X	X	—	—	X	—
Fla. ....	7,384	X	X	X	X	X	—
Ga. ....	—	—	—	—	—	—	—
Md. ....	15,150	X	X	X	X	X	—
N.C. ....	—	—	—	—	—	—	—
S.C. ....	11,348	X	X	—	X	X	—
Va. ....	5,115	X	X	—	X	—	Cultured products, milk shakes, counter freezes, milk cartons
W. Va. ....	5,004	X	—	—	X	—	—
<b>East South Central</b> ....	<b>92,718</b>						
Ala. ....	37,475	X	X	X	X	X	Empty cartons, sandwich spreads, yogurt, check specimens
Ky. ....	9,367	X	X	X	X	X	—
Miss. ....	20,472	X	—	—	X	—	—
Tenn. ....	25,404	X	X	—	X	X	—
<b>West South Central</b> ...	<b>134,520</b>						
Ark. ....	7,592	X	X	X	X	X	—
La. ....	37,712	X	X	X	X	X	Plastic milk containers
Okla. ....	9,649	X	—	—	—	—	—
Tex. ....	79,567	X	X	—	—	X	—
<b>Mountain</b> .....	<b>32,691</b>						
Ariz. ....	6,235	X	X	—	X	X	—
Colo. ....	4,104	X	X	X	X	—	—
Ida. ....	15,859	X	—	—	—	—	—
Mont. ....	—	—	—	—	—	—	—
Nev. ....	2,810	X	X	—	X	X	—
N.M. ....	3,254	X	X	X	X	X	—
Utah ....	429	X	X	—	—	X	—
Wyo. ....	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>3,949</b>						
Alaska ....	—	—	—	—	—	—	—
Cal. ....	360	X	—	—	—	—	—
Hawaii ....	3,589	X	X	—	X	X	—
Ore. ....	—	—	—	—	—	—	—
Wash. ....	—	—	—	—	—	—	—
<b>Territories</b> .....	<b>8,499</b>						
Guam ....	80	—	—	—	—	—	Raw milk
P.R. ....	5,460	X	X	—	X	X	—
V.I. ....	2,959	X	X	—	—	—	—

Table 4-41  
IX. ENVIRONMENTAL MICROBIOLOGY

Lab & Region	C. Food and Beverage Samples Types					D. Other Samples	
	Number of Samples	Food Quality	Food-Associated Disease Outbreaks	Seafood	Environmental	Number of Samples	Other
<b>Total</b> .....	<b>49,782</b>					<b>8,850</b>	
Average .....	1,106					590	
<b>New England</b> .....	<b>6,212</b>					<b>647</b>	
Conn. ....	691	X	X	X	X	16	Shellfish
Mass. ....	38	—	X	—	—	—	—
Me. ....	—	—	—	—	—	166	Toys-analysis of stuffing for sanitary quality
N.H. ....	—	—	—	—	—	—	—
R.I. ....	5,196	—	—	—	—	465	P.S.P. (Red Tide)
Vt. ....	287	—	X	—	X	—	—
<b>Middle Atlantic</b> .....	<b>959</b>					<b>6</b>	
N.J. ....	959	X	X	—	X	6	Milk for penicillin residue
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—
<b>East North Central</b> . . .	<b>3,862</b>					<b>450</b>	
Ill. ....	1,232	X	X	X	X	—	—
Ind. ....	2,034	X	X	X	X	450	Meat products
Mich. ....	331	—	X	—	—	—	—
Ohio ....	265	X	X	X	X	—	—
Wisc. ....	—	—	—	—	—	—	—
<b>West North Central</b> . . .	<b>4,048</b>					<b>2,771</b>	
Ia. ....	17	—	X	—	—	—	—
Kans. ....	211	X	X	—	—	—	—
Minn. ....	—	—	—	—	—	—	—
Mo. ....	3,755	X	X	—	X	67	Miscellaneous
Nebr. ....	—	—	—	—	—	—	—
N.D. ....	10	—	X	—	X	2,704	RODAC, sterility controls from hospitals
S.D. ....	55	—	X	—	—	—	—
<b>South Atlantic</b> .....	<b>10,356</b>					<b>814</b>	
Del. ....	306	X	X	X	X	—	—
D.C. ....	727	X	X	—	X	—	—
Fla. ....	2,603	X	X	X	X	—	—
Ga. ....	163	—	X	X	X	—	—
Md. ....	1,447	—	X	X	X	—	—
N.C. ....	347	—	X	X	X	—	—
S.C. ....	3,812	X	X	X	X	—	—
Va. ....	826	X	X	—	—	814	Medicated feeds, animal remedies, broassay
W. Va. ....	125	X	X	—	—	—	—
<b>East South Central</b> . . .	<b>1,778</b>					<b>26</b>	
Ala. ....	998	X	X	X	X	—	—
Ky. ....	168	X	X	—	X	—	—
Miss. ....	502	—	X	X	X	—	—
Tenn. ....	110	—	X	—	X	26	Water analysis for enteric pathogens
<b>West South Central</b> . . .	<b>8,470</b>					<b>2,749</b>	
Ark. ....	842	X	X	—	X	—	—
La. ....	980	X	—	X	X	2,749	Cholerae (environmental), nuisance organisms
Okla. ....	444	X	X	—	X	—	—
Tex. ....	6,204	—	—	—	—	—	—
<b>Mountain</b> .....	<b>4,787</b>					<b>41</b>	
Ariz. ....	519	X	X	—	—	—	—
Colo. ....	294	—	X	—	X	—	—
Ida. ....	1,909	—	—	—	X	41	Miscellaneous sanitation
Mont. ....	207	X	X	—	—	—	—
Nev. ....	322	—	X	—	—	—	—
N.M. ....	636	X	X	—	X	—	—
Utah ....	900	X	X	—	X	—	—
Wyo. ....	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>2,580</b>					<b>1,290</b>	
Alaska ....	—	—	—	—	—	—	—
Cal. ....	282	X	X	X	X	571	Drug surveillance, HACCP Project, Shellfish for PSP
Hawaii ....	544	X	X	X	X	702	Hog viscera Salmonella survey
Ore. ....	44	—	X	X	—	17	Shellfish toxicity
Wash. ....	1,710	—	—	—	—	—	—
<b>Territories</b> .....	<b>6,730</b>					<b>56</b>	
Guam ....	222	X	—	—	—	—	—
P.R. ....	6,252	X	X	X	X	56	Stools, vomits, containers
V.I. ....	256	—	X	—	X	—	—

Table 4-42  
X. ENVIRONMENTAL CHEMISTRY  
SAMPLES BY CATEGORY AND SUB-CATEGORY

Lab & Region	Total Envir. Chem. Samples	A	B	C	D	E	F
		Water Samples	Dairy Prod. and Food Samples	Pesticide Samples	Air Pollution Samples	Radiological Samples	Other Samples
<b>Total</b> .....	<b>881,069</b>	<b>443,965</b>	<b>134,274</b>	<b>31,668</b>	<b>232,069</b>	<b>33,280</b>	<b>5,813</b>
Average .....	21,489	11,999	4,796	1,056	10,549	1,664	727
<b>New England</b> .....	<b>110,226</b>	<b>35,439</b>	<b>8,150</b>	<b>1,293</b>	<b>62,982</b>	<b>2,358</b>	<b>4</b>
Conn. ....	28,800	13,576	5,283	135	9,193	613	—
Mass. ....	—	—	—	—	—	—	—
Me. ....	12,384	10,659	—	639	—	1,082	4
N.H. ....	—	—	—	—	—	—	—
R.I. ....	65,872	8,051	2,867	502	53,789	663	—
Vt. ....	3,170	3,153	—	17	—	—	—
<b>Middle Atlantic</b> .....	<b>13,655</b>	<b>9,917</b>	<b>2,478</b>	<b>1,260</b>	—	—	—
N.J. ....	13,655	9,917	2,478	1,260	—	—	—
N.Y. ....	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—
<b>East North Central</b> .....	<b>132,791</b>	<b>90,638</b>	<b>14,880</b>	<b>5,027</b>	<b>18,263</b>	<b>3,465</b>	<b>518</b>
Ill. ....	24,515	16,199	6,215	708	—	1,393	—
Ind. ....	24,365	12,824	8,665	2,876	—	—	—
Mich. ....	28,392	28,392	—	—	—	—	—
Ohio ....	24,077	13,198	—	886	7,403	2,072	518
Wisc. ....	31,442	20,025	—	557	10,860	—	—
<b>West North Central</b> .....	<b>137,627</b>	<b>62,831</b>	<b>5,460</b>	<b>2,911</b>	<b>62,656</b>	<b>3,769</b>	—
Ia. ....	91,071	31,247	911	557	57,391	965	—
Kans. ....	16,529	8,920	—	741	4,544	2,324	—
Minn. ....	—	—	—	—	—	—	—
Mo. ....	11,311	5,529	4,549	753	—	480	—
Nebr. ....	8,653	7,793	—	860	—	—	—
N.D. ....	—	—	—	—	—	—	—
S.D. ....	10,063	9,342	—	—	721	—	—
<b>South Atlantic</b> .....	<b>133,655</b>	<b>71,475</b>	<b>29,935</b>	<b>6,223</b>	<b>16,373</b>	<b>8,156</b>	<b>1,493</b>
Del. ....	4,923	3,975	—	—	—	948	—
D.C. ....	1,673	—	450	—	25	—	1,198
Fla. ....	5,179	4,484	52	274	365	—	4
Ga. ....	—	—	—	—	—	—	—
Md. ....	48,930	21,310	13,487	1,494	9,269	3,079	291
N.C. ....	19,883	17,794	—	792	—	1,297	—
S.C. ....	12,773	—	11,393	1,380	—	—	—
Va. ....	40,294	23,912	4,553	2,283	6,714	2,832	—
W. Va. ....	—	—	—	—	—	—	—
<b>East South Central</b> .....	<b>61,852</b>	<b>48,480</b>	<b>12,155</b>	<b>1,217</b>	—	—	—
Ala. ....	51,387	39,768	11,619	—	—	—	—
Ky. ....	7,380	5,627	536	1,217	—	—	—
Miss. ....	3,085	3,085	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—
<b>West South Central</b> .....	<b>72,321</b>	<b>24,591</b>	<b>24,926</b>	<b>6,564</b>	<b>8,271</b>	<b>7,969</b>	—
Ark. ....	6,247	—	6,247	—	—	—	—
La. ....	16,495	5,176	9,096	408	2	1,813	—
Okla. ....	4,848	—	4,848	—	—	—	—
Tex. ....	44,731	19,415	4,735	6,156	8,269	6,156	—
<b>Mountain</b> .....	<b>151,286</b>	<b>84,781</b>	<b>23,017</b>	<b>2,873</b>	<b>32,473</b>	<b>4,538</b>	<b>3,604</b>
Ariz. ....	6,136	673	2,282	1,274	1,907	—	—
Colo. ....	16,920	3,593	2,570	744	6,088	3,925	—
Ida. ....	84,521	57,527	15,839	618	9,039	—	1,498
Mont. ....	8,418	3,219	352	44	4,789	14	—
Nev. ....	8,997	4,322	1,954	60	2,661	—	—
N.M. ....	18,514	8,061	—	133	7,663	551	2,106
Utah ....	7,780	7,386	20	—	326	48	—
Wyo. ....	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>57,763</b>	<b>11,152</b>	<b>8,041</b>	<b>4,300</b>	<b>31,051</b>	<b>3,025</b>	<b>194</b>
Alaska ....	—	—	—	—	—	—	—
Cal. ....	22,830	7,759	4,808	1,928	5,572	2,569	194
Hawaii ....	30,566	1,692	3,231	164	25,479	—	—
Ore. ....	—	—	—	—	—	—	—
Wash. ....	4,367	1,701	2	2,208	—	456	—
<b>Territories</b> .....	<b>9,893</b>	<b>4,661</b>	<b>5,232</b>	—	—	—	—
Guam ....	—	—	—	—	—	—	—
P.R. ....	8,143	2,911	5,232	—	—	—	—
V.I. ....	1,750	1,750	—	—	—	—	—

Table 4-43  
X. ENVIRONMENTAL CHEMISTRY

Lab & Region	Number of Samples	A. Water Samples				B. Dairy Products and Food Samples		
		Types				Number of Samples	Types	
		Potable	Non-Potable	Swimming Pools	Sewage & Waste		Milk & Cream	Foods
<b>Total</b> .....	<b>443,965</b>					<b>134,274</b>		
Average .....	11,999					4,796		
<b>New England</b> .....	<b>35,439</b>					<b>8,150</b>		
Conn. ....	13,576	X	X	X	X	5,283	X	X
Mass. ....	—	—	—	—	—	—	—	—
Me. ....	10,659	X	X	X	X	—	—	—
N.H. ....	—	—	—	—	—	—	—	—
R.I. ....	8,051	X	X	X	X	2,867	X	X
Vt. ....	3,153	X	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>9,917</b>					<b>2,478</b>		
N.J. ....	9,917	X	X	—	X	2,478	X	X
N.Y. ....	—	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—	—
<b>East North Central</b> ....	<b>90,638</b>					<b>14,880</b>		
Ill. ....	16,199	X	X	X	X	6,215	X	X
Ind. ....	12,824	X	X	—	X	8,665	X	X
Mich. ....	28,392	X	X	—	X	—	—	—
Ohio ....	13,198	X	X	—	X	—	—	—
Wisc. ....	20,025	X	X	X	X	—	—	—
<b>West North Central</b> ...	<b>62,831</b>					<b>5,460</b>		
Ia. ....	31,247	X	X	X	X	911	X	X
Kans. ....	8,920	X	X	—	X	—	—	—
Minn. ....	—	—	—	—	—	—	—	—
Mo. ....	5,529	X	X	—	—	4,549	X	X
Nebr. ....	7,793	X	—	—	—	—	—	—
N.D. ....	—	—	—	—	—	—	—	—
S.D. ....	9,342	X	X	X	X	—	—	—
<b>South Atlantic</b> .....	<b>71,475</b>					<b>29,935</b>		
Del. ....	3,975	X	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	450	X	X
Fla. ....	4,484	X	X	—	—	52	—	X
Ga. ....	—	—	—	—	—	—	—	—
Md. ....	21,310	X	X	X	X	13,487	X	X
N.C. ....	17,794	X	X	X	X	—	—	—
S.C. ....	—	—	—	—	—	11,393	X	X
Va. ....	23,912	X	X	—	X	4,553	X	X
W. Va. ....	—	—	—	—	—	—	—	—
<b>East South Central</b> ....	<b>48,480</b>					<b>12,155</b>		
Ala. ....	39,768	X	X	—	—	11,619	X	X
Ky. ....	5,627	X	X	X	—	536	X	X
Miss. ....	3,085	X	X	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—	—
<b>West South Central</b> ...	<b>24,591</b>					<b>24,926</b>		
Ark. ....	—	—	—	—	—	6,247	X	—
La. ....	5,176	X	X	—	X	9,096	X	X
Okla. ....	—	—	—	—	—	4,848	X	X
Tex. ....	19,415	X	X	—	X	4,735	—	X
<b>Mountain</b> .....	<b>84,781</b>					<b>23,017</b>		
Ariz. ....	673	X	X	X	X	2,282	X	X
Colo. ....	3,593	X	X	—	X	2,570	—	X
Ida. ....	57,527	X	X	X	X	15,839	X	X
Mont. ....	3,219	X	X	—	X	352	—	X
Nev. ....	4,322	X	X	X	X	1,954	X	X
N.M. ....	8,061	X	X	X	X	—	—	—
Utah ....	7,386	X	X	X	X	20	—	—
Wyo. ....	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>11,152</b>					<b>8,041</b>		
Alaska ....	—	—	—	—	—	—	—	—
Cal. ....	7,759	X	X	X	X	4,808	—	X
Hawaii ....	1,692	X	X	—	X	3,231	X	X
Ore. ....	—	—	—	—	—	—	—	—
Wash. ....	1,701	X	X	—	—	2	—	X
<b>Territories</b> .....	<b>4,661</b>					<b>5,232</b>		
Guam ....	—	—	—	—	—	—	—	—
P.R. ....	2,911	X	—	—	—	5,232	X	X
V.I. ....	1,750	X	X	—	—	—	—	—

Table 4-44  
X. ENVIRONMENTAL CHEMISTRY  
C. Pesticide Samples

Lab & Region	Number of Samples	Types				Other
		Human Source	Water	Milk	Foods	
<b>Total</b> .....	<b>31,668</b>					
Average .....	1,056					
<b>New England</b> .....	<b>1,293</b>					
Conn. ....	135	—	X	—	X	Oils, fish, sediments — muds, sewage, industrial waste
Mass. ....	—	—	—	—	—	—
Me. ....	639	X	X	—	X	Miscellaneous
N.H. ....	—	—	—	—	—	—
R.I. ....	502	X	X	X	X	—
Vt. ....	17	—	X	—	—	—
<b>Middle Atlantic</b> .....	<b>1,260</b>					
N.J. ....	1,260	X	X	X	X	Marijuana (paraquat), air and soil, Misc.
N.Y. ....	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—
<b>East North Central</b> .....	<b>5,027</b>					
Ill. ....	708	—	X	X	X	Soil, vegetation, fish
Ind. ....	2,876	—	—	X	X	—
Mich. ....	—	—	—	—	—	—
Ohio ....	886	—	X	X	X	—
Wisc. ....	557	—	X	—	X	Soils, industrial
<b>West North Central</b> .....	<b>2,911</b>					
Ia. ....	557	X	X	—	X	air, silt
Kans. ....	741	—	X	—	—	—
Minn. ....	—	—	—	—	—	—
Mo. ....	753	X	X	X	X	—
Nebr. ....	860	—	X	—	—	—
N.D. ....	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>6,223</b>					
Del. ....	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—
Fla. ....	274	—	X	—	X	—
Ga. ....	—	—	—	—	—	—
Md. ....	1,494	—	X	X	X	Seafood
N.C. ....	792	—	X	—	—	—
S.C. ....	1,380	X	X	X	X	Cigars, transformer oil, vegetation
Va. ....	2,283	—	X	—	X	Miscellaneous environmental samples
W. Va. ....	—	—	—	—	—	—
<b>East South Central</b> .....	<b>1,217</b>					
Ala. ....	—	—	—	—	—	—
Ky. ....	1,217	X	X	X	X	—
Miss. ....	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—
<b>West South Central</b> .....	<b>6,564</b>					
Ark. ....	—	—	—	—	—	—
La. ....	408	—	X	X	X	Soil, Mud, air filter, transformer oil
Okla. ....	—	—	—	—	—	—
Tex. ....	6,156	—	X	—	—	—
<b>Mountain</b> .....	<b>2,873</b>					
Ariz. ....	1,274	—	X	X	X	Fish
Colo. ....	744	—	X	X	X	—
Ida. ....	618	X	X	X	—	Soil
Mont. ....	44	—	X	—	—	Air, formulations, soil
Nev. ....	60	—	X	X	—	—
N.M. ....	133	—	X	X	—	Soils
Utah ....	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>4,300</b>					
Alaska ....	—	—	—	—	—	—
Cal. ....	1,928	—	X	—	X	Soil/sediment, wastes
Hawaii ....	164	—	X	X	X	Sediment
Ore. ....	—	—	—	—	—	—
Wash. ....	2,208	X	X	X	X	Soil, air, plants
<b>Territories</b> .....	<b>—</b>					
Guam ....	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—

Table 4-45  
 X. ENVIRONMENTAL CHEMISTRY  
 D. Air Pollution Samples

Lab & Region	Number of Samples	Types of Activity							Number of Continuous Samp. Stations	
		Discrete Sampling Stations						Gaseous		Other
		Number of Stations	Particulate				Other			
			Solids	Metals	Organics	Other				
<b>Total</b> .....	<b>232,069</b>									
Average .....	10,549									
<b>New England</b> .....	<b>62,982</b>									
Conn. ....	9,193	80	X	X	X	—	X	—	46	
Mass. ....	—	—	—	—	—	—	—	—	—	
Me. ....	—	—	—	—	—	—	—	—	—	
N.H. ....	—	—	—	—	—	—	—	—	—	
R.I. ....	53,789	12	X	X	—	—	—	—	4	
Vt. ....	—	—	—	—	—	—	—	—	—	
<b>Middle Atlantic</b> .....	<b>—</b>									
N.J. ....	—	—	—	—	—	—	—	—	—	
N.Y. ....	—	—	—	—	—	—	—	—	—	
Pa. ....	—	—	—	—	—	—	—	—	—	
<b>East North Central</b> ....	<b>18,263</b>									
Ill. ....	—	—	—	—	—	—	—	—	—	
Ind. ....	—	—	—	—	—	—	—	—	—	
Mich. ....	—	—	—	—	—	—	—	—	—	
Ohio ....	7,403	80	X	X	—	X	X	—	—	
Wisc. ....	10,860	90	X	—	—	—	X	—	20	
<b>West North Central</b> ...	<b>62,656</b>									
Ia. ....	57,391	1	X	X	—	—	X	—	9	
Kans. ....	4,544	34	—	X	—	X	X	—	4	
Minn. ....	—	—	—	—	—	—	—	—	—	
Mo. ....	—	—	—	—	—	—	—	—	—	
Nebr. ....	—	—	—	—	—	—	—	—	—	
N.D. ....	—	—	—	—	—	—	—	—	—	
S.D. ....	721	—	X	—	X	—	—	—	—	
<b>South Atlantic</b> .....	<b>16,373</b>									
Del. ....	—	—	—	—	—	—	—	—	—	
D.C. ....	25	25	—	X	—	—	—	—	—	
Fla. ....	365	1	X	—	—	—	—	—	—	
Ga. ....	—	—	—	—	—	—	—	—	—	
Md. ....	9,269	137	X	X	X	X	X	X	16	
N.C. ....	—	—	—	—	—	—	—	—	—	
S.C. ....	—	—	—	—	—	—	—	—	—	
Va. ....	6,714	90	X	X	—	—	—	—	—	
W. Va. ....	—	—	—	—	—	—	—	—	—	
<b>East South Central</b> ....	<b>—</b>									
Ala. ....	—	—	—	—	—	—	—	—	—	
Ky. ....	—	—	—	—	—	—	—	—	—	
Miss. ....	—	—	—	—	—	—	—	—	—	
Tenn. ....	—	—	—	—	—	—	—	—	—	
<b>West South Central</b> ...	<b>8,271</b>									
Ark. ....	—	—	—	—	—	—	—	—	—	
La. ....	2	—	X	—	—	—	—	—	—	
Okla. ....	—	—	—	—	—	—	—	—	—	
Tex. ....	8,269	—	—	X	—	—	X	—	—	
<b>Mountain</b> .....	<b>32,473</b>									
Ariz. ....	1,907	40	X	X	X	X	X	X	19	
Colo. ....	6,088	74	X	X	X	—	—	—	4	
Ida. ....	9,039	34	X	X	—	—	—	—	6	
Mont. ....	4,789	50	X	X	—	X	X	X	—	
Nev. ....	2,661	16	X	X	X	—	—	—	3	
N.M. ....	7,663	66	X	X	—	X	X	—	—	
Utah ....	326	3	—	X	—	—	—	—	—	
Wyo. ....	—	—	—	—	—	—	—	—	—	
<b>Pacific</b> .....	<b>31,051</b>									
Alaska ....	—	—	—	—	—	—	—	—	—	
Cal. ....	5,572	60	X	X	X	—	X	X	10	
Hawaii ....	25,479	12	X	—	—	—	X	X	8	
Ore. ....	—	—	—	—	—	—	—	—	—	
Wash. ....	—	—	—	—	—	—	—	—	—	
<b>Territories</b> .....	<b>—</b>									
Guam ....	—	—	—	—	—	—	—	—	—	
P.R. ....	—	—	—	—	—	—	—	—	—	
V.I. ....	—	—	—	—	—	—	—	—	—	

Table 4-46  
**X. ENVIRONMENTAL CHEMISTRY**  
**E. Radiological Analysis**

Lab & Region	Number of Samples	Types							Other
		Air	Water	Milk	Food	Silt	Soil	Wipes	
<b>Total</b> .....	<b>33,280</b>								
Average .....	1,664								
<b>New England</b> .....	<b>2,358</b>								
Conn. ....	613	X	X	X	X	X	X	X	Shellfish, fish, feed, industrial waste
Mass. ....	—	—	—	—	—	—	—	—	—
Me. ....	1,082	X	X	X	X	X	X	X	Seaweed
N.H. ....	—	—	—	—	—	—	—	—	—
R.I. ....	663	X	X	—	—	—	—	X	—
Vt. ....	—	—	—	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>								
N.J. ....	—	—	—	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—	—	—
<b>East North Central</b> .....	<b>3,465</b>								
Ill. ....	1,393	X	X	X	X	—	—	X	—
Ind. ....	—	—	—	—	—	—	—	—	—
Mich. ....	—	—	—	—	—	—	—	—	—
Ohio ....	2,072	—	X	X	—	X	—	X	—
Wisc. ....	—	—	—	—	—	—	—	—	—
<b>West North Central</b> .....	<b>3,769</b>								
Ia. ....	965	X	X	X	—	—	—	—	—
Kans. ....	2,324	X	X	X	—	—	X	X	—
Minn. ....	—	—	—	—	—	—	—	—	—
Mo. ....	480	X	X	—	—	—	—	—	—
Nebr. ....	—	—	—	—	—	—	—	—	—
N.D. ....	—	—	—	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>8,156</b>								
Del. ....	948	—	X	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—	—
Fla. ....	—	—	—	—	—	—	—	—	—
Ga. ....	—	—	—	—	—	—	—	—	—
Md. ....	3,079	X	X	X	X	X	X	X	—
N.C. ....	1,297	X	X	X	X	X	X	X	—
S.C. ....	—	—	—	—	—	—	—	—	—
Va. ....	2,832	X	X	X	—	—	X	X	—
W. Va. ....	—	—	—	—	—	—	—	—	—
<b>East South Central</b> .....	<b>—</b>								
Ala. ....	—	—	—	—	—	—	—	—	—
Ky. ....	—	—	—	—	—	—	—	—	—
Miss. ....	—	—	—	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—	—	—
<b>West South Central</b> .....	<b>7,969</b>								
Ark. ....	—	—	—	—	—	—	—	—	—
La. ....	1,813	—	X	—	—	—	—	—	—
Okla. ....	—	—	—	—	—	—	—	—	—
Tex. ....	6,156	—	X	X	—	—	X	X	—
<b>Mountain</b> .....	<b>4,538</b>								
Ariz. ....	—	—	—	—	—	—	—	—	—
Colo. ....	3,925	X	X	X	X	X	X	—	—
Ida. ....	*	—	X	—	—	—	—	—	—
Mont. ....	14	—	X	—	—	—	—	—	Rock/slag
Nev. ....	—	—	—	—	—	—	—	—	—
N.M. ....	551	—	X	—	—	—	—	—	—
Utah ....	48	X	X	X	—	—	X	X	Luminescent dials
Wyo. ....	—	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>3,025</b>								
Alaska ....	—	—	—	—	—	—	—	—	—
Cal. ....	2,569	X	X	X	X	X	X	X	Vegetation
Hawaii ....	—	—	—	—	—	—	—	—	—
Ore. ....	—	—	—	—	—	—	—	—	—
Wash. ....	456	X	X	X	X	X	X	X	Wipes and liquids from disposal sites
<b>Territories</b> .....	<b>—</b>								
Guam ....	—	—	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—	—	—

\* Included in water samples, Table 4-43

Table 4-47  
**ENVIRONMENTAL CHEMISTRY**  
**F. Other Samples**

Lab	Number of Samples	Types
<b>Total</b> .....	<b>5,813</b>	
Average .....	727	
Cal. ....	194	Air monitoring instrument calibration
D.C. ....	1,198	Soil (metals), vegetables (metals)
Fla. ....	4	Bedding
Ida. ....	1,498	Utensil counts, miscellaneous
Me. ....	4	—
Md. ....	291	Bedding and upholstery
N.M. ....	2,106	Heavy metals in/on soils; muds; water
Ohio .....	518	All matrices — organics, all matrices — inorganics

Table 4-48  
**XI. OCCUPATIONAL HEALTH AND SAFETY**

Lab & Region	Total Occup. Health & Safety Samples	Number of Environmental Samples	Number of Biological Samples
<b>Total</b> .....	<b>60,187</b>	<b>58,956</b>	<b>2,903</b>
Average .....	3,168	3,103	363
<b>New England</b> .....	<b>3,824</b>	<b>1,958</b>	<b>1,866</b>
Conn. ....	2,672	806	1,866
Mass. ....	—	—	—
Me. ....	45	45	—
N.H. ....	—	—	—
R.I. ....	1,107	1,107	—
Vt. ....	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>	<b>—</b>	<b>—</b>
N.J. ....	—	—	—
N.Y. ....	—	—	—
Pa. ....	—	—	—
<b>East North Central</b> .....	<b>16,950</b>	<b>16,802</b>	<b>148</b>
Ill. ....	—	—	—
Ind. ....	—	—	—
Mich. ....	—	—	—
Ohio ....	6,506	6,502	4
Wisc. ....	10,444	10,300	144
<b>West North Central</b> .....	<b>4,210</b>	<b>4,145</b>	<b>65</b>
Ia. ....	3,285	3,220	65
Kans. ....	925	925	—
Minn. ....	—	—	—
Mo. ....	—	—	—
Nebr. ....	—	—	—
N.D. ....	—	—	—
S.D. ....	—	—	—
<b>South Atlantic</b> .....	<b>16,925</b>	<b>16,848</b>	<b>77</b>
Del. ....	—	—	—
D.C. ....	—	—	—
Fla. ....	1,231	1,231	—
Ga. ....	97	97	—
Md. ....	9,264	9,264	—
N.C. ....	4,956	4,956	—
S.C. ....	—	—	—
Va. ....	1,377	1,300	77
W. Va. ....	—	—	—
<b>East South Central</b> .....	<b>2,656</b>	<b>2,656</b>	<b>—</b>
Ala. ....	—	—	—
Ky. ....	2,656	2,656	—
Miss. ....	—	—	—
Tenn. ....	—	—	—
<b>West South Central</b> .....	<b>—</b>	<b>—</b>	<b>—</b>
Ark. ....	—	—	—
La. ....	—	—	—
Okla. ....	—	—	—
Tex. ....	—	—	—
<b>Mountain</b> .....	<b>3,899</b>	<b>3,182</b>	<b>717</b>
Ariz. ....	842	842	—
Colo. ....	473	473	—
Ida. ....	—	—	—
Mont. ....	178	117	61
Nev. ....	—	—	—
N.M. ....	208	208	—
Utah ....	2,198	1,542	656
Wyo. ....	—	—	—
<b>Pacific</b> .....	<b>11,723</b>	<b>11,693</b>	<b>30</b>
Alaska ....	—	—	—
Cal. ....	11,723	11,693	30
Hawaii ....	—	—	—
Ore. ....	—	—	—
Wash. ....	—	—	—
<b>Territories</b> .....	<b>—</b>	<b>—</b>	<b>—</b>
Guam ....	—	—	—
P.R. ....	—	—	—
V.I. ....	—	—	—

Table 4-49  
**XII. TOXICOLOGY**  
**SAMPLES BY CATEGORY AND SUB-CATEGORY**

Lab & Region	Total Toxicology Samples	A	B
		Physical Samples	Biological Samples
<b>Total</b> .....	<b>544,730</b>	<b>78,523</b>	<b>466,207</b>
Average .....	11,590	3,020	14,127
<b>New England</b> .....	<b>216,506</b>	<b>46,824</b>	<b>169,682</b>
Conn. ....	72,684	42,455	30,229
Mass. ....	113,386	250	113,136
Me. ....	7,715	802	6,913
N.H. ....	35	—	35
R.I. ....	18,525	3,098	15,427
Vt. ....	4,161	219	3,942
<b>Middle Atlantic</b> .....	<b>1,008</b>	<b>8</b>	<b>1,000</b>
N.J. ....	—	—	—
N.Y. ....	—	—	—
Pa. ....	1,008	8	1,000
<b>East North Central</b> .....	<b>34,955</b>	<b>662</b>	<b>34,293</b>
Ill. ....	12,535	399	12,136
Ind. ....	39	39	—
Mich. ....	—	—	—
Ohio ....	14,455	144	14,311
Wisc. ....	7,926	80	7,846
<b>West North Central</b> .....	<b>17,224</b>	<b>5,110</b>	<b>12,114</b>
Ia. ....	7,426	740	6,686
Kans. ....	3,136	107	3,029
Minn. ....	—	—	—
Mo. ....	861	332	529
Nebr. ....	5,801	3,931	1,870
N.D. ....	—	—	—
S.D. ....	—	—	—
<b>South Atlantic</b> .....	<b>156,019</b>	<b>1,562</b>	<b>154,457</b>
Del. ....	2,502	—	2,502
D.C. ....	18,815	—	18,815
Fla. ....	18,272	60	18,212
Ga. ....	39,112	—	39,112
Md. ....	37,053	622	36,431
N.C. ....	5,218	—	5,218
S.C. ....	12,355	188	12,167
Va. ....	22,692	692	22,000
W. Va. ....	—	—	—
<b>East South Central</b> .....	<b>8,330</b>	<b>571</b>	<b>7,759</b>
Ala. ....	5,026	—	5,026
Ky. ....	3,304	571	2,733
Miss. ....	—	—	—
Tenn. ....	—	—	—
<b>West South Central</b> .....	<b>39,998</b>	<b>—</b>	<b>39,998</b>
Ark. ....	—	—	—
La. ....	—	—	—
Okla. ....	—	—	—
Tex. ....	39,998	—	39,998
<b>Mountain</b> .....	<b>61,127</b>	<b>21,533</b>	<b>39,594</b>
Ariz. ....	—	—	—
Colo. ....	15,397	—	15,397
Ida. ....	30,590	20,594	9,996
Mont. ....	2	2	—
Nev. ....	—	—	—
N.M. ....	7,728	—	7,728
Utah ....	5,626	937	4,689
Wyo. ....	1,784	—	1,784
<b>Pacific</b> .....	<b>8,615</b>	<b>1,951</b>	<b>6,664</b>
Alaska ....	—	—	—
Cal. ....	6,551	1,523	5,028
Hawaii ....	33	33	—
Ore. ....	—	—	—
Wash. ....	2,031	395	1,636
<b>Territories</b> .....	<b>948</b>	<b>302</b>	<b>646</b>
Guam ....	—	—	—
P.R. ....	646	—	646
V.I. ....	302	302	—



Table 4-51  
 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
<b>Total</b> .....	<b>466,207</b>								
Average .....	14,127								
<b>New England</b> .....	<b>169,682</b>								
Conn. ....	30,229	F	F	F	O	O	—	—	F/Carboxyhemoglobin, halides
Mass. ....	113,136	—	—	—	O	—	—	—	O/Erythrocyte protoporphyrin
Me. ....	6,913	F	F	F	O	F	F	O	—
N.H. ....	35	—	—	—	—	—	—	—	—
R.I. ....	15,427	F	F	F	O	F	F	—	—
Vt. ....	3,942	F	F	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>1,000</b>								
N.J. ....	—	—	—	—	—	—	—	—	—
N.Y. ....	—	—	—	—	—	—	—	—	—
Pa. ....	1,000	F	O	O	O	—	—	—	—
<b>East North Central</b> .....	<b>34,293</b>								
Ill. ....	12,136	F/O	F/O	F/O	F/O	F/O	F/O	F/O	F/O Erythrocyte protoporphyrin
Ind. ....	—	—	—	—	—	—	—	—	—
Mich. ....	—	—	—	—	—	—	—	—	—
Ohio ....	14,311	F/O	F/O	F/O	O	O	—	O	F/O paraquat
Wisc. ....	7,846	F/O	O	O	O	O	O	—	CO <sub>2</sub> , Cholinesterase, erythrocyte protoporphyrin
<b>West North Central</b> .....	<b>12,114</b>								
Ia. ....	6,686	—	—	—	O	—	—	O	O/pesticides
Kans. ....	3,029	F	F	F/O	O	F/O	—	—	—
Minn. ....	—	—	—	—	—	—	—	—	—
Mo. ....	529	O	—	O	O	—	—	—	—
Nebr. ....	1,870	F/O	F	F	O	—	—	—	—
N.D. ....	—	—	—	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>154,457</b>								
Del. ....	2,502	—	—	—	O	—	—	—	—
D.C. ....	18,815	—	—	—	O	—	—	—	O/Erythrocyte protoporphyrin
Fla. ....	18,212	F	O	O	O	O	O	O	—
Ga. ....	39,112	—	—	—	O	—	—	—	—
Md. ....	36,431	—	—	O	O	—	—	—	—
N.C. ....	5,218	—	—	—	O	—	—	—	—
S.C. ....	12,167	O	—	O	O	O	—	O	Erythrocyte protoporphyrin lead screen
Va. ....	22,000	—	—	—	O	—	—	—	—
W. Va. ....	—	—	—	—	—	—	—	—	—
<b>East South Central</b> .....	<b>7,759</b>								
Ala. ....	5,026	—	—	—	O	—	—	—	—
Ky. ....	2,733	F	F	F	F	F	F	—	—
Miss. ....	—	—	—	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—	—	—
<b>West South Central</b> .....	<b>39,998</b>								
Ark. ....	—	—	—	—	—	—	—	—	—
La. ....	—	—	—	—	—	—	—	—	—
Okla. ....	—	—	—	—	—	—	—	—	—
Tex. ....	39,998	—	—	O	O	—	—	—	—
<b>Mountain</b> .....	<b>39,594</b>								
Ariz. ....	—	—	—	—	—	—	—	—	—
Colo. ....	15,397	F	—	F	—	—	—	—	—
Ida. ....	9,996	F	O	F	—	F	—	—	Serology
Mont. ....	—	—	—	—	—	—	—	—	—
Nev. ....	—	—	—	—	—	—	—	—	—
N.M. ....	7,728	F	—	O	O	O	—	—	—
Utah ....	4,689	F	F	F	—	—	—	—	—
Wyo. ....	1,784	F/O	F/O	F/O	O	O	—	—	—
<b>Pacific</b> .....	<b>6,664</b>								
Alaska ....	—	—	—	—	—	—	—	—	—
Cal. ....	5,028	O	—	—	O	—	—	—	FEP
Hawaii ....	—	—	—	—	—	—	—	—	—
Ore. ....	—	—	—	—	—	—	—	—	—
Wash. ....	1,636	—	—	—	O	—	—	—	O—Pesticides
<b>Territories</b> .....	<b>646</b>								
Guam ....	—	—	—	—	—	—	—	—	—
P.R. ....	646	—	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—	—	—

Table 4-52  
 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
<b>New England</b> .....	F	F	F	O	F/O	O	-	-	F	F	F	-	-	-	-	O/Arsenic, hair, and nails
Conn. ....	-	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-
Mass. ....	F	F	F	O	F	F	O	-	F	F	F	O	F	F	O	O
N.H. ....	F	-	F	O	-	-	-	-	F	F	F	-	F	F	-	-
R.I. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vt. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Middle Atlantic</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N.J. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N.Y. ....	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-
Pa. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>East North Central</b> .....	F/O	F/O	F/O	-	F/O	F/O	F/O	-	F	F	F	-	F	F	F	-
Ill. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ind. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mich. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio ....	F/O	F/O	F/O	O	O	-	-	F/O	F/O	F/O	F/O	-	-	-	-	F/O paraquat
Wisc. ....	F/O	O	F/O	F/O	F/O	F/O	-	-	-	-	-	-	-	-	-	-
<b>West North Central</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ia. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kans. ....	F	-	F/O	O	O	F/O	-	-	F	F	F	-	O	-	-	-
Minn. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mo. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebr. ....	F/O	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-
N.D. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S.D. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>South Atlantic</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Del. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D.C. ....	O	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-
Fla. ....	O	-	O	O	O	-	-	-	O	O	O	O	O	O	O	-
Ga. ....	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-
Md. ....	-	-	-	O	-	-	-	O/Lithium	-	-	-	-	-	-	-	-
N.C. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S.C. ....	O	-	O	O	O	-	O	-	-	-	-	-	O	-	-	-
Va. ....	-	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-
W. Va. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>East South Central</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ala. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ky. ....	F	F	F	F	F	F	-	-	F	F	F	F	F	F	-	-
Miss. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenn. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>West South Central</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ark. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
La. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Okla. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tex. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Mountain</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ariz. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colo. ....	F	-	F	-	-	-	-	-	-	-	-	-	-	-	-	-
Ida. ....	F	O	F	-	X	X	X	-	F	-	F/O	-	-	-	-	-
Mont. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nev. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N.M. ....	-	-	F	-	-	-	-	-	-	-	-	-	X	X	-	-
Utah ....	F	F	F	-	-	-	-	-	F	F	F	-	-	-	-	-
Wyo. ....	F/O	-	F/O	-	-	-	-	-	-	-	F/O	-	-	-	-	-
<b>Pacific</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alaska ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cal. ....	-	-	-	O	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ore. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wash. ....	-	-	-	-	-	-	-	O	-	-	-	-	-	-	-	O
<b>Territories</b> .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Guam ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P.R. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V.I. ....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 4-53  
 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	
<b>New England</b> .....											
Conn. ....	F	F	F	O	F/O	-	-	-	F	-	-
Mass. ....	-	-	-	F	-	-	-	-	-	-	-
Me. ....	F	F	F	O	F	F/O	O	-	F	-	-
N.H. ....	-	-	-	-	-	-	-	-	-	-	O Red Tide (Shellfish)
R.I. ....	F	-	F	-	F	-	-	F	-	-	-
Vt. ....	-	-	-	-	-	-	-	-	-	Breath alcohol	-
<b>Middle Atlantic</b> .....											
N.J. ....	-	-	-	-	-	-	-	-	-	-	-
N.Y. ....	-	-	-	-	-	-	-	-	-	-	-
Pa. ....	-	-	-	-	-	-	-	-	-	-	-
<b>East North Central</b> ....											
Ill. ....	F/O	F/O	F/O	F/O	F/O	F/O	F/O	-	-	-	-
Ind. ....	-	-	-	-	-	-	-	-	-	-	-
Mich. ....	-	-	-	-	-	-	-	-	-	-	-
Ohio ....	F/O	F/O	F/O	-	-	-	-	F/O	F/O	-	F/O-beverages, pills, capsules
Wisc. ....	O	O	O	-	-	-	-	-	-	-	-
<b>West North Central</b> ....											
Ia. ....	-	-	-	-	-	-	-	-	-	-	-
Kans. ....	F/O	F/O	F/O	-	O	-	-	-	-	-	O-hair and nails for arsenic
Minn. ....	-	-	-	-	-	-	-	-	-	-	-
Mo. ....	-	-	-	-	-	-	-	-	X	-	-
Nebr. ....	-	-	-	-	-	-	-	-	-	-	-
N.D. ....	-	-	-	-	-	-	-	-	-	-	-
S.D. ....	-	-	-	-	-	-	-	-	-	-	-
<b>South Atlantic</b> .....											
Del. ....	-	-	-	-	-	-	-	-	-	-	-
D.C. ....	-	-	-	-	-	-	-	-	-	-	-
Fla. ....	O	O	O	O	O	O	O	-	-	-	-
Ga. ....	-	-	-	-	-	-	-	-	-	-	-
Md. ....	-	-	-	-	-	-	-	-	-	-	-
N.C. ....	-	-	-	-	-	-	-	-	-	-	-
S.C. ....	-	-	O	-	-	-	-	-	-	-	-
Va. ....	-	-	-	-	-	-	-	-	-	-	-
W. Va. ....	-	-	-	-	-	-	-	-	-	-	-
<b>East South Central</b> ....											
Ala. ....	-	-	-	-	-	-	-	-	-	-	-
Ky. ....	F	F	F	F	F	F	-	-	-	-	-
Miss. ....	-	-	-	-	-	-	-	-	-	-	-
Tenn. ....	-	-	-	-	-	-	-	-	-	-	-
<b>West South Central</b> ....											
Ark. ....	-	-	-	-	-	-	-	-	-	-	-
La. ....	-	-	-	-	-	-	-	-	-	-	-
Okla. ....	-	-	-	-	-	-	-	-	-	-	-
Tex. ....	-	-	-	-	-	-	-	-	-	-	-
<b>Mountain</b> .....											
Ariz. ....	-	-	-	-	-	-	-	-	-	-	-
Colo. ....	-	-	-	-	-	-	-	-	-	-	-
Ida. ....	-	-	F/O	-	-	-	-	-	F	-	-
Mont. ....	-	-	-	-	-	-	-	-	-	-	-
Nev. ....	-	-	-	-	-	-	-	-	-	-	-
N.M. ....	-	-	-	-	-	-	-	-	-	-	-
Utah ....	-	-	F	-	-	-	-	-	-	Ethyl alcohol	-
Wyo. ....	F/O	F/O	F/O	-	-	-	-	-	F	-	-
<b>Pacific</b> .....											
Alaska ....	-	-	-	-	-	-	-	-	-	-	-
Cal. ....	-	-	-	-	-	-	-	-	O	-	-
Hawaii ....	-	-	-	-	-	-	-	-	-	-	-
Ore. ....	-	-	-	-	-	-	-	-	-	-	-
Wash. ....	-	-	-	-	-	-	-	O	-	-	-
<b>Territories</b> .....											
Guam ....	-	-	-	-	-	-	-	-	-	-	-
P.R. ....	-	-	-	-	-	-	-	-	-	-	-
V.I. ....	-	-	-	-	-	-	-	-	-	-	-

Table 4-54  
**XIII. LABORATORY IMPROVEMENT PROGRAM  
SUMMARY BY LABORATORY CATEGORY**

Lab & Region	Number of Professional & Technical Positions In LIP	A	B	C	D	E
		Clinical	Public Health	Dairy & Food	Water	Other
<b>Total</b> .....	<b>290.4</b>	<b>16,736</b>	<b>406</b>	<b>377</b>	<b>2,565</b>	<b>—</b>
Average .....	7.3	429	8.8	17.1	73.3	—
<b>New England</b> .....	<b>15</b>	<b>249</b>	<b>118</b>	<b>33</b>	<b>120</b>	<b>—</b>
Conn. ....	11.0	156	113	28	72	X
Mass. ....	—	—	—	—	—	—
Me. ....	—	57	2	3	35	X
N.H. ....	1.0	36	1	—	—	—
R.I. ....	3.0	—	1	2	13	—
Vt. ....	—	—	1	—	—	—
<b>Middle Atlantic</b> .....	<b>44.5</b>	<b>2,464</b>	<b>11</b>	<b>—</b>	<b>410</b>	<b>—</b>
N.J. ....	23.0	464	8	—	133	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	21.5	2,000	3	—	277	X
<b>East North Central</b> .....	<b>32.1</b>	<b>3,197</b>	<b>55</b>	<b>154</b>	<b>450</b>	<b>—</b>
Ill. ....	8.0	1,800	13	—	—	—
Ind. ....	2.1	—	6	—	57	—
Mich. ....	12.0	—	18	—	—	—
Ohio ....	10.0	397	10	—	350	—
Wisc. ....	—	1,000	8	154	43	—
<b>West North Central</b> .....	<b>33.5</b>	<b>1,540</b>	<b>26</b>	<b>48</b>	<b>200</b>	<b>—</b>
Ia. ....	7.0	366	—	31	30	—
Kans. ....	5.0	212	3	13	100	X
Minn. ....	10.3	695	5	—	—	—
Mo. ....	6.0	—	8	—	39	—
Nebr. ....	2.2	137	3	—	17	—
N.D. ....	1.0	63	4	4	14	—
S.D. ....	2.0	67	3	—	—	—
<b>South Atlantic</b> .....	<b>59.1</b>	<b>1,438</b>	<b>39</b>	<b>58</b>	<b>305</b>	<b>—</b>
Del. ....	0.3	25	1	1	8	—
D.C. ....	2.0	65	1	1	3	—
Fla. ....	28.0	850	9	—	179	X
Ga. ....	—	—	—	—	—	—
Md. ....	6.0	173	9	20	39	—
N.C. ....	10.0	—	—	—	—	—
S.C. ....	5.5	93	8	17	—	—
Va. ....	3.3	—	10	19	76	—
W. Va. ....	4.0	232	1	—	—	—
<b>East South Central</b> .....	<b>9.0</b>	<b>1,547</b>	<b>27</b>	<b>55</b>	<b>133</b>	<b>—</b>
Ala. ....	—	—	9	9	20	—
Ky. ....	3.0	1,117	8	—	—	—
Miss. ....	—	200	5	6	13	—
Tenn. ....	6.0	230	5	40	100	—
<b>West South Central</b> .....	<b>5.5</b>	<b>484</b>	<b>15</b>	<b>—</b>	<b>40</b>	<b>—</b>
Ark. ....	3.0	160	2	—	40	—
La. ....	—	—	7	—	—	—
OKla. ....	2.5	324	6	—	—	—
Tex. ....	—	—	—	—	—	—
<b>Mountain</b> .....	<b>32.7</b>	<b>1,116</b>	<b>43</b>	<b>20</b>	<b>206</b>	<b>—</b>
Ariz. ....	8.0	171	10	—	31	—
Colo. ....	3.0	185	10	7	30	—
Ida. ....	7.5	212	7	7	35	X
Mont. ....	2.7	126	2	—	26	—
Nev. ....	5.2	160	4	2	24	—
N.M. ....	2.3	95	4	4	30	X
Utah ....	4.0	115	6	—	23	X
Wyo. ....	—	52	—	—	7	—
<b>Pacific</b> .....	<b>51.0</b>	<b>4,274</b>	<b>65</b>	<b>4</b>	<b>690</b>	<b>—</b>
Alaska ....	—	—	—	—	—	—
Cal. ....	40.0	4,000	39	—	643	—
Hawaii ....	1.0	74	4	4	8	—
Ore. ....	4.0	200	3	—	39	—
Wash. ....	6.0	—	19	—	—	—
<b>Territories</b> .....	<b>8.0</b>	<b>427</b>	<b>7</b>	<b>5</b>	<b>11</b>	<b>—</b>
Guam ....	—	7	2	2	3	—
P.R. ....	8.0	419	4	3	8	—
V.I. ....	—	1	1	—	—	—

Table 4-55  
**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./App.	Reg.	Cert.	
<b>Total</b> .....	<b>16,736</b>	<b>11,446</b>	<b>8,674</b>	<b>746</b>	<b>2,715</b>	
Average .....	429	260	234	93	118	
<b>New England</b> .....	<b>249</b>	<b>543</b>	<b>518</b>	<b>32</b>	<b>121</b>	
Conn. ....	156	182	182	—	81	—
Mass. ....	—	254	254	—	—	Laboratory Regulation Program of the Division of Health Facility Regulation
Me. ....	57	2	2	—	2	Hospital Services Division approves hospital laboratories for Medicare-Medicaid reimbursement
N.H. ....	36	6	—	—	6	—
R.I. ....	—	67	67	—	32	—
Vt. ....	—	32	13	32	—	—
<b>Middle Atlantic</b> .....	<b>2,464</b>	<b>981</b>	<b>981</b>	<b>—</b>	<b>97</b>	
N.J. ....	464	464	464	—	97	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	2,000	517	517	—	—	—
<b>East North Central</b> ....	<b>3,197</b>	<b>1,389</b>	<b>1,505</b>	<b>55</b>	<b>687</b>	
Ill. ....	1,800	287	567	—	—	—
Ind. ....	—	156	153	—	3	Division of Medical Care Administration—Medicare/Medicaid
Mich. ....	—	533	478	55	150	—
Ohio ....	397	—	307	—	121	—
Wisc. ....	1,000	413	—	—	413	—
<b>West North Central</b> ...	<b>1,540</b>	<b>692</b>	<b>586</b>	<b>24</b>	<b>315</b>	
Ia. ....	366	99	99	—	—	—
Kans. ....	212	212	198	12	107	—
Minn. ....	695	—	—	—	—	Division of Health Systems (Medicare and CLIA-67 only)
Mo. ....	—	271	220	—	160	—
Nebr. ....	137	62	62	—	—	—
N.D. ....	63	—	—	—	—	Division of Health Facilities for Medicare
S.D. ....	67	48	7	12	48	—
<b>South Atlantic</b> .....	<b>1,438</b>	<b>1,297</b>	<b>767</b>	<b>—</b>	<b>352</b>	
Del. ....	25	16	16	—	—	—
D.C. ....	65	65	38	—	39	—
Fla. ....	850	770	409	—	212	—
Ga. ....	—	—	—	—	—	—
Md. ....	173	173	173	—	—	—
N.C. ....	—	14	—	—	14	Division of Facility Service (Medicare, Medicaid, Syphilis Serology)
S.C. ....	93	93	—	—	—	Bureau of Health Licensing and Certification (Certifies for Medicare)
Va. ....	—	—	—	—	—	Dept. of Health, except water, milk, blood banks, Syphilis Serology
W. Va. ....	232	166	131	—	87	—
<b>East South Central</b> ....	<b>1,547</b>	<b>559</b>	<b>559</b>	<b>—</b>	<b>33</b>	
Ala. ....	—	—	—	—	—	Bureau of Licensure and Certification
Ky. ....	1,117	203	203	—	—	Division for Licensure and Regulation certifies labs

Table 4-55  
**XIII. LABORATORY IMPROVEMENT PROGRAM – Continued**  
**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./App.	Reg.	Cert.	
Miss. ....	200	126	126	—	—	—
Tenn. ....	230	230	230	—	33	—
<b>West South Central ...</b>	<b>484</b>	<b>1,945</b>	<b>425</b>	<b>—</b>	<b>14</b>	
Ark. ....	160	120	120	—	—	—
La. ....	—	—	—	—	—	Office of Licensing Certification is responsible for certification of clinical labs
Okla. ....	324	185	185	—	9	—
Tex. ....	—	1,640	120	—	5	Medicare—Licensing and Certification Bureau of the Texas Department of Health
<b>Mountain .....</b>	<b>1,116</b>	<b>1,011</b>	<b>714</b>	<b>279</b>	<b>55</b>	
Ariz. ....	171	171	123	48	—	—
Colo. ....	185	134	116	—	—	—
Ida. ....	212	212	212	—	55	—
Mont. ....	126	126	—	126	—	—
Nev. ....	160	160	55	105	—	—
N.M. ....	95	95	95	—	—	—
Utah ....	115	61	61	—	—	—
Wyo. ....	52	52	52	—	—	—
<b>Pacific .....</b>	<b>4,274</b>	<b>2,609</b>	<b>2,200</b>	<b>356</b>	<b>1,041</b>	
Alaska ....	—	—	—	—	—	—
Cal. ....	4,000	2,000	2,000	—	850	—
Hawaii ....	74	53	—	—	53	—
Ore. ....	200	200	200	—	—	—
Wash. ....	—	356	—	356	138	—
<b>Territories .....</b>	<b>427</b>	<b>420</b>	<b>419</b>	<b>—</b>	<b>—</b>	
Guam ....	7	—	—	—	—	—
P.R. ....	419	419	419	—	—	—
V.I. ....	1	1	—	—	—	—



Table 4-56  
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./App.	Reg.	Cert.	
<b>Total</b> .....	<b>406</b>	<b>433</b>	<b>262</b>	<b>28</b>	<b>150</b>	
Average .....	8.8	12.4	11.9	7	18.8	
<b>New England</b> .....	<b>118</b>	<b>114</b>	<b>114</b>	<b>1</b>	<b>—</b>	
Conn. ....	113	113	113	—	—	—
Mass. ....	—	—	—	—	—	—
Me. ....	2	—	—	—	—	—
N.H. ....	1	—	—	—	—	—
R.I. ....	1	—	—	—	—	—
Vt. ....	1	1	1	1	—	—
<b>Middle Atlantic</b> .....	<b>11</b>	<b>10</b>	<b>10</b>	<b>—</b>	<b>—</b>	
N.J. ....	8	8	8	—	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	3	2	2	—	—	—
<b>East North Central</b> .....	<b>55</b>	<b>105</b>	<b>38</b>	<b>6</b>	<b>77</b>	
Ill. ....	13	10	8	—	—	—
Ind. ....	69	69	—	—	69	—
Mich. ....	18	18	24	6	—	—
Ohio ....	10	—	6	—	—	—
Wisc. ....	8	8	—	—	8	—
<b>West North Central</b> .....	<b>26</b>	<b>14</b>	<b>5</b>	<b>—</b>	<b>—</b>	
Ia. ....	—	—	—	—	—	—
Kans. ....	3	2	2	—	—	—
Minn. ....	5	—	—	—	—	Division of Health Systems (Medicare and CLIA-67 only)
Mo. ....	8	5	—	—	—	—
Nebr. ....	3	3	3	—	—	—
N.D. ....	4	4	—	—	—	Division of Health Facilities (Medicare only)
S.D. ....	3	—	—	—	—	—
<b>South Atlantic</b> .....	<b>39</b>	<b>35</b>	<b>9</b>	<b>—</b>	<b>25</b>	
Del. ....	1	—	—	—	—	—
D.C. ....	1	—	—	—	—	P.H. Lab performs the inspections and cooperates with the State agency
Fla. ....	9	9	9	—	—	—
Ga. ....	—	—	—	—	—	—
Md. ....	9	—	—	—	—	—
N.C. ....	—	25	—	—	25	Div. of Facility Services (Medicare, Medicaid, Syphilis Serology)
S.C. ....	8	1	—	—	—	Bureau of Health Licensing and Certification (certifies for Medicare)
Va. ....	10	—	—	—	—	Dept. of Health, except water, milk, blood banks, Syphilis Serology
W. Va. ....	1	—	—	—	—	—
<b>East South Central</b> .....	<b>27</b>	<b>12</b>	<b>12</b>	<b>—</b>	<b>—</b>	
Ala. ....	9	—	—	—	—	Bureau of Licensure and Certification
Ky. ....	8	3	3	—	—	Division for Licensure and Regulation (except premarital tests for syphilis)
Miss. ....	5	4	4	—	—	—
Tenn. ....	5	5	5	—	—	—
<b>West South Central</b> .....	<b>15</b>	<b>36</b>	<b>7</b>	<b>—</b>	<b>12</b>	
Ark. ....	2	1	1	—	—	—
La. ....	7	6	—	—	6	—
Okla. ....	6	6	6	—	6	—
Tex. ....	—	23	—	—	—	Licensing and Certification Bureau (Medicare)
<b>Mountain</b> .....	<b>43</b>	<b>37</b>	<b>21</b>	<b>2</b>	<b>17</b>	
Ariz. ....	10	10	10	—	—	—
Colo. ....	10	10	—	—	10	—
Ida. ....	7	7	7	—	7	—
Mont. ....	2	2	—	2	—	—
Nev. ....	4	4	—	—	—	—
N.M. ....	1	*3	3	—	—	—
Utah ....	6	1	1	—	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>65</b>	<b>65</b>	<b>42</b>	<b>19</b>	<b>19</b>	
Alaska ....	—	—	—	—	—	—
Cal. ....	39	39	39	—	—	—
Hawaii ....	4	4	—	—	X	—
Ore. ....	3	3	3	—	—	—
Wash. ....	—	19	—	19	19	—
<b>Territories</b> .....	<b>7</b>	<b>5</b>	<b>4</b>	<b>—</b>	<b>—</b>	
Guam ....	2	—	—	—	—	—
P.R. ....	4	4	4	—	—	—
V.I. ....	1	1	—	—	—	—

\*Branch Laboratories



Table 4-57  
**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./App.	Reg.	Cert.	
<b>Total</b> .....	<b>377</b>	<b>530</b>	<b>107</b>	<b>7</b>	<b>369</b>	
Average .....	17.1	18.9	11.9	7	19.4	
<b>New England</b> .....	<b>33</b>	<b>73</b>	<b>30</b>	<b>—</b>	<b>2</b>	
Conn. ....	28	28	28	—	—	—
Mass. ....	—	43	—	—	—	Division of Food and Drugs, Mass. Dept. of Public Health Department of Agriculture
Me. ....	3	—	—	—	—	—
N.H. ....	—	—	—	—	—	—
R.I. ....	2	2	2	—	2	—
Vt. ....	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>	<b>12</b>	<b>12</b>	<b>—</b>	<b>—</b>	
N.J. ....	—	12	12	—	—	—
N.Y. ....	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—
<b>East North Central</b> ....	<b>154</b>	<b>224</b>	<b>36</b>	<b>—</b>	<b>188</b>	
Ill. ....	—	36	36	—	—	—
Ind. ....	—	15	—	—	15	—
Mich. ....	—	—	—	—	—	Michigan Department of Agriculture
Ohio ....	—	19	—	—	19	—
Wisc. ....	154	154	—	—	154	—
<b>West North Central</b> ...	<b>48</b>	<b>61</b>	<b>15</b>	<b>—</b>	<b>26</b>	
Ia. ....	31	31	—	—	—	Iowa Department of Agriculture
Kans. ....	13	12	12	—	12	—
Minn. ....	—	—	—	—	—	—
Mo. ....	—	14	—	—	14	—
Nebr. ....	—	—	—	—	—	—
N.D. ....	4	4	3	—	—	—
S.D. ....	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>58</b>	<b>47</b>	<b>—</b>	<b>—</b>	<b>86</b>	
Del. ....	1	—	—	—	—	—
D.C. ....	1	—	—	—	—	—
Fla. ....	—	—	—	—	—	State Department of Agriculture and Consumer Services
Ga. ....	—	—	—	—	—	—
Md. ....	20	15	—	—	15	—
N.C. ....	—	—	—	—	39	—
S.C. ....	17	9	—	—	9	—
Va. ....	19	17	—	—	17	—
W. Va. ....	—	6	—	—	6	—
<b>East South Central</b> ....	<b>55</b>	<b>62</b>	<b>6</b>	<b>—</b>	<b>54</b>	
Ala. ....	9	9	—	—	9	—
Ky. ....	—	30	—	—	30	—
Miss. ....	6	6	6	—	—	—
Tenn. ....	40	17	—	—	15	Joint responsibility of Departments of Agriculture and Public Health
<b>West South Central</b> ...	<b>—</b>	<b>32</b>	<b>6</b>	<b>—</b>	<b>3</b>	
Ark. ....	—	2	—	—	2	—
La. ....	—	7	6	—	—	—
Okla. ....	—	—	—	—	—	—
Tex. ....	—	23	—	—	1	—
<b>Mountain</b> .....	<b>20</b>	<b>17</b>	<b>2</b>	<b>7</b>	<b>8</b>	
Ariz. ....	—	—	—	—	—	—
Colo. ....	7	7	—	7	—	—
Ida. ....	7	7	—	—	7	—
Mont. ....	—	—	—	—	—	Department of Livestock
Nev. ....	2	2	2	—	—	—
N.M. ....	4	1	—	—	1	3 public health labs certified by FDA
Utah ....	—	—	—	—	—	—
Wyo. ....	—	—	—	—	—	—
<b>Pacific</b> .....	<b>4</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	
Alaska ....	—	—	—	—	—	—
Cal. ....	—	—	—	—	—	—
Hawaii ....	4	—	—	—	—	—
Ore. ....	—	—	—	—	—	Department of Agriculture
Wash. ....	—	—	—	—	—	Department of Agriculture
<b>Territories</b> .....	<b>5</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>2</b>	
Guam ....	2	—	—	—	—	—
P.R. ....	3	2	—	—	2	—
V.I. ....	—	—	—	—	—	—

Table 4-57  
**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./App.	Cert.	Other	Lic./App.	Cert.	Other		
<b>New England</b>									
Conn. ....	X	X	—	—	—	—	X	X	
Mass. ....	—	—	—	—	—	—	—	—	
Me. ....	—	X	—	—	—	—	X	—	
N.H. ....	—	—	—	—	—	—	—	—	
R.I. ....	X	X	X	—	—	—	X	X	
Vt. ....	—	—	—	—	—	—	—	—	
<b>Middle Atlantic</b>									
N.J. ....	X	X	X	X	—	—	X	X	
N.Y. ....	—	—	—	—	—	—	—	—	
Pa. ....	—	—	—	—	—	—	—	—	
<b>East North Central</b>									
Ill. ....	X	X	—	—	—	—	X	X	
Ind. ....	X	—	X	—	—	—	X	X	
Mich. ....	X	—	—	—	—	—	—	—	
Ohio ....	X	—	X	—	—	—	—	X	
Wisc. ....	—	X	X	—	X	X	X	X	
<b>West North Central</b>									
Ia. ....	—	—	—	—	—	—	—	—	
Kans. ....	X	X	X	—	—	X	—	X	
Minn. ....	—	—	—	—	—	—	—	—	
Mo. ....	X	—	—	—	—	X	X	X	
Nebr. ....	—	—	—	—	—	—	—	—	
N.D. ....	X	—	—	—	—	—	—	—	
S.D. ....	—	—	—	—	—	—	—	—	
<b>South Atlantic</b>									
Del. ....	—	—	—	—	—	—	X	—	
D.C. ....	—	—	—	—	—	—	—	—	
Fla. ....	X	X	—	—	—	—	X	X	
Ga. ....	—	—	—	—	—	—	—	—	
Md. ....	X	—	X	—	—	X	—	X	
N.C. ....	X	—	X	—	—	—	X	X	
S.C. ....	X	—	X	—	—	—	X	X	
Va. ....	X	—	X	—	—	—	—	X	
W. Va. ....	X	—	X	—	—	—	X	—	
<b>East South Central</b>									
Ala. ....	X	—	X	—	—	—	X	X	
Ky. ....	X	—	X	—	—	—	X	—	
Miss. ....	—	X	—	—	—	—	—	—	
Tenn. ....	X	—	X	—	—	X	X	X	
<b>West South Central</b>									
Ark. ....	—	—	X	—	—	—	—	X	
La. ....	X	—	X	—	—	—	X	X	
Okla. ....	—	—	—	—	—	—	—	—	
Tex. ....	X	X	—	—	—	—	X	X	
<b>Mountain</b>									
Ariz. ....	—	—	—	—	—	—	—	—	
Colo. ....	—	—	X	—	—	—	X	X	
Ida. ....	X	—	—	X	—	—	X	X	
Mont. ....	—	—	—	—	—	—	X	—	
Nev. ....	X	X	—	—	—	—	—	—	
N.M. ....	X	—	X	—	—	X	X	X	
Utah ....	—	—	—	—	—	—	—	—	
Wyo. ....	—	—	—	—	—	—	—	—	
<b>Pacific</b>									
Alaska ....	—	—	—	—	—	—	—	—	
Cal. ....	—	—	—	—	—	—	—	—	
Hawaii ....	—	—	—	—	—	—	—	—	
Ore. ....	—	—	—	—	—	—	—	—	
Wash. ....	X	X	X	—	—	X	X	X	
<b>Territories</b>									
Guam ....	—	—	—	—	—	—	—	—	
P.R. ....	—	—	—	X	—	—	X	X	
V.I. ....	—	—	—	—	—	—	—	—	

Table 4-58  
**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./App.	Reg.	Cert.	
<b>Total</b> .....	<b>2,565</b>	<b>1,506</b>	<b>—</b>	<b>1,462</b>	
Average .....	73.3	71.7	—	56.2	
<b>New England</b> .....	<b>120</b>	<b>241</b>	<b>—</b>	<b>93</b>	
Conn. ....	72	72	—	72	—
Mass. ....	—	135	—	—	Dept. of Environmental and Quality Engineering
Me. ....	35	21	—	21	—
N.H. ....	—	—	—	—	—
R.I. ....	13	13	—	—	—
Vt. ....	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>410</b>	<b>—</b>	<b>—</b>	<b>410</b>	
N.J. ....	133	—	—	133	—
N.Y. ....	—	—	—	—	—
Pa. ....	277	—	—	277	—
<b>East North Central</b> .....	<b>450</b>	<b>75</b>	<b>—</b>	<b>517</b>	
Ill. ....	—	75	—	—	—
Ind. ....	57	—	—	57	—
Mich. ....	—	—	—	—	—
Ohio ....	350	—	—	417	Certificates are granted by Ohio EPA. ODH conducts surveys and recommends to Ohio EPA
Wisc. ....	43	—	—	43	—
<b>West North Central</b> .....	<b>200</b>	<b>144</b>	<b>—</b>	<b>56</b>	
Ia. ....	30	30	—	—	—
Kans. ....	100	100	—	—	—
Minn. ....	—	—	—	—	—
Mo. ....	39	—	—	39	—
Nebr. ....	17	—	—	17	—
N.D. ....	14	14	—	—	—
S.D. ....	—	—	—	—	—
<b>South Atlantic</b> .....	<b>305</b>	<b>202</b>	<b>—</b>	<b>117</b>	
Del. ....	8	7	—	—	—
D.C. ....	3	—	—	—	—
Fla. ....	179	179	—	—	—
Ga. ....	—	—	—	—	—
Md. ....	39	—	—	17	—
N.C. ....	—	—	—	17	Environmental Sciences Branch
S.C. ....	—	—	—	—	—
Va. ....	76	—	—	76	—
W. Va. ....	—	16	—	7	—
<b>East South Central</b> .....	<b>133</b>	<b>13</b>	<b>—</b>	<b>90</b>	
Ala. ....	20	—	—	20	—
Ky. ....	—	—	—	28	—
Miss. ....	13	13	—	—	—
Tenn. ....	100	—	—	42	The Divisions of Water Control and Radiological Health
<b>West South Central</b> .....	<b>40</b>	<b>32</b>	<b>—</b>	<b>37</b>	
Ark. ....	40	—	—	16	—
La. ....	—	—	—	13	—
Okla. ....	—	—	—	8	—
Tex. ....	—	32	—	—	—
<b>Mountain</b> .....	<b>206</b>	<b>110</b>	<b>—</b>	<b>101</b>	
Ariz. ....	31	29	—	29	—
Colo. ....	30	30	—	—	—
Ida. ....	35	—	—	23	—
Mont. ....	26	—	—	18	—
Nev. ....	24	14	—	10	—
N.M. ....	30	30	—	—	—
Utah ....	23	—	—	21	—
Wyo. ....	7	7	—	—	—
<b>Pacific</b> .....	<b>690</b>	<b>689</b>	<b>—</b>	<b>40</b>	
Alaska ....	—	—	—	—	—
Cal. ....	643	643	—	—	—
Hawaii ....	8	7	—	—	—
Ore. ....	39	39	—	—	—
Wash. ....	—	—	—	40	Non-potable water — Department of Ecology
<b>Territories</b> .....	<b>11</b>	<b>—</b>	<b>—</b>	<b>1</b>	
Guam ....	3	—	—	—	Guam EPA — Public Utility Agency of Guam Laboratory
P.R. ....	8	—	—	1	—
V.I. ....	—	—	—	—	—

Table 4-58  
XIII. LABORATORY IMPROVEMENT PROGRAM  
D. Water Laboratories – Continued

Lab & Region	4. No. Water Testing Laboratories in Laboratory Improvement Program											
	Licensed/Approved				Registered				Certified			
	Microbiology	Chemistry	Microbiology & Chemistry	Total	Microbiology	Chemistry	Microbiology & Chemistry	Total	Microbiology	Chemistry	Microbiology & Chemistry	Total
<b>Total</b> .....	<b>399</b>	<b>381</b>	<b>509</b>	<b>1,289</b>	—	—	—	—	<b>940</b>	<b>281</b>	<b>237</b>	<b>1,458</b>
Average .....	28.5	63.5	39.2	80.6	—	—	—	—	37.6	23.4	18.2	58.3
<b>New England</b> .....	<b>32</b>	<b>9</b>	<b>65</b>	<b>106</b>	—	—	—	—	<b>24</b>	<b>9</b>	<b>60</b>	<b>93</b>
Conn. ....	11	9	52	72	—	—	—	—	11	9	52	72
Mass. ....	—	—	—	—	—	—	—	—	—	—	—	—
Me. ....	11	—	10	21	—	—	—	—	13	—	8	21
N.H. ....	—	—	—	—	—	—	—	—	—	—	—	—
R.I. ....	10	—	3	13	—	—	—	—	—	—	—	—
Vt. ....	—	—	—	—	—	—	—	—	—	—	—	—
<b>Middle Atlantic</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	—	—	—	—	<b>311</b>	<b>6</b>	<b>93</b>	<b>410</b>
N.J. ....	—	—	—	—	—	—	—	—	34	6	93	133
N.Y. ....	—	—	—	—	—	—	—	—	—	—	—	—
Pa. ....	—	—	—	—	—	—	—	—	277	—	—	277
<b>East North Central</b> .....	<b>75</b>	<b>—</b>	<b>—</b>	<b>75</b>	—	—	—	—	<b>292</b>	<b>225</b>	<b>—</b>	<b>517</b>
Ill. ....	75	—	—	75	—	—	—	—	—	—	—	—
Ind. ....	—	—	—	—	—	—	—	—	57	—	—	57
Mich. ....	—	—	—	—	—	—	—	—	—	—	—	—
Ohio ....	—	—	—	—	—	—	—	—	192	225	—	417
Wisc. ....	—	—	—	—	—	—	—	—	43	—	—	43
<b>West North Central</b> .....	<b>30</b>	<b>93</b>	<b>21</b>	<b>144</b>	—	—	—	—	<b>44</b>	<b>4</b>	<b>8</b>	<b>56</b>
Ia. ....	20	—	10	30	—	—	—	—	—	—	—	—
Kans. ....	—	91	9	100	—	—	—	—	—	—	—	—
Minn. ....	—	—	—	—	—	—	—	—	—	—	—	—
Mo. ....	—	—	—	—	—	—	—	—	39	—	—	39
Nebr. ....	—	—	—	—	—	—	—	—	5	4	8	17
N.D. ....	10	2	2	14	—	—	—	—	—	—	—	—
S.D. ....	—	—	—	—	—	—	—	—	—	—	—	—
<b>South Atlantic</b> .....	<b>99</b>	<b>6</b>	<b>81</b>	<b>186</b>	—	—	—	—	<b>98</b>	<b>—</b>	<b>19</b>	<b>117</b>
Del. ....	1	1	5	7	—	—	—	—	—	—	—	—
D.C. ....	—	—	—	—	—	—	—	—	—	—	—	—
Fla. ....	98	5	76	179	—	—	—	—	—	—	—	—
Ga. ....	—	—	—	—	—	—	—	—	—	—	—	—
Md. ....	—	—	—	—	—	—	—	—	17	—	—	17
N.C. ....	—	—	—	—	—	—	—	—	17	—	—	17
S.C. ....	—	—	—	—	—	—	—	—	—	—	—	—
Va. ....	—	—	—	—	—	—	—	—	57	—	19	76
W. Va. ....	—	—	—	—	—	—	—	—	7	—	—	7
<b>East South Central</b> .....	<b>12</b>	<b>—</b>	<b>1</b>	<b>13</b>	—	—	—	—	<b>59</b>	<b>4</b>	<b>—</b>	<b>63</b>
Ala. ....	—	—	—	—	—	—	—	—	20	—	—	20
Ky. ....	—	—	—	—	—	—	—	—	24	4	—	28
Miss. ....	12	—	1	13	—	—	—	—	—	—	—	—
Tenn. ....	—	—	—	—	—	—	—	—	15	—	—	15
<b>West South Central</b> .....	<b>31</b>	<b>—</b>	<b>1</b>	<b>32</b>	—	—	—	—	<b>24</b>	<b>—</b>	<b>—</b>	<b>24</b>
Ark. ....	—	—	—	—	—	—	—	—	16	—	—	16
La. ....	—	—	—	—	—	—	—	—	—	—	—	—
Okla. ....	—	—	—	—	—	—	—	—	8	—	—	8
Tex. ....	31	—	1	32	—	—	—	—	—	—	—	—
<b>Mountain</b> .....	<b>26</b>	<b>—</b>	<b>25</b>	<b>51</b>	—	—	—	—	<b>61</b>	<b>21</b>	<b>49</b>	<b>131</b>
Ariz. ....	—	—	—	—	—	—	—	—	17	2	10	29
Colo. ....	—	—	—	—	—	—	—	—	20	6	4	30
Ida. ....	—	—	—	—	—	—	—	—	12	3	8	23
Mont. ....	—	—	—	—	—	—	—	—	9	5	4	18
Nev. ....	—	—	14	14	—	—	—	—	—	—	10	10
N.M. ....	19	—	11	30	—	—	—	—	—	—	—	—
Utah ....	—	—	—	—	—	—	—	—	3	5	13	21
Wyo. ....	7	—	—	7	—	—	—	—	—	—	—	—
<b>Pacific</b> .....	<b>94</b>	<b>273</b>	<b>315</b>	<b>682</b>	—	—	—	—	<b>27</b>	<b>12</b>	<b>8</b>	<b>47</b>
Alaska ....	—	—	—	—	—	—	—	—	—	—	—	—
Cal. ....	55	273	315	643	—	—	—	—	—	—	—	—
Hawaii ....	—	—	—	—	—	—	—	—	4	1	2	7
Ore. ....	39	—	—	39	—	—	—	—	—	—	—	—
Wash. ....	—	—	—	—	—	—	—	—	23	11	6	40
<b>Territories</b> .....	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	—	—	—	—	—	—	—	—
Guam ....	—	—	—	—	—	—	—	—	—	—	—	—
P.R. ....	—	—	—	—	—	—	—	—	—	—	—	—
V.I. ....	—	—	—	—	—	—	—	—	—	—	—	—

Table 4-58  
 XIII. LABORATORY IMPROVEMENT PROGRAM  
 D. Water Laboratories – Continued

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

Table 4-59  
**XIII. LABORATORY IMPROVEMENT PROGRAM**  
**E. Other Laboratories**

Lab	Program Activity
Conn. ....	Recombinant DNA registration and inspection; physicians' offices proficiency testing; preparation and administration of examinations to approve laboratory directors for dairy, food, and water; NPDES approval, inspection, and proficiency testing; air registration.
Fla. ....	Implied Consent — permits issued to 3,535 alcohol breath test (law enforcement) technicians and 62 chemists and technologists for blood alcohol analysis; inspection and certification of 741 breath testing machines in 333 law enforcement agencies.
Ida. ....	Rubella proficiency testing — 30 laboratories approved, forensic alcohol testing — 10 laboratories approved
Kans. ....	Breath Alcohol Program for law enforcement agencies — approval, proficiency testing, field visits, training, and consultation.
Me. ....	Implied consent; breath and blood alcohol testing; certification of chemists, laboratories, and phlebotomists.
Pa. ....	Methods investigations and development, evaluation of selected methods.
Utah ....	Technical consultation and training contracts from CDC; include on-site visits and workshop preparation and presentation.

**Table 4-60**  
**XIV. BIOLOGICS, REAGENTS, AND MEDIA PRODUCED FOR DISTRIBUTION**

Lab	Number FTE's	Biologics		Reagents	Media	Materials Produced for Distribution
		Human	Lab			
Ala. ....	<0.1	—	—	—	X	Rodac plates
Ariz. ....	5	—	—	—	X	McConkeys agar, TSB broth, Hanks solution, charcoal agar slants
Ark. ....	3.0	—	—	X	X	Martin-Lewis Agar, Polyvinyl Alcohol for intestinal parasites
Cal. ....	3.5	—	X	X	—	Reagents Febrile, bacterial antigens Salmonella typhi "O", S. typhi "H", S. paratyphi A, S. paratyphi B, Franciscella tularensis, Brucella abortus  Febrile, immune sera Brucella abortus, S. paratyphi A, S. paratyphi B, S. typhi "H," S. typhi "O", Franciscella tularensis, Anti-sheep hemolysin
Colo. ....	3	—	—	—	X	JEMBEC plates
Conn. ....	1	—	—	X	X	Group A Streptococcus FA Conjugate; Group A Streptococcus office culture kits; Syphilis serology control sera; VDRL antigen and buffered saline.
Ga. ....	4	—	—	—	X	Improved Thayer-Martin Medium
Ill. ....	1.5	—	—	X	—	Alcohol standard solution used for calibration of breath testing equipment
Ia. ....	5.5	—	—	X	X	—
La. ....	—	—	—	—	X	Modified Thayer-Martin
Mass. ....	40.0	X	X	X	—	Albumin-human, DTP vaccine, DT vaccine, immune globulin, RHO immune globulin, cross match reagent for RHO immune globulin, tetanus immune globulin, tetanus toxoid adsorbed, Td toxoids, typhoid vaccine, diphtheria antitoxin, tetanus antitoxin, Schick test outfit, silver nitrate, cytomegalovirus globulin (experimental), varicella zoster immune globulin (experimental)
Mich. ....	—	X	—	—	—	Immune serum globulin; normal serum albumin; anthrax vaccine; diphtheria antitoxin; diphtheria toxoid adsorbed; diphtheria and tetanus toxoids adsorbed; diphtheria and tetanus toxoids and pertussis vaccine combined; adsorbed; tetanus toxoid adsorbed; tetanus and diphtheria toxoids adsorbed (adult); typhoid vaccine, pertussis vaccine adsorbed
Minn. ....	1.0	—	—	—	X	Thayer-Martin plates
Mo. ....	2.0	—	—	—	X	Gonorrhea culture media, total media required in state-wide culture screening program
Mont. ....	3	—	—	X	X	JEMBEC plates with MTM medium, various transport media for all types of specimens, preservatives for water samples (redistilled acids, CuSO <sub>4</sub> ), sampling solutions and media for air monitoring (bubbler solutions, sulfation plates)
Nev. ....	0.6	—	—	—	X	MTM plates

Table 4-60

## XIV. BIOLOGICS, REAGENTS, AND MEDIA PRODUCED FOR DISTRIBUTION – Continued

Lab	Number FTE.s	Biologics		Reagents	Media	Materials Produced for Distribution
		Human	Lab			
N.H. ....	0.5	—	—	X	X	—
N.C. ....	5	—	—	X	X	—
N.D. ....	0.4	—	—	—	X	JEMBEC and modified Thayer-Martin media, transport media
Ohio .....	6.5	—	—	X	X	Thayer-Martin plates
S.C. ....	0.2	—	—	X	X	47 types of media and 20 separate reagents, stains, and solutions produced for water bacteriology and chemistry laboratories
Tenn. ....	9.5	—	—	X	X	Sterile distilled water, sterile, physiological saline, buffered glycerol saline, modified Thayer-Martin enrichment, VCN-T™ inhibitors, modified Thayer-Martin media, Jones Kindrick charcoal agar, tryptic soy agar slants, pai media for diphtheria.
Tex. ....	—	X	X	X	X	N. gonorrhoeae transport medium, Lowenstein Jensen medium, VDRL antigen and saline, Sheep blood and cells, bacterial agglutination antigens, silver nitrate solution
Wash. ....	3.0	—	X	X	X	Tabco <sub>2</sub> — G. C. media, Thayer-Martin plates
W. Va. ....	4	—	—	X	X	Improved-modified Transgrow medium (plate), Specimen containers with: buffered glycerol solution for enterics; formalin or PVA for parasites; sodium carbonate for mycobacteriological specimens; sodium thiosulfate for waters; tryptose phosphate with glycerine for viral preservative
Wisc. ....	5.5	—	—	X	X	Buffered glycerol, charcoal transport, chemistry tubes with sodium fluoride and thymol, chlamydia, formaline, PVA, Resazurin agar indicator, transport, transport for PPLO, veal for virus

Table 4-61  
 XV. RESEARCH AND DEVELOPMENT  
 A. Basic Research

Lab	Titles of Research Projects	Funding Support				
		Number of Positions	Federal Grant	Contract	State Funds	Other Funds
Cal. ....	Calibration of Mass Monitors	1	X	—	—	—
	Evaluation of Methods for Sulphate	2	X	—	—	—
	Validation of Samplers	1.6	X	—	—	—
	Env. Carcinogens by Cell Trans	1	X	—	—	—
	Studies of Naegleria Infections	1.6	X	—	—	—
	Electron Microscopic Studies	1.0	X	—	—	—
	Viral Diseases Study	9.8	X	—	—	—
	Inactivation of viruses for Vaccination	2.3	X	—	—	—
	Cancer Virus Studies	4.6	—	X	—	—
Marsupial Cytology Studies	0.6	X	—	—	—	
Fla. ....	Mobility and Survival Characteristics of Viruses in Cypress Dome Wetlands	2	X	—	X	X
	Virus Monitoring of Waste water used for Spray Irrigation of Public and Private Lands	5	—	X	X	X
	Determination of Lake Characteristics which do and do not support Pathogenic Naegleria Populations.	4	—	X	X	X
Ill. ....	Marijuana Detection Analyses	0.3	—	—	—	X
Ia. ....	Developing Methods for Separation, Identification, and Quantification of Complex Hydrocarbons Found in Coal Liquefaction and Gasification Plants	1.4	—	X	—	—
Mass. ....	Rapid Diagnosis of Respiratory Viruses by Immunochemical Methods — in collaboration with Harvard School of Public Health	1.6	—	X	—	—
Ore. ....	Toxoplasmosis	4.0	X	—	—	—
Pa. ....	Rapid diagnosis of LD	1	—	—	X	—
	Investigation of glycosylated hemoglobin assays and control materials	1	—	—	X	—
Wisc. ....	Epidemiology and Course of Viral Myopericarditis	4.0	X	—	—	—

Table 4-62  
**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. ....	Conf on Methods in Air Pollution Studies	0.5	X	—	—	—
	Viruses in Water and Reclaimed Wastewater	3.0	X	—	—	—
Conn. ....	Identification of L.D. Antigen in Serum	—	—	—	X	—
	Forensic Electrophoretic Serotyping	—	—	—	X	—
	Immunological Detection of Mucoprotein,	—	—	—	X	—
	Pyrolysis Products of Building Materials	—	—	—	X	—
	Microscopic Differentiation of Steroisomers	—	—	—	X	—
D.C. ....	Enteropathogenic E. coli	—	—	—	X	—
Ga. ....	A Modified Procedure for the Phadebact Gonococcus Test,	.03	—	—	X	—
	Virus Serologic Survey of a Normal Population,	.03	—	—	X	—
	Distribution of Serotypes of the MAIS Complex in Georgia,	.06	—	—	X	—
	A New Method for Performing Acid—Fast Smear Examinations,	.05	—	—	X	—
	Prestudy for Developing "In-house" Procedures for Sputum Digestion Using CPC	.08	—	—	X	—
Ida. ....	Idaho Epidemiologic Studies Project					
	Human Monitoring	2.0	X	X	—	—
	Method Development	2.0	X	X	—	—
	Health Effects	2.0	X	X	—	—
Incident Investigations	1.0	X	X	—	—	
Ia. ....	Legionnaires'	1.0	—	—	—	X
	Arbovirus	0.5	—	—	X	—
	Water Supply Quality	0.5	X	—	—	—
	Insulation Formaldehyde Emission	0.25	—	—	—	X
Kans. ....	Beverage Alcohol Measurements by Headspace Gas Chromatography	—	—	—	X	—
	Detection of Coliform Species in Kansas Drinking Waters	—	—	—	X	—
Mass. ....	Application of SRH to Serodiagnosis of influenza, Measles, Mumps, and N. pneumoniae	—	—	—	—	—
Pa. ....	Evaluation of virus transport systems.	1.0	—	—	X	—
	Drug susceptibility patterns of pigmented and non-pigmented Mycobacterium intracellulare.	1.0	—	—	X	—
	Development of Standards for T <sub>4</sub> and TSH in Hypothyroidism Screening Program.	2.0	—	—	X	—
Wisc. ....	Erythrocyte Protoporphyrin Proficiency Testing	2.0	—	X	—	—
	Drugs in Drivers	2.0	—	X	—	—
	Septra Streak Plate Evaluation	1.0	—	—	X	—
	Ticarcillin Study	—	—	X	—	—
	Evaluation of Co-agglutination for Strep and GC	0.5	—	X	—	—

Table 4-63  
 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	2.0	X	—	—	—
Conn. ....	High Pressure Liquid Chromatography of Drugs of Abuse	—	—	—	X	—
	Radioimmunoassay of Drugs of Abuse	—	—	—	X	—
Ga. ....	Isolation of Chlamydia in Cell Culture,	.05	—	—	X	—
	Identification of HSV Isolates by IF,	.05	—	—	X	—
	Poliovirus Micro Neutralization,	.02	—	—	X	—
	Rickettsial PHA,	.02	—	—	X	—
	Preparation of Chlamydia Antigen	.01	—	—	X	—
Ill. ....	Modified Guthrie Test	0.1	—	—	X	—
Mass. ....	Application of SRH to Rubella and Serodiagnosis of Rubella	0.3	—	—	—	—
Ohio ....	Virus Isolation Methods	0.5	—	—	—	—
Okla. ....	Hypothyroidism methodology	0.1	—	—	X	—
Ore. ....	Metabolic Innovative	2.0	X	—	—	—
	Metabolic MCH	2.5	—	—	—	X
Pa. ....	Direct FA for Viruses	2	—	—	X	—
	Modification of Calcium Method (complexone)	1	—	—	X	—
	Evaluation of proposed selected methods for prothrombin time and inorganic PO <sub>4</sub>	2	—	—	X	—

**SECTION V**  
**SPECIAL QUESTIONS**



**Table 5-1  
I. LABORATORY ORGANIZATIONAL STRUCTURE**

Lab	Date of Current Organizational Chart		Did Organizational Structure Change During FY 1979	Description of Organizational Change
	State Health Department	State Laboratory		
Ala. ....	08/01/79	09/01/79	—	—
Alaska .....	—	—	—	—
Ariz. ....	11/01/76	07/20/78	—	—
Ark. ....	02/78	06/30/79	X	Consolidated Sections of the laboratory from 9 to 7. As of December 1, 1979, the Division of Public Health Laboratories was reorganized along with the State Department of Health to include both the former P.H. Labs and the Division of Environmental Laboratories.
Cal. ....	—	—	—	—
Colo. ....	10/76	1968	—	—
Conn. ....	06/01/79	06/30/79	X	The Laboratory Division now reports to the Chief, Bureau of Health Promotion and Disease Prevention rather than the Deputy Commissioner of the Health Department.
Del. ....	—	—	—	—
D.C. ....	—	—	—	—
Fla. ....	07/01/76	01/01/77	—	—
Ga. ....	09/14/77	07/01/78	—	—
Guam .....	—	06/78	—	—
Hawaii .....	07/01/79	07/01/79	—	—
Ida. ....	07/01/79	01/01/78	—	—
Ill. ....	02/01/79	10/01/79	—	—
Ind. ....	01/79	01/79	—	—
Ia. ....	—	12/01/78	X	A separate Laboratory Extension Division was established.
Kans. ....	06/79	07/01/79	—	—
Ky. ....	09/01/78	09/01/78	—	—
La. ....	03/01/79	03/01/79	—	—
Me. ....	07/01/78	07/01/78	—	—
Md. ....	07/02/79	01/12/79	—	—
Mass. ....	1979	03/15/77	—	—
Mich. ....	—	—	—	—
Minn. ....	05/78	—	—	—
Miss. ....	—	10/23/78	—	—
Mo. ....	07/01/78	08/15/79	X	The Bureau of Laboratory Services was changed to the Section of Laboratory Services. The 2 branch laboratories are now under the jurisdiction of the Section of Laboratory Services.
Mont. ....	07/01/79	07/01/79	X	The position of Administrator, Laboratory Division was abolished by legislative action.
Nebr. ....	09/01/76	01/01/78	—	—
Nev. ....	07/01/79	10/01/78	—	—
N.H. ....	06/13/73	06/13/73	—	—
N.J. ....	09/15/78	09/15/78	—	—
N.M. ....	06/30/79	09/30/79	X	The Cytopathology Section and Veterinary Diagnostic Services were established as elements of the Biological Sciences Bureau. A separate Fiscal Office was established 7/1/79.

**Table 5-1**  
**I. LABORATORY ORGANIZATIONAL STRUCTURE – Continued**

Lab	Date of Current Organizational Chart		Did Organizational Structure Change During FY 1979	Description of Organizational Change
	State Health Department	State Laboratory		
N.Y. ....	—	—	—	—
N.C. ....	12/01/77	01/78	—	—
N.D. ....	—	—	—	—
Ohio ....	05/15/78	06/20/78	—	—
Okla. ....	09/78	09/78	—	—
Ore. ....	05/78	05/78	—	—
Pa. ....	—	—	X	Changes pending
P.R. ....	—	—	—	—
R.I. ....	09/01/76	09/25/75	—	—
S.C. ....	06/01/79	06/01/79	X	A new position, Deputy Chief, was created with responsibility for day-to-day administration of the laboratory
S.D. ....	—	—	—	—
Tenn. ....	02/08/79	10/20/78	X	Dr. Michael Kimberly became Director of the Division of Laboratories with Dr. J. Howard Barrick as Associate Director in charge of the branch laboratories and Ms. Mary Jane Sassaman as Assistant Director in charge of the Central laboratory.
Tex. ....	—	—	—	—
Utah ....	08/17/79	08/23/79	—	The Environmental Monitoring Section was established by combining the Environmental Chemistry and Environmental Microbiology Sections.
Vt. ....	—	—	—	—
Va. ....	05/28/78	07/01/78	—	—
V.I. ....	—	—	—	—
Wash. ....	11/79	11/78	X	A Family Planning Section was added to Community Health Services.
W. Va. ....	06/79	11/79	X	The Director, State Hygienic Laboratory now reports to the Director, Community Health Services instead of the State Director of Health.
Wisc. ....	07/01/79	07/01/79	X	The State Laboratory of Hygiene Board reorganized to show voting membership.
Wyo. ....	1970	1970	—	—



Table 5-2

PREMARITAL EXAMINATION LAWS

NOTE: Brief answers are given in the body of the chart. Longer explanations and exceptions or qualifications, while they exist, are given under indicated footnote headings.

STATES AND TERRITORIES	Effective Year of Law or Latest Revision		Minimum Age Legal		Minimum Age With Consent		Certificate Required May Be From (b)		Waiting Period Excep- tions (c)	Condi- tions Waiver (d)	Physical Exam. Required—Qualifica- tions (e)	Kind of Serology Required—Qualifica- tions (f)	Test for Disease (g)	Serology Accepted From Other Than State Approved Labs (h)	Provision for Free Test—Qualifica- tions (i)	Provision for Free Exam	Premarital Forms or Other Stats Accepted—Qualifica- tions (j)	Test Results Filed With State Health Department—Qualifica- tions (k)	STATES AND TERRITORIES
	M	F	M	F	M	F	M	F											
Alabama	1975	21	18	17	14	(1)	30	None	(1-3)	Yes	(1)	(1,4)	(1-5)	Yes	Yes	Yes	(1)	Alabama	
Alaska	1953	18	18(1)	16	16	(1-3)	30	3 days	(2,5)	Yes	(1)	(4)	(1-4,5a)	Yes	No	Yes(1)	Yes	Alaska	
Arizona	1972	18	18	18	16	(1-2)	30	None	(6)	Yes	(1)	No	(1-5)	No	No	Yes(1)	Yes	Arizona	
Arkansas	1953	18	18	18	16	(1-3)	30	3 days	(1,3)	Yes	(1)	No	(1-5)	No	No	Yes	Yes	Arkansas	
California	1973	18	18	(11)	(11)	(1-2)	30	None	(2,5)	Yes	(1,4,5)	(4,7)	(1-5)	No	No	Yes	No	California	
Colorado	1979	18	18	16	16	(1)	No Limit	None	(2,6)	Yes(3)	(1,4,5)	(4,7)	(1-5)	Yes	No	Yes	No	Colorado	
Connecticut	1980	18	18	16	16	(1-3,5)	35	4 days	(6)	Yes(1,2)	(1)	(8)	(1,2a,3,4,5a)	Yes	No	Yes(1,3)	Yes(1)	Connecticut	
Delaware	1947	18	18	18	16	(1-3)	30	1 day(2)	(2)	Yes	(1)	No	(1,3,6)	Yes	Yes	Yes(1)	Yes	Delaware	
Dist. of Columbia	1966	21	18	18	16	(1-3,5)	30	5 days	(1-3,6)	Yes(1)	(1)	No	(1,2a,6,8)	Yes	Yes	Yes(1)	Yes	Dist. of Columbia	
Florida	1978	18	18	18	16	(1)	60	3 days	(1)	No	(1)	No	(1-5)	Yes	No	No	No	Florida	
Georgia	1978	18	18	18	16	(1)	30	None(5)	(1)	No(2)	(1)	(9,10)	(1-5,1,3)	Yes	Yes	Yes(1)	Yes	Georgia	
Guam	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Guam
Hawaii	1979	20	20	18	16	(1-3)	30	3 days	(2,6,10)	Yes	(1-2)	No	(1-4,5a)	No	No	Yes(1)	Yes	Hawaii	
Idaho	1979	18	18	16	16	(1-3)	—	None(1)	(6)	Yes	None	(11)	(1-4)	Yes	No	Yes	Yes(2)	Idaho	
Illinois	1949	18	18(10)	16	16	(1)	15	3 days	(1,7,8)	Yes	(1)	No	(1,3,4,5,9,10,12)	No	No	No	Yes(1)	Illinois	
Indiana	1976	18	18	17	17(3)	(4)	30	3 days	(1,6)	No	(2)	(12)	(1-3,4)	No	No	Yes	Yes(1)	Indiana	
Iowa	1975	18	18	16	16	(1-3)	20	(2,4)	None	Yes	(1)	No	(1,3-4)	Yes	No	Yes(1)	Yes	Iowa	
Kansas	1947	18	18(4)	17	17(5)	(1-3,5)	30	(2,4)	None	Yes	(1)	(4)	(1-5)	Yes	Yes	Yes(1)	Yes	Kansas	
Kentucky	1940	16	16	16	16	(2,4)	30	3 days	(1)	Yes	(1)	No	(1-5)	Yes	No	No	Yes	Kentucky	
Louisiana	1975	18	18	17	16(6)	(4)	30	3 days	(6)	Yes	(3)	(4)	(7)	Yes	No	No	No	Louisiana	
Maine	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N/A	Maine
Maryland	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Maryland
Massachusetts	1974	18	18	18	16	(1-3)	30	3 days	(1,3,8)	Yes	(1)	(7)	(1-4,6)	Yes	No	Yes(1)	No	Massachusetts	
Michigan	1978	18	18	18	16	(1-3,5)	30	3 days	(6)	Yes	(1)	(3)	(1,3-4,6,8-10)	Yes	No	No	No	Michigan	
Minnesota	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Minnesota
Mississippi	1957	21	21	17	15	(1-4)	30	3 days	(2,6)	Yes(1)	(1)	No	(1-5)	Yes	Yes	Yes(1)	Yes	Mississippi	
Missouri	1955	18	18	15	15	(4)	15	3 days(4)	(1,3,7)	Yes(1)	(1)	No	(1-5)	Yes	No	Yes	Yes	Missouri	
Montana	1973*	18	16	18	16	(1-3)	20	None	None	Yes	(1)	No	(1-5)	Yes	Yes	Yes(1)	Yes	Montana	
Nebraska	1978	19	19	17	17	(1)	30	2 days	(1,3,7)	Yes	(1)	(8)	(1,3,5)	Yes	No	Yes(1,3)	Yes	Nebraska	
Nevada	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Nevada
New Hampshire	1979	18	18	14	13	(1)	30	5 days	(2)	Yes(1)	(1)	No	(1-4,5b,6,9-11)	Yes	No	Yes(1)	Yes	New Hampshire	
New Jersey	1953	21	18	16	16(9)	(1-3,5)	30	3 days	(1,3)	No	(1)	No	(1-6)	Yes	No	Yes(4)	No	New Jersey	
New Mexico	1975	18	18	18	16	(1-3,5)	30	None	(6)	Yes	(1)	(4)	(1-5)	Yes	No	Yes	Yes(1)	New Mexico	
New York	1938	21	18	16	14	(1-3)	30	3 days	(6)	Yes	(1)	No	(1-5)	No	No	Yes(1)	Yes	New York	
North Carolina	1979	18	18	16	16(7)	(1)	30	None	(1,4)	Yes	(1)	(4,6)	(3-5)	Yes	Yes	Yes(6)	Yes	North Carolina	
North Dakota	1971	18	18	16	16	(1)	30	None	(1,4)	Yes	(1)	(4)	(1-4)	No	No	No	No	North Dakota	
Ohio	1972	18	18	18	16	(1)	30	5 days	(1)	No	(1)	No	(1-5,8)	Yes(1)	No	Yes(1)	Yes	Ohio	
Oklahoma	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Oklahoma
Oregon	1979	18	18	17	17	(1-3)	30	7 days	(7,8)	Yes	(3)	(4)	(1,2b,3-5)	Yes	Yes	Yes	Yes(1)	Oregon	
Pennsylvania	1975	18	18	16	16	(1-3,5)	30	3 days(4)	(5)	Yes	(1)	No	(1-6)	Yes	Yes	Yes(1)	Yes(3)	Pennsylvania	
Puerto Rico	1975	21	21**	18	16	(1-3)	10	None	(3)	Yes	(3)	(4)	(7)	Yes	Yes	No	No	Puerto Rico	
Rhode Island	1975	18	18	18	16	(1-3,5)	40	None	None	Yes	(1)	(1,8)	(1,3,5)	Yes	Yes	Yes(6)	Yes	Rhode Island	
South Carolina	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	South Carolina	
South Dakota	1977	18	18	16	16	(1-3)	20	None	(1,5)	Yes(1)	(1)	No	(1,2a,5)	Yes	Yes	Yes(1)	Yes	South Dakota	
Tennessee	1950	18	18	16	14	(1)	30	None(1)	(1)	Yes	(1)	(1)	(1,3-4)	Yes	Yes	Yes(1)	Yes	Tennessee	
Texas	1949	18	18	14	14	(1)	21	None	(2)	Yes	(1)	No	(1-5)	Yes	No	Yes(5)	Yes	Texas	
Utah	1951	18	18	14	14	(1-3,5)	30	None	(2)	Yes	(1)	(1,2,4)	(1-5)	Yes	No	Yes	Yes	Utah	
Vermont	1951	21	18	18	16	(1-3,6)	30	5 days	(1,3)	No	(1)	No	(1-6)	Yes	No	Yes	Yes	Vermont	
Virginia	1979	18	18	16	16	(1-3)	60	None	(9)	Yes(1)	(1)	No	(1-5)	No	No	No	Yes	Virginia	
Virgin Islands	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Virgin Islands
Washington	No Law	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Washington
West Virginia	1939	18	18	18	16(8)	(4)	30	3 days	(2)	Yes	(1)	No	(1-4,8)	Yes	No	No	Yes(1)	West Virginia	
Wisconsin	1960	18	18	16	16	(1-3,5)	20	5 days	(5-6)	Yes	(1)	(4)	(5-6)	Yes	No	Yes(2)	No(4)	Wisconsin	
Wyoming	1941	19	19	16	16	(1-3)	30	None	(1,3)	Yes	(1)	(3)	(1-5)	Yes	No	No	Yes	Wyoming	

\*Includes unlicensed marriages \*\*Special provisions for women

(a) MINIMUM AGE

- (1) Minimum age below age of majority (18 or 21)
- (2) With Consent: Under 18 with parental consent
- (3) Legal: Under 17 requires consent of both parents for hours counting
- (4) State license physician only
- (5) With Consent: Consent of parents & district court judge

(b) MEDICAL REQUIREMENTS

- (1) Medical officers of the Armed Forces
- (2) Medical officers of the Public Health Service
- (3) State license physician only
- (4) Any licensed physician

(c) EXCEPTIONS

- (1) If age of age 3 days
- (2) If age of age 15 days
- (3) If under 21, 3 days

(d) EXPLANATION OF ABBREVIATIONS

- (1) Emergency delivery by State Board of Health or a judge
- (2) Impending death
- (3) Impending death
- (4) Impending death
- (5) Impending death

(e) QUALIFICATIONS

- (1) Physical exam by physician or health officer
- (2) Physical exam by physician or health officer

(f) NEW OF SEROLOGY REQUIREMENTS

- (1) Serological test for syphilis listed in PHS Publication #411 (1955) or later revision may be used also test for immunity against
- (2) Serological test for syphilis listed in PHS Publication #411 (1955) or later revision may be used also test for immunity against
- (3) Serological test for syphilis listed in PHS Publication #411 (1955) or later revision may be used also test for immunity against
- (4) Serological test for syphilis listed in PHS Publication #411 (1955) or later revision may be used also test for immunity against

(g) TESTS FOR OTHER DISEASE

- (1) Microscopic test for gonorrhea
- (2) Microscopic test for gonorrhea
- (3) Microscopic test for gonorrhea
- (4) Microscopic test for gonorrhea
- (5) Microscopic test for gonorrhea

(h) SEROLOGY ACCEPTED FROM OTHER THAN STATE APPROVED LABORATORIES

- (1) Department of Health Laboratories of the State
- (2) Bureau of Health Laboratories of the State
- (3) Bureau of Health Laboratories of the State
- (4) Bureau of Health Laboratories of the State
- (5) Bureau of Health Laboratories of the State

(i) QUALIFICATIONS

- (1) Yes, by Armed Forces, temporary for students only
- (2) Yes, by Armed Forces, temporary for students only
- (3) Yes, by Armed Forces, temporary for students only
- (4) Yes, by Armed Forces, temporary for students only

(j) OTHER INFORMATION

- (1) If other State has comparable provisions for
- (2) If other State has comparable provisions for
- (3) If other State has comparable provisions for
- (4) If other State has comparable provisions for

(k) OTHER INFORMATION

- (1) If other State has comparable provisions for
- (2) If other State has comparable provisions for
- (3) If other State has comparable provisions for
- (4) If other State has comparable provisions for

(l) OTHER INFORMATION

- (1) If other State has comparable provisions for
- (2) If other State has comparable provisions for
- (3) If other State has comparable provisions for
- (4) If other State has comparable provisions for



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