

Hausler

CONSOLIDATED ANNUAL REPORT
on
State and Territorial
Public Health Laboratories
Fiscal Year 1966



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL
NATIONAL
COMMUNICABLE DISEASE CENTER
Atlanta, Georgia 30333

CONSOLIDATED ANNUAL REPORT
on State and Territorial
Public Health Laboratories
Fiscal Year 1966
For Administrative Use Only

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A Collaborative Compilation
by the
Association of State and Territorial
Public Health Laboratory Directors
and the
Laboratory Program
National
Communicable Disease Center
Bureau of Disease Prevention and Environmental Control
Public Health Service
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Atlanta, Georgia 30333

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FY 1966 - 1967

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INTRODUCTION

INTRODUCTION

This is the third in a series of annual reports prepared from data submitted by the State and Territorial Laboratory Directors. The Laboratory Consultation and Development Section, Laboratory Program, of the National Communicable Disease Center (NCDC), compiled and arranged for publication and distribution of the Report following discussions with the Association of State and Territorial Public Health Laboratory Directors' Committee on Current Operations of Constituent Laboratories.

Forty-eight States, Puerto Rico, and the Virgin Islands submitted data for inclusion in the Report. This participation by 50 of the 53 State and territorial public health laboratories is the highest rate yet attained. Data provided by 37 of these is for the fiscal year ending June 30, 1966, and the other 13 reported data for the 1966 calendar year.

A number of changes from the fiscal year 1965 Report have been made. Major changes are: (1) Summary tables have been added and placed at the front. (2) New programs of current interest are also shown at the front. (3) A section on production of biologics and a section on the laboratory evaluation program have been added. (4) Additional information on PKU, air pollution, and radioactivity was gathered and published. (5) The Report format was changed so all the States appear on one page rather than two. (6) Footnotes no longer follow each table but are either at the end of the section or every few tables (in Workload Section) as seems appropriate.

Where an asterisk (*) appears, it indicates that information was not reported. Blank spaces in the columns of statistical data represent a report with no activity for the particular items.

Totals for the many columns of statistical data are not shown in order to avoid invalid conclusions where individual items were not reported by one or more States. Definitions of examinations and specimens have been prepared for guidance in keeping and reporting data to be compiled in the Annual Report. Improvements from year to year in these definitions and experience in using them have made laboratory statistics more accurate and meaningful. However, application of the definitions is difficult in some instances. The reader should keep this in mind when making comparisons between States.

Although the information contained in each Consolidated Annual Report is more accurate and complete than in the preceding Report, it may contain errors in interpretation as well as in transcribing and calculating quantities. The principal reason for this is the differences in format used by laboratories for recording and reporting workload information. Another reason is differences in definition in those areas not covered by common definitions specified for this report. Reporting of positive results obtained from PKU examinations falls within this category.

A number of laboratories have changed their format for recording workload data to make their records more compatible with the Consolidated Annual Report. These efforts have already created a wealth of comparable statistical information that can be used for planning, budgeting, and control purposes.

SECTION I

SUMMARY TABLE

TABLE 1-1. PERCENTAGE OF PERSONNEL, EXPENDITURES, AND SPACE ALLOTTED TO
LABORATORY PROGRAM SERVICES

	Diagnostic Services			Research		
	Personnel \$	Expenditures \$	Space %	Personnel %	Expenditures %	Space %
Ala.	79.0	87.9	*	20.0	12.0	*
Alaska	99.99	100.0	97.6	.01		2.4
Ariz.	96.0+	*	50.0	2.0	*	*
Ark.	*	*	*	*	*	*
Cal.	*	*	*	*	*	*
Colo.	97.0	99.0	*			
Conn.	26.7	69.0	32.2	2.0	20.0	2.8
Del.	64.0	*	*	*	*	*
D.C.	*	*	*	*	*	*
Fla.	86.3	90.0	90.0	11.4	8.0	8.0
Ga.	100.0 (a)	97.0	100.0 (a)		<1.0	
Hawaii	100.0 (b)	100.0	100.0	(b)		(c)
Ida.	97.8	*	93.5		*	6.5
Ill.	91.6	*	*		*	*
Ind.	90.0	*	96.0		*	2.0
Ia.	57.1 1^	*	82.0	(d)	*	12.0
Kans.	98.3	*	*		*	*
Ky.	94.0	91.9	89.0		8.0	10.0
La.	46.2	*	98.0		*	1.0
Me.	90.0	98.25	100.0			
Md.	*	*	*	*	*	*
Mass.	50.0	36.4	50.0		17.7	(c)
Mich.	50.0	*	*	18.0	*	*
Minn.	97.4	*	*		*	*
Miss.	98.9	93.0	*		*	*
Mo.	90.0	89.0	80.0			
Mont.	*	*	*	*	*	*
Nebr.	96.0	*	95.0		*	
Nev.	85.0	85.0	85.0	5.0	5.0	5.0
N.H.	70.0	*	*		*	*
N.J.	78.4	79.7	78.8	19.2	17.9	20.0
N.M.	85.0	99.5	55.0			
N.Y.	23.0	30.0	*	20.0	35.0	*
N.C.	54.9	54.9	54.9			
N.D.	53.0	*	*	15.0	*	*
Ohio	50.0	70.5	40.9	1.0	1.8	1.9
Oklahoma	96.0	97.3	100.0			
Ore.	91.0	95.0	90.0			
Pa.	*	*	*	*	*	*
R.I.	100.0 (e)	88.0	100.0	(e)	2.0	(c)
S.C.	100.0 (f)	*	*		*	*
S.D.	*	*	*	*	*	*
Tenn.	96.4	99.7	98.8	0.8	0.1	0.1
Tex.	*	*	55.0	*	*	
Utah	98.5	99.5 (g)	100.0		(g)	
Vt.	92.0	65.0	95.0	7.0	5.0	5.0
Va.	95.0	100.0	*			
Wash.	76.4	80.0	37.4			
W. Va.	89.2	*	78.0	5.4	*	2.0
Wisc.	67.3	*	70.0	27.7	*	15.0
Wyo.	77.7	100.0	36.0			
P.R.	87.0	*	30.0	7.4	*	3.0
V.I.	*	*	*		*	*

TABLE 1-1. PERCENTAGE OF PERSONNEL, EXPENDITURES, AND SPACE ALLOTTED TO
LABORATORY PROGRAM SERVICES
(Continued)

	Laboratory Program Service											
	Production of Biologics			Laboratory Improvement (Evaluation, Licensure, Training)			Other					
	Personnel	Expenditures	Space	Personnel	Expenditures	Space	Personnel	Expenditures	Space	Personnel	Expenditures	Space
Ala.				1.0	.1	*						
Alaska												
Ariz.	<1.0	*	*	1.0	*	*						
Ark.	*	*	*	*	*	*	*	*	*	*	*	*
Cal.	*	*	*	*	*	*	*	*	*	*	*	*
Colo.				3.0	1.0	*						
Conn.	2.0	1.0	1.0	4.0	10.0	1.0	65.3				63.0	
Del.	*	*	*	*	*	*	*	*	*	*	*	*
D.C.	*	*	*	*	*	*	*	*	*	*	*	*
Fla.				2.3	2.0	2.0						
Ga.		<1.0				1-2.0						
Hawaii	(b)			(c)	(b)		(c)					
Ida.		*			2.2	*						
Ill.	6.4	30.0	*	2.0	*	*	*	*	*	*	*	*
Ind.		*		10.0	*		2.0					
Ia.					7.1	*	6.0					
Kans.		*	*	1.7	*	*	*					
Ky.				6.0	.1	1.0						
La.	1.8	*	1.0	.6	*			51.4				
Me.				10.0	1.75							
Md.	*	*	*	*	*	*	*	*	*	*	*	*
Mass.	48.0	45.9	50.0	2.0			(c)					
Mich.	31.0	*	*	1.0	*	*	*					
Minn.		*	*	2.6	*	*						
Miss.				1.1	7.0							
Mo.				10.0	11.0	20.0 (h)						
Mont.	*	*	*	*	*	*	*	*	*	*	*	*
Nebr.	*			4.0	*	5.0						
Nev.				10.0	10.0	10.0						
N.H.	*	*	*		*	*	30.0	*	*	*	*	
N.J.	0.2	0.3	2.4	2.2	0.9							
N.M.			15.0	0.5	1.0						44.0	
N.Y.		*	6.0	10.0	*		51.0 (i)	25.0 (j)			*	
N.C.			1.97	1.97	1.97		43.13(k)	43.13			43.13	
N.D.	*	*	*	*	*	*	*	*	*			
Ohio			2.0	3.5	1.2		47.0	24.2			56.0	
Okla.			4.0	2.7								
Ore.			9.0	5.0	10.0							
Pa.	*	*	*	*	*	*	*	*	*	*	*	
R.I.			(e)	10.0		(c)						
S.C.		*	*	(f)	*	*						
S.D.	*	*	*	*	*	*	*	*	*	*	*	
Tenn.	2.4	0.2	1.0	0.4		0.1						
Tex.	*	*	16.0	*	*	4.0	*	*	*		25.0	
Utah		(a)		1.5	0.5							
Vt.				1.0	30.0							
Va.				5.0		*						
Wash.				23.6	20.0	23.0					39.6	
W. Va.				5.4	*	18.0					2.0	
Wisc.	*		5.0	5.0	*	10.0						
Wyo.				22.3		11.0					53.0	
P.R.				5.6	*	3.0					64.0	
V.I.	*	*	*	*	*	*	*	*	*	*	*	

SECTION I. FOOTNOTES

- (a) No personnel are assigned to the other program services. These are carried out by workers in Diagnostic Services. Space is used on a part-time basis and cannot be accurately identified with individual programs.
- (b) Very small amount for serology evaluation program; minimal amount for other categories.
- (c) No specific space allotted for this activity.
- (d) Included with Diagnostic Services.
- (e) No personnel specifically assigned to laboratory improvement or research, but many of them are involved in intrastate laboratory improvement and several are involved in areas of research.
- (f) Appropriate personnel assigned to intrastate laboratory improvement as needed.
- (g) Includes research and production of biologics.
- (h) Space used for this item is shared with technical work.
- (i) Sanitary and analytical chemistry, 15%; all other administrative, maintenance, and support service, 36%.
- (j) Sanitary and analytical chemistry, 25%.
- (k) Administrative Section and Environmental Sciences Section.

SECTION II

NEW PROGRAMS OF CURRENT INTEREST

TABLE 2-1. STATUS OF LABORATORY REGISTRATION LAWS

No or Law	Bill Stage Only	<u>Under Consideration:</u>				Bill Introduced	Date Law Passed	Number of Facilities Registered (a)
		In Discussion	By Study Committee	In Committee of Legislature	*			
Ala.	x							
Alaska	x							
Ariz.	x							
Ark.	*	*	*	*	*	*	*	*
Cal.	x							
Colo.		x						
Conn.						1961	I-62; H-53; B-1	
Del.	x							
D.C.	*	*	*	*	*	*	*	*
Fla.			x (b)			1949	I-67 (c)	
Ga.	x							
Hawaii	x							
Ida.	x (d)							
Ill.						1963 (e)	(e)	
Ind.	x							
Ia.	x							
Kans.	x							
Ky.	x							
La.	x							
Me.	x							
Md.	x							
Mass.	x							
Mich.	*	*	*	*	*	*	*	*
Minn.			x					
Miss.			x					
Mo.	x							
Mont.	*	*	*	*	*	*	*	*
Nebr.	x							
Nev.	x							
N.H.	*	*	*	*	*	*	*	*
N.J.						1953	(f)	
N.M.	x (g)							
N.Y.	x							
N.C.	x							
N.D.					x (h)			
Ohio	x							
Oklahoma	x							
Ore.						1938	I-33; H-77; B-1; O-43 (i)	
Pa.						1951	I-155	
R.I.	x							
S.C.		x	x					
S.D.	*	*	*	*	*	*	*	*
Tenn.						x (j)		
Tex.	x							
Utah	x							
Vt.			x					
Va.		x						
Wash.						1943 (k)	I-71; H-128; O-95 (l)	
W. Va.	x							
Wisc.	*	*	*	*	*	*	*	*
Wyo.	x							
P.R.	x							
V.I.		x						

TABLE 2-2. STATUS OF LABORATORY LICENSURE LAWS

No Bill or Law	Under Consideration: In Discussion Stage Only	By Study Committee	In Committee of Legislature	Bill Introduced	Date Law Passed	Number of Facilities Licensed (a)
Ala.	x			x	x (m)	
Alaska				x	x (n)	
Ariz.				*	*	*
Ark.	*	*	*	*	*	*
Cal.					1938	1-930; H-535; PH-39; O-514(o)
Colo.	x					
Conn.	x					
Del.	x					
D.C.	*	*	*	*	*	*
Fla.		x				
Ga.			x	x (p)		
Hawaii	x					
Ida.	x					
Ill.					1/66	I-320; PH-2 (q)
Ind.	x					
Ia.	x					
Kans.	x					
Ky.	x					
La.	x			x (r)		
Me.						
Md.					6/66	I-52; H-41; O-2 (s)
Mass.		x		x (r)		
Mich.	*	*	*	*	*	*
Minn.		x				
Miss.		x				
Mo.		x		x (t)		
Mont.	*	*	*	*	*	*
Nebr.	x					
Nev.					4/67	(u)
N.H.	*	*	*	*	*	*
N.J.		x (v)				
N.M.	x					
N.Y.					3/64 (w)	423 (x)
N.C.	x					
N.D.	x					
Ohio			x	x (y)		
Oklahoma		x (z)				
Ore.			x	x (aa)		
Pa.					1951	
R.I.					1961	I-31
S.C.		x				
S.D.	*	*	*	*	*	*
Tenn.					x (bb)	
Tex.	x					
Utah	x		x			
Vt.			x			
Va.		x				
Wash.	x					
W. Va.	x					
Wisc.	*	*	*	*	*	*
Wyo.	x					
P.R.					6/62	I-77; H-89; PH-6; O-2
V.I.	x					

FOOTNOTES FOR TABLES 2-1 AND 2-2

- (a) Code: I - Independent; H - Hospital; B - Blood Banks; PH - Public Health; O - Other.
- (b) Revision of current law under consideration.
- (c) Laboratories operated by non-physicians.
- (d) Proposed laboratory approval legislation, which was submitted to the last session of the Legislature, did not get out of the Senate Public Health Committee.
- (e) This Law was repealed by the Clinical Laboratory Act effective January 1, 1966.
- (f) Laboratory registration is administered by Board of Medical Examiners, Department of Law and Public Safety.
- (g) Has program of approval of laboratories.
- (h) Bill defeated in Committee.
- (i) Includes pathologists and others.
- (j) Would cover clinical laboratories, hospital laboratories, and schools of medical technology.
- (k) Regulation rather than law.
- (l) Includes 85 clinics and private physician laboratories, and ten local health department laboratories.
- (m) Bill introduced in 1967 which would cover independent, hospital, institutional and commercial laboratories.
- (n) A Bill introduced in 1966 and another in 1967 and would cover independent laboratories.
- (o) Included are the following public health laboratories: state, 1; county, 34; city, 3; city-county, 1. "Other" includes: approved schools of medical technology, 82; blood banks, 50; laboratory animal facilities, 382. Public health laboratories, blood banks, and animal facilities are licensed and certified separately under health and safety code, not included in business and professions code with clinical laboratories.
- (p) Bill held over to 1968 Session. It would cover independent, hospital, state, county, city, city-county, and institutional laboratories, as well as blood banks and tissue banks.
- (q) "PH" represents two city laboratories. County and city-county laboratories are also covered under the law but none are licensed yet.
- (r) Would cover independent laboratories.
- (s) Out-of-state laboratories with offices in Maryland.
- (t) Held over to 1968 session. Bill would cover independent, hospital, county, city, city-county, and institutional laboratories.
- (u) Numbers not determined yet. Independent, hospital, public health and institutional laboratories are covered.
- (v) Bill drafted and being considered for introduction to Legislature as of April 1967.
- (w) Permits issued rather than licenses.
- (x) Total permit laboratories, including independent, hospital, public health (excluding state), and institutional laboratories.

FOOTNOTES FOR TABLES 2-1 AND 2-2 (Continued)

- (y) Bill introduced in April 1967 and would cover independent, hospital, public health, and institutional laboratories.
- (z) Bill would cover independent, hospital, public health, and institutional laboratories.
- (aa) If Law passes it would cover 60 independent, 87 hospital, 1 state, 1 city, 8 institutional laboratories and possibly 50 clinics (5 or more doctors).
- (bb) Would cover independent and hospital laboratories.

TABLE 2-3. STATUS OF LABORATORY PERSONNEL LICENSURE LAWS

No or Law	Bill No.	Under Consideration:				Bill Introduced	Date Law Passed	Number of Personnel Licensed (a)
		In Discussion Stage Only	By Study Committee	In Committee of Legislature				
Ala.					x		1940	*
Alaska					x (b)			
Ariz.					x (c)			
Ark.	*	*	*	*	*	*	*	*
Cal.							1938	D-211; T-11,308 (d)
Colo.		x						
Conn.	x							
Del.	x							
D.C.	*	*	*	*	*	*	*	*
Fla.			x (e)				1949	D-140; T-416
Ga.	x							
Hawaii							1958	D-41; T-340
Ida.	x							
Ill.	x							
Ind.	x							
Ia.	x							
Kans.	x							
Ky.	x							
La.	x							
Me.	x							
Md.	x							
Mass.			x		x (f)			
Mich.	*	*	*	*	*	*	*	*
Minn.			x					
Miss.			x					
Mo.			x					
Mont.	*	*	*	*	*	*	*	*
Nebr.	x							
Nev.							4/67	(g)
N.H.	*	*	*	*	*	*	*	*
N.J.							1953	(h)
N.M.	x							
N.Y.							3/64 (i)	D-416
N.C.	x							
N.D.	x							
Ohio				x	x (j)			
Oklahoma			x (k)		x (l)			
Ore.								
Pa.			x					
R.I.	x							
S.C.		x						
S.D.	*	*	*	*	*	*	*	*
Tenn.					x (m)			
Tex.		x						
Utah	x							
Vt.			x					
Va.		x						
Wash.	x							
W. Va.	x							
Wisc.	*	*	*	*	*	*	*	*
Wyo.	x						1939, 1957	T-753
P.R.								
V.I.	x							

This shows absurdity of
the posed question.

Jawa does not have
a law but it does have
a program. ∴ We
were excluded from 2-4

TABLE 2-4. PERFORMANCE EVALUATION OF LABORATORY PROCEDURES AS PART OF THE LICENSURE PROGRAM

No Program	Planning for Program	Procedures Covered or to be Covered:						Immu- no- Hematology	Other
		Syphilis Serology	Clinical Microbiology	Clinical Chemistry	Hematology				
Ala.	x								
Alaska		x							
Ariz.		x							
Ark.	*	*	*	*	*	*	*	*	*
Cal.	x								
Colo.	x								
Conn.			x (n)	x	x	x	x		
Del.	x (o)								
D.C.	*	*	*	*	*	*	*	*	*
Fla.	x								
Ga.	x								
Hawaii	x								
Ida.	x								
Ill.	x								
Ind.	x								
Ia.	x								
Kans.		x							
Ky.	x								
La.	x								
Me.	x								
Md.	x								
Mass.	x								
Mich.	*	*	*	*	*	*	*	*	*
Minn.	x								
Miss.	x								
Mo.		x							
Mont.	*	*	*	*	*	*	*	*	*
Nebr.	x								
Nev.		x		x	x	x	x	x	
N.H.	*	*	*	*	*	*	*	*	*
N.J.		x	x	x	x	x	x		x (p)
N.M.	x (o)								
N.Y.			(q)	(q)	(q)	(q)	(q)	(q)	(q)
N.C.	x								
N.D.	x								
Ohio		x		x	x	x	x		
Oklahoma	x								
Ore.				x	x	x	x	x	
Pa.				x	x	x	x		
R.I.			x	x	x	x			x (r)
S.C.	x								
S.D.	*	*	*	*	*	*	*	*	*
Tenn.		x							
Tex.	x (o)			x	x	x	x	x	
Utah	x								
Vt.	x								
Va.	x								
Wash.	x								
W. Va.	x								
Wisc.	x								
Wyo.	x								
P.R.	x								
V.I.		x							

TABLE 2-5. CERTIFICATION OF LABORATORIES FOR ACCREDITATION UNDER MEDICARE THROUGH DECEMBER 31, 1966
(HEALTH INSURANCE FOR THE AGED ACT)

	Total Applications for Accreditation		No. of Labs. Surveyed for Compliance		No. of Labs. Certified		Labs. not Certified		Withdrew Application		
	Hosp.	Ind.	Hosp.	Ind.	Hosp.	Ind.	Defi- ciencies	Not Covered		Application	Other
	Ala.	14 (s)		14		11	1		2		
Alaska	3			3		2	1				
Ariz.	91			81			81 (t)				
Ark.	*	*	*	*	*	*	*	*	*	*	*
Cal.	204	768 (u)	204	527 (v)	204	372	23	60			
Colo.	28										
Conn.	56			13		52 (w)					
Del.	3			2		(x)					
D.C.	*	*	*	*	*	*	*	*	*	*	*
Fla.	101			6		95 (y)					
Ga.	23			20		19		1			
Hawaii	18			18		18					
Ida.											
Ill.	280										
Ind.	46										
Ia.	91	17	91	17	86	22	12			12 (z)	7
Kans.	36			33		15		15			
Ky.	13			9		(aa)					
La.	14			14		9 (bb)					
Me.	2			2		2					
Md.	37					28 (cc)					9
Mass.	83			82		69	1	13			
Mich.	*	*	*	*	*	*	*	*	*	*	*
Minn.	9			9		9					
Miss.	17			17		15					2
Mo.	59			59		49	4	6			
Mont.	*	*	*	*	*	*	*	*	*	*	*
Nebr.	*	*	*	*	*	*	*	*	*	*	*
Nev.	(dd)	(dd)									
N.H.	*	*	*	*	*	*	*	*	*	*	*
N.J.	110			75		(aa)					
N.M.	3	19	3	19				22			
N.Y.	158			105		105	52				
N.C.	(dd)	(dd)									
N.D.	11			11		8	*	*	*		
Ohio	105			105		90	11	2	2		
Okla.	(dd)	(dd)									
Ore.	93 (ee)	36	42	36	90	30		6	1		2
Pa.	119			119		117	*	*	*		
R.I.	20			20		17	3				
S.C.	*	4		4		4					
S.D.	*	*	*	*	*	*	*	*	*	*	*
Tenn.											
Tex.	256			256		230 (ff)					4
Utah	9			9		3	6				
Vt.	(dd)	(dd)									
Va.	2	27	2	27	2	20	2				5
Wash.	70			70		60	7	3			
W. Va.	(dd)	(dd)									
Wisc.											
Wyo.	(dd)	(dd)									
P.R.											
V.I.											
		59		45		43	5		11		

FOOTNOTES FOR TABLES 2-3 THROUGH 2-5

- (a) Code: D - Laboratory Directors; S - Supervisors; T - Technologists; Tn - Technicians; O - Others.
- (b) Bill introduced in 1967 and would cover directors, supervisors, technologists, technicians and trainees.
- (c) Would cover directors and technologists.
- (d) Figure for directors licensed includes clinical laboratory bioanalysts only; physicians and surgeons are licensed by Medical Board. Total licensed clinical laboratories directed by physicians and surgeons and clinical laboratory bioanalysts is 1470. Physicians (perhaps more than one per facility) involved in directorship of 1218 clinical laboratories. Forty-one laboratories directed by a combination of bioanalysts and physicians.
- (e) Revision of current registration law being considered.
- (f) Would cover directors and supervisors.
- (g) Numbers undetermined - covers directors, supervisors, technologists, and technicians.
- (h) Only directors are licensed and this is a function of the Board of Medical Examiners, Department of Law and Public Safety.
- (i) Certificates of qualification issued rather than licenses.
- (j) Bill introduced in April 1967 and covers directors only.
- (k) Would cover directors, supervisors, technologists, technicians, laboratory assistants, and trainees.
- (l) A laboratory personnel certification bill is in committee and would possibly certify directors and technicians, as well as 800 technologists.
- (m) Covers directors, supervisors, technologists, and technicians.
- (n) Prerequisites for registration are Health Department approval, based on full investigation of the director's qualifications and approval based on an inspection visit to the laboratory of quarters, equipment, procedures, records and sub-director personnel. Proficiency testing is required on a routine basis for all laboratories after registration. Registration may be withdrawn for any test or tests if proficiency testing shows consistently poor performance in spite of State efforts to improve situation by individual review and training.
- (o) State has program of laboratory evaluation for approval in Syphilis Serology.
- (p) Virology, Parasitology, and Mycology.
- (q) Permit shows which procedures are authorized for a laboratory. Law does not list specifically procedures covered.
- (r) Milk and Water Bacteriology.
- (s) Not handled by State Laboratory but information supplied.
- (t) Directors' requirements.
- (u) Figures cover through 3/31/67 as information was not tabulated for period ending 12/31/66.
- (v) There were 102 laboratories for which surveys were completed but not processed.
- (w) Interim certification; no final certifications were completed until March 1967.
- (x) Laboratories will be "approved," not certified.

FOOTNOTES FOR TABLES 2-3 THROUGH 2-5 (Continued)

- (y) Interim basis. Certification delayed pending establishment of revised regulations covering independent laboratories.
- (z) Pending because of incomplete data from laboratory.
- (aa) No certifications were made in 1966.
- (bb) Figures cover through 4/1/67. Five applications pending.
- (cc) Total through June 1967. No laboratories certified through 12/31/66.
- (dd) Not handled by State laboratories.
- (ee) Figures cover through 4/26/67.
- (ff) These applications were reviewed again after January 1967 when new requirements were received from the Social Security Administration. Interim certification was given to all but 4 laboratories. Of the 256 laboratories originally applying, many were found not to be true independent laboratories and a grand total of 198 were certified.

TABLE 2-6. PHENYLKETONURIA SCREENING PROGRAM

No Prog.	Type Program Vol.	Laboratories Performing Tests Routinely (a)	Screening Test Procedure Used: (b)		Participation in Procedure Evaluation	
			Hospital	Independent	Vol.	Mand.
Ala.	x	S-1,H-1	*			
Alaska	x	(c)				
Ariz.	x (d)	*	*		*	*
Ark.	*	*	*	*	*	*
Cal.	x	Co-2,H-128,I-53	G-76,F-36,G,F-16	A-29,F-15,G,F-9		x
Colo.	x	S-1,H-12,I-6	G-10,F-2,PC-1	G-6,F-1		
Conn.	x	S-1,H-1	G-1			
Del.	x	S-1				
D.C.	*	*	*	*	*	*
Fla.	x	S-2,H-40,I-20	G-28,F-4,O-8	G-6,F-1,FC-3,O-10		
Ga.	x	S-1,H-3				x (e)
Hawaii	x	H-2,I-2	G-2	F-2		
Ida.	x	S-1,H-2	G-2			x
Ill.	x	S-3,Cy-1,H-68, I-2,O-9	G-68,FA-2,FM-27	G-1,FM-2	x	
Ind.	x	H-94,I-5,Co-1	*	*		
Ia.	x (f)	S-1,H-23,I-5	G-15,F-5,A-1	G-2,F-1		x (g)
Kans.	x	S-1,H-15	*			
Ky.	x (h)	S-1				
La.	x	S-1,H-1,I-3	*	*		
Me.	x	S-1				
Md.	x	S-1,H-5				
Mass.	x	S-1				
Mich.	*	*	*	*	*	*
Minn.	x	S-1,H-* ,I-*	G-*	G-*		
Miss.	x					
Mo.						
Mont.	*	*	*	*	*	*
Nebr.	x					
Nev.	x (i)	S-1				
N.H.	x	S-1				
N.J.	x	S-1,H-7	G-6,F-1			x
N.M.	x	S-1				
N.Y.	x	S-1,Co-1,Cy-1				
N.C.	x	S-1				
N.D.	x	S-1				
Ohio	x	S-1,H-6	G-3,FM-3			x
Oklahoma	x	S-1,H-5	G-4,FM-1			
Ore.	x	S-1,H-1	G,FM-1			
Pa.	x	S-1,Co-1,H-89	G-61,F-9,FC-1,PC-1			x
R.I.	x	S-1				
S.C.						
S.D.	*	*	*	*	*	*
Tenn.	x	S-1				
Tex.	x	S-1,H-* ,I-*	*	*		
Utah	x	H-9	G-9			
Vt.	x	H-1	G-1			
Va.	x	S-3				
Wash.	x	S-1,Co-3,Cy-1, H-32,I-37	G-11,F-5,FC-8 PC-1,O-7	G-4,F-2,FC-19, PC-4,O-8		
W. Va.	x	S-1,H-14	G-10,F-4			
Wisc.	x	Cy-1,H-73,I-4,O-3	G-67,F-16	G-1,F-1	x (k)	x (k)
Wyo.	x					
P.R.	x					
V.I.	x	S-1				

TABLE 2-7. STATUS OF PLANNING FOR NEW LABORATORY FACILITIES

Year Present Lab. Completed	Planning Currently in Progress	Plans Have Been Completed	Construction Funds Appropriated	Architect Has Been Selected
Ala.	1954	x (l)		
Alaska	(m)			
Ariz.	1954			
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.	1960			
Conn.	1935	x	x	x
Del.	1960		x	x
D.C.	*	*	*	*
Fla.	1954 (n)	x		
Ga.	1960			
Hawaii	1961			
Ida.	1965			
Ill.	*	x	(o)	x
Ind.	1950			
Ia.	1928			
Kans.	(p)	x		(q)
Ky.	1960			
La.	1958	x		
Me.	1910	x	(o)	x
Md.	1951	x		(q)
Mass.	*	x		(q)
Mich.	*	*	*	*
Minn.	1938	x	x	x
Miss.	1959			
Mo.	1939	x		
Mont.	*	*	*	*
Nebr.	1930	x		x
Nev.	1964	x		x
N.H.	*	*	*	*
N.J.	1966	x (r)		
N.M.	1937	x		x
N.Y.	1918 (s)	x	x	x
N.C.	1940	x		
N.D.	*	*	*	*
Ohio	1941	x	*	x
Oklahoma	1951	x	(o)	x
Ore.	1951	x		
Pa.	1927	x	*	x
R.I.	1936	x	(o)	x
S.C.	1965			
S.D.	*	*	*	*
Tenn.	*			
Tex.	1958			
Utah	1952	x	x	(t)
Vt.	1953	x	(o)	(q)
Va.	1923	x	(o)	x
Wash.	1962			
W. Va.	1954	(u)		
Wisc.	1953	-		
Wyo.	1952			
P.R.	*	*	*	*
V.I.	1960	x		x

TABLE 2-7. STATUS OF PLANNING FOR NEW LABORATORY FACILITIES
(Continued)

	Construction Should Begin By FY:	Estimated Net Sq. Ft.	Estimated \$ Cost	Lab. to be a Separate Bldg.
Ala.	*	6,000	*	x
Alaska				
Ariz.				
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.				
Conn.	(v)	33,000	2,000,000	x
Del.				
D.C.	*	*	*	*
Fla.	*	20,000	1,000,000	x
Ga.				
Hawaii				
Ida.				
Ill.	1968	100,000	*	x
Ind.				
Ia.				
Kans.	1970	*	*	
Ky.				
La.	*	*	*	*
Me.	1968	36,000	770,000	
Md.	1970	82,500	*	x
Mass.	1968	187,000 (w)	*	x
Mich.	*	*	*	*
Minn.	1967	195,000	*	
Miss.				
Mo.	*	40,000 (w)	2,500,000	x
Mont.	*	*	*	*
Nebr.	1967	23,000	650,000	x
Nev.	*	*	*	*
N.H.	*	*	*	*
N.J.				
N.M.	*	46,100	4,500,000	
N.Y.	1968	60,000 (w)	3,000,000	x
N.C.	*	475,000 (w)	37,000,000	x
N.D.	*	*	*	
Ohio	*	25,000	2,500,000	
Okla.	1968	26,750	1,325,000	x
Ore.	1971	40,000 (w)	2,000,000	x
Pa.	1970	*	3,500,000	*
R.I.	1968	102,000 (x)	*	
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.				
Utah	*	23,376	857,000	x
Vt.	1969	10,000 (w)	500,000	
Va.	1968	90,000 (y)	*	x
Wash.				
W. Va.				
Wisc.				
Wyo.				
P.R.	*	*	*	*
V.I.	*	*	*	

FOOTNOTES FOR TABLES 2-6 AND 2-7

- (a) Code: S - State; Co - County; Cy - City; H - Hospital; I - Independent; O - Other.
- (b) Code: G - Guthrie; F - Fluorometric; M - Manual; A - Automated; L - LaDu; FC - Ferric Chloride; PC - Paper Chromatography; O - Other. Workload data for State laboratory is in Section III, Table 3-49.
- (c) PKU tests performed by unknown number of local hospital laboratories and also independent laboratories in Washington and California. PKU Statute amended and passed in 1967 Legislature, effective July 1, 1967.
- (d) Program in planning stage to start July 1, 1966 and run for one year.
- (e) Effective February 20, 1967, laboratories must participate in evaluation program in order to be approved to perform procedure. Hospital laboratories approved by the Joint Commission on Accreditation of Hospitals are exempt from the approval program. Three regional laboratories are now participating in the program.
- (f) Public Policy Program.
- (g) Program just beginning.
- (h) A voluntary program became mandatory by law on July 1, 1966.
- (i) Began April 1967.
- (j) Mandatory program for newborn in hospitals.
- (k) Voluntary for pathologist-directed laboratories; mandatory for non-pathologist-directed laboratories.
- (l) Shell fish laboratory in Mobile.
- (m) Anchorage, 1960; Juneau, 1937; Fairbanks, 1965.
- (n) Central Laboratory. Other laboratories completed as follows: Miami, 1958; Orlando, 1957; Tallahassee, 1950; West Palm Beach, 1953; Pensacola, 1965; Tampa, 1966. Current planning is for Miami Laboratory.
- (o) Plans should be completed by the end of Fiscal Year 1967.
- (p) Facilities destroyed by tornado June 18, 1966. Temporary laboratory building being built.
- (q) Funds provided for planning (Kansas, \$20,000; Vermont, \$20,000).
- (r) New building almost ready for occupancy.
- (s) Main building. Last wing completed in 1939.
- (t) Funds provided for planning and partially for construction.
- (u) Animal house addition planned for 1966-1967 in progress.
- (v) Facilities should be completed by June 1967.
- (w) Estimated gross square feet.
- (x) Building to be constructed will be a State Health Department structure with laboratories in basement. Laboratory space is estimated to be 42,000 gross square feet.
- (y) Gross square feet for building in which all State laboratories will be housed. The Public Health Laboratory will have approximately 16,500 square feet net space.

SECTION III

DIAGNOSTIC WORKLOAD

TABLE 3-1. SUMMARY OF LABORATORY SPECIMENS AND EXAMINATIONS

	Total Specimens	Total Examinations	Diagnostic Bacteriology	Examinations: Sanitary Bacteriology
Ala. (a)	661,091	1,009,282	303,738	143,472
Alaska (a)	70,852	87,988	36,066	13,849
Ariz. (a)	125,032	185,704	26,435	39,388
Ark.	183,680	183,751	22,184	27,516
Cal. (a)	120,764	279,959	50,941	30,556
Colo.	*	422,829	204,543	33,650
Conn.	545,334	1,012,347	372,005	70,470
Del.	110,054	124,064	10,056	8,361
D. C.	*	*	*	*
Fla. (a)	1,594,630	2,073,151	599,089	195,500
Ga. (a)	793,541	1,242,235	340,921	44,817
Hawaii (a)	112,754	280,902	164,784	28,703
Ida. (a)	*	145,082	28,927	39,862
Ill. (a)	657,785	993,595	185,512	492
Ind.	298,188	414,340	72,478	53,602
Iowa (a)	314,445	482,033	80,279	67,605
Kans.	197,029	294,280	47,730	46,478
Ky. (a)	239,862	512,971	32,926	49,149
La. (a)	*	1,007,359	157,467	178,055
Me.	105,142	136,856	35,826	
Md. (a)	597,635	911,504	256,600	97,644
Mass.	153,398	945,791	227,508	
Mich. (a)	*	1,361,168	564,861	*
Minn.	219,118	452,556	107,883	862
Miss. (a)	415,183	671,284	166,304	131,209
Mo.	165,201	217,926	20,094	49,939
Mont.	*	*	*	*
Nebr. (a)	*	150,233	5,005	804
Nev. (a)	67,271	93,485	23,669	15,039
N. H.	98,813	145,278	38,093	
N. J. (a)	415,186	753,258	140,260	41,771
N. M. (a)	111,789	180,520	55,963	22,991
N. Y.	181,635	410,267	35,460	44,612
N. C.	610,178	714,019	65,641	68,558
N. D. (a)	118,517	214,967	67,432	31,280
Ohio (a)	440,043	651,174	97,815	48,968
Okla. (a)	275,268	372,015	68,578	75,364
Ore.	186,240	290,730	24,532	21,842
Pa.	65,316	321,308	54,900	77,250
R. I.	151,404	238,356	36,640	1,874
S. C. (a)	*	478,504	43,089	18,586
S. D.	*	*	*	*
Tenn. (a)	658,671	792,437	163,814	69,774
Tex. (a)	*	528,398	55,742	25,419
Utah (a)	165,574	254,755	24,600	25,612
Vt.	88,328	137,272	27,054	9,932
Va. (a)	426,984	522,136	153,223	36,586
Wash.	86,119	129,689	39,237	16,059
W. Va.	81,232	136,393	51,442	28,455
Wisc.	659,711	856,224	138,033	54,871
Wyo.	22,828	25,441	3,831	7,260
Puerto Rico (a)	*	375,205	46,504	42,396
Virgin Islands	26,247	31,350	9,106	3,497

TABLE 3-1. SUMMARY OF LABORATORY SPECIMENS AND EXAMINATIONS
(Continued)

	<u>Examinations:</u>			Syphilis Serology
	Mycology	Parasitology	Virology	
Ala.	2,085	58,395	508	350,567
Alaska	57	725	78 (b)	21,116
Ariz.	2,033	337	10,958	54,452
Ark.	2,899	1,715	5,301	114,620
Cal.	2,306	3,428	9,679	54,927
Colo.		960	1,240	140,235
Conn.	16,151	31,713	5,025	116,494
Del.		302	255 (b)	43,900
D. C.	*	*	*	*
Fla.	8,510	180,601	19,190	833,140
Ga.	753	91,001	7,652	490,856
Hawaii	4,352	18,141	2,606	36,470
Ida.	404	440	2,554	38,745
Ill.	1,617	43,756	9,133	506,991
Ind.	4,557	16,831	7,133 (b)	173,478
Iowa	3,805	673	6,966	232,256
Kans.	366	6,440	18,231	118,408
Ky.	1,041	7,022	3,293	331,185
La.	406	108,333	30,653	392,588
Me.	360	193	205 (b)	50,229
Md.	*	23,732	4,107	167,704
Mass.	*	75	5,338	461,094
Mich.	46,538	7,921	12,961	403,989
Minn.	3,371	5,464	9,638	205,568
Miss.	*	11,869	1,652 (b)	221,342
Mo.	163	4,089	3,420	73,457
Mont.	*	*	*	*
Nebr.		212	890 (b)	107,240
Nev.	81	293		30,669
N. H.		245	931 (b)	41,394
N. J.	469	982	131,934	260,765
N. M.	660	566	1,622	58,691
N. Y.	2,883	359	22,014	156,193
N. C.	218	18,500	5,391	359,438
N. D.	728	198	1,016	48,500
Ohio	604	1,607	7,002	194,475
Okla.	2,976	12,204	4,792	151,328
Ore.	354	1,161	936	175,246
Pa.	201	606	35,540	51,122
R. I.	2,807	3,307	340 (b)	41,219
S. C.	269	17,516	1,047 (b)	331,817
S. D.	*	*	*	*
Tenn.	1,802	3,300	6,995	471,746
Tex.	*	6,463	43,014	91,560
Utah	1,392	3,094	1,239	90,939
Vt.	48	239	613	42,779
Va.	593	22,099	3,516	206,877
Wash.	977	1,292	7,216	39,891
W. Va.	235	3,168	2,859	43,846
Wisc.	26,577	7,065	8,616	226,074
Wyo.	4	35		12,612
Puerto Rico	144	37,497	2,740	76,967
Virgin Islands	44	6,959		9,186

TABLE 3-1. SUMMARY OF LABORATORY SPECIMENS AND EXAMINATIONS
(Continued)

	All Other Serology	Clinical Chemistry	Examinations: PKU	Sanitary Chemistry	All Other Examinations
Ala.	7,177		73,889	53,144	16,307
Alaska	1,477			1,386	13,234
Ariz.	15,073	13,909		16,391	6,728
Ark.	9,516				
Cal.	41,412			22,035	64,675
Colo.	2,360		24,207	15,405	229
Conn.	42,866	14,870	91,818	229,833	21,102
Del.	110	5,637	18,217	1,123	36,103
D. C.	*	*	*	*	*
Fla.	27,658	33,033	44,599	73,085	58,746
Ga.	21,334	1,864	23,307	48,702	171,028
Hawaii	5,495			18,615	1,736
Ida.	11,655	56	11,916	8,092	2,431
Ill.	70,416	168	60,780	98,379	16,351
Ind.	22,163			64,098	
Iowa	43,275		3,728	39,021	4,425
Kans.	24,968	3	17,397	11,703	2,556
Ky.	48,384	1,333	17,743	18,736	2,159
La.	10,120	2,444	64,200	13,569	49,524
Me.	3,485	9,724	24,117		12,717
Md.	12,712	69,455	52,523	6,311	220,716
Mass.	12,320		238,856		
Mich.	24,123	155,631	90,067	*	55,077
Minn.	36,240		66,414	10,679	6,437
Miss.	8,493	49,031		78,822	2,562
Mo.	9,853	2	44,423	11,337	1,149
Mont.	*	*	*	*	*
Nebr.	18,595			17,487	
Nev.	733	3,067	13,845		6,089
N. H.	13,137	15,356	16,513		19,609
N. J.	30,428	7,765	85,244	35,908	17,732
N. M.	5,381		11,814	20,821	2,011
N. Y.	19,262		88,326	4,502	36,656
N. C.	11,691	1,207	48,981	30,081	104,313
N. D.	26,557		13,657	7,667	17,932
Ohio	27,503	37,749	164,328	60,830	10,293
Okla.	7,453	3,344	22,579	11,910	11,487
Ore.	12,192		54,467		
Pa.	23,541	13,450	64,698		
R. I.	353	67,181	71,625		13,010
S. C.	23,380	6,987	18,204	5,167	12,442
S. D.	*	*	*	*	*
Tenn.	17,473		19,157	8,049	30,327
Tex.	40,833		109,287	152,483	3,597
Utah	25,350	1,413		23,735	57,381
Vt.	17,106	6,575		12,310	20,616
Va.	22,779	7,714	49,739	13,470	5,540
Wash.	13,586	1,230	6,388	3,813	
W. Va.	1,774	3,692	215		707
Wisc.	71,278	118,669		43,046	161,995
Wyo.	1,527	81			91
Puerto Rico	8,678	71,271		9,242	79,766
Virgin Islands	884		871	803	

TABLE 3-2. DIAGNOSTIC BACTERIOLOGY: DIPHTHERIA

	Specimens	Examinations	Positives
Ala.	232	990	10
Alaska	11	22	
Ariz.	1	1	
Ark.	158	311	
Cal.	1	21	6
Colo.	*	36	
Conn.	586	587	
Del.	359	359	*
D. C.	*	*	*
Fla.	8,420	8,420	21
Ga.	417	397	30
Hawaii	13	121	5
Ida.	*	8	
Ill.	4,476	4,504	7
Ind.	45	54	2
Iowa	206	1,236	
Kans.	257	269	
Ky.	176	176	
La.	*	4,515	284
Me.	17	33	
Md.	58,730	58,773	
Mass.	54,029	54,033	4
Mich.	*	568	*
Minn.	4,883	4,909	24
Miss.	105	105	7
Mo.	27	54	
Mont.	*	*	*
Nebr.	*	45	
Nev.	32	29	
N. H.	214	428	
N. J.	1,163	1,164	
N. M.	215	216	
N. Y.	73	73	2
N. C.	71	142	4
N. D.	1,202	40	
Ohio	2,746	2,747	1
Okla.	207	234	3
Ore.	33	78	
Pa.	51	51	1
R. I.	1,501	1,506	
S. C.	*	111	1
S. D.	*	*	*
Tenn.	64	67	3
Tex.	*	878	70
Utah	7	16	
Vt.	5,200	5,200	
Va.	2,723	2,723	
Wash.	1,375	3,060	28
W. Va.			
Wisc.	40	40	
Wyo.	2	2	
P. R.	*	22,855	*
V. I.			

TABLE 3-2. DIAGNOSTIC BACTERIOLOGY: DIPHTHERIA
(Continued)

	Direct Smears	Cultures	Toxigenicity		Referred Cultures	FA Primary Cultures	FA Referred Cultures
			in vivo	in vitro			
Ala.	232	696	4	13	45		
Alaska	11	11					
Ariz.	1						
Ark.	158	153					
Cal.	1	6			14		
Colo.		36					
Conn.		586	1				
Del.	179	179			1		
D. C.	*	*	*	*	*	*	*
Fla.				8,420			
Ga.		397					
Hawaii	4	1?	2	3	95		
Ida.		8					
Ill.		4,476	8	8	12		
Ind.		45	3	3	3		
Iowa		1,236					
Kans.		257	7		5		
Ky.		176					
La.		3,330		175	*	1,010	
Me.		16	16		1		
Md.	11,007	47,766					
Mass.		54,029	4				
Mich.	*	568					
Minn.		4,868	26		15		
Miss.		105					
Mo.	27	27					
Mont.	*	*	*	*	*	*	*
Nebr.	10	28		5	2		
Nev.		29					
N. H.	214	214					
N. J.		1,163			1		
N. M.		215		1	*		
N. Y.		66	2		5		
N. C.	*	142			*		
N. D.	40	*	*	*	*	*	*
Ohio		2,746			1		
Oklahoma		207			2	25	
Ore.	J3	33		5		7	
Pa.					51		
R. I.		1,497	5		4		
S. C.	34	34		42	1		
S. D.	*	*	*	*	*	*	*
Tenn.		64		3			
Tex.	370	370		70	68		
Utah	7	7			2		
Vt.		5,200					
Va.		2,723					
Wash.		2,849	8			203	
W. Va.							
Wisc.		40					
Wyo.		2					
P. R.		22,833	22				
V. I.							

TABLE 3-3. DIAGNOSTIC BACTERIOLOGY: STREPTOCOCCUS

	Specimens	Examinations	Positives
Ala.	24,596	30,544	4,950
Alaska	291	329	50
Ariz.	3,468	5,136	545
Ark.	171	491	21
Cal.	(c)	(c)	(c)
Colo.	*	191,472	31,272
Conn.	171,488	241,181	45,646
Del.	182	234	39
D. C.	*	*	*
Fla.	14,268	14,268	*
Ga.	5,708	5,708	*
Hawaii	15,757	21,953	2,188
Ida.	*	12,293	1,216
Ill.	33,922	33,939	30
Ind.	21	45	24
Iowa	12,852	16,362	1,878
Kans.	1,134 (d)	988	259
Ky.	1,369	5,731	1,021
La.	*	2,028	94
Me.	6,541	8,407	1,722
Md.	(e)	(e)	9,404
Mass.	70,696	103,318	18,245
Mich.	*	118,578	*
Minn.	31	124	31
Miss.	10,664	21,328	1,928
Mo.	9,705	13,640	2,939
Mont.	*	*	*
Nebr.	*	874	190
Nev.	4	41	3
N. H.	16,963	23,649	5,458
N. J.	37	58	9
N. M.	544 (f)	1,088 (f)	149 (f)
N. Y.	3,543	3,543	141
N. C.	29,471 (g)	29,471 (g)	6,129
N. D.	12,014	21,804	2,751
Ohio	10,842	12,752	2,442
Okla.	4,995	5,630	317
Ore.	2,090	2,090	421
Pa.	*	121	52
R. I.	22,747	26,408	3,659
S. C.	*	709	78
S. D.	*	*	*
Tenn.	44,127	88,254	8,124
Tex.	*	1,612	286
Utah	8,779	12,138	2,241
Vt.	5,542	7,272	*
Va.	21,887	23,633	1,822
Wash.	2,093	4,928	911
W. Va.	6,299	13,016	1,715
Wisc.	45,635	52,505	11,146
Wyo.	2,169	2,589	420
P. R.	*	5,183	337
V. I.	832	1,302	36

TABLE 3-3. DIAGNOSTIC BACTERIOLOGY: STREPTOCOCCUS
(Continued)

	Cultures	GROUP A		Group A Positives	OTHER GROUPS			Other Group Positives	Referred Cultures
		FA	Method Used Precipitin		FA	Method Used Precipitin			
Ala.	24,596	5,892		4,141	16	40		809	
Alaska	291	36		50	2				
Ariz.	3,391	1,745		545					
Ark.	171	150	90	1		60		20	20
Cal.	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
Colo.	155,000	35,000		31,200		627	*		845
Conn.	171,330	69,464		37,016		229	8,505		158
Del.	182		47	35	1	4	4		
D. C.	*	*	*	*	*	*	*	*	*
Fla.	14,268								*
Ga.	5,708			*				*	
Hawaii	19,230	2,687		2,178					36
Ida.	10,057	2,236		1,216	(h)	*	*	*	*
Ill.	33,903		11	12		6	3		19
Ind.	21		3	3			18		21
Iowa	12,852	3,078	72	1,838	120	240	40		
Kans.	775	210	3	210	*	*	49		*
Ky.	1,980	3,684		954		67	67		
La.	1,859	23	94	42		52	52		*
Me.	6,541	1,840	6	1,712		10	5		5
Md.	(e)			9,404				*	
Mass.	70,696	18,245	*	18,245	14,334	43	*	*	*
Mich.	118,578			*				*	*
Minn.	31	12	12	12	19	19	19		31
Miss.	10,664	10,664		1,928					(c)
Mo.	9,705	3,820	67	2,891		48	48		
Mont.	*	*	*	*	*	*	*		*
Nebr.	684	80	100	180		10	10		
Nev.	33	5	3	3					
N. H.	16,963	6,506	170	5,438			10		10
N. J.	19	19		3		2	2		18
N. M.	544 (f)	544 (f)		149 (f)					
N. Y.	199	3,145	141	141		58			*
N. C.	29,471 (g)	*	*	4,874	*	*	1,255		*
N. D.	11,632	10,154		2,733		18	18		
Ohio	10,842	1,784		2,424		126	18		
Oklahoma	4,995	599	12	293	2	4	6		18
Ore.		2,090		421					
Pa.	17		52				24		52
R. I.	22,745	3,095		3,095	564	2	564		2
S. C.	567	119	8	78		15			
S. D.	*	*	*	*	*	*	*		*
Tenn.	44,127	44,127		8,124					
Tex.	1,220	281		281					111
Utah	8,779	3,274		2,156		85	85		
Vt.	5,542	1,600	100	*	10	20	*		
Va.	21,481	1,841	133	1,674		150	120		28
Wash.	3,306	1,618	1	850	3		61		
W. Va.	6,299	6,299	393	1,691		25	24		
Wisc.	45,635	6,032	32	10,376	390	416	770		*
Wyo.	2,169	391		391		29	29		
P. R.	326	4,812	15	337		30	*		
V. I.	832	235		28	235		8		

TABLE 3-4. DIAGNOSTIC BACTERIOLOGY: STAPHYLOCOCCUS

	Specimens	Examinations	Positives
Ala.	3,024	6,048	2,735
Alaska	67	200	66
Ariz.	45	127	
Ark.	101	301	34
Cal.	(c)	(c)	(c)
Colo.	*	496	*
Conn.	2,610	9,383	1,744
Del.	184	221	61
D. C.	*	*	*
Fla.	14,268	15,030	762
Ga.	642	1,926	*
Hawaii	7,571	18,060	2,016
Ida.	*	563	*
Ill.	3,122	4,558	419
Ind.	942	2,895	506
Iowa	13,265	18,784	1,767
Kans.	3,150	13,811	*
Ky.	734	1,878	
La.	*	4,394	*
Me.	38	76	*
Md.	(e)	16,896	10,306
Mass.	203	417	*
Mich.	*	158,817	*
Minn.	93	268	53
Miss.	593 (i)	1,087	215
Mo.	54	108	44
Mont.	*	*	*
Nebr.	*	26	15
Nev.	28	109	*
N. H.	1,224	2,130	*
N. J.	360	431	359
N. M.	*	893 (f)	*
N. Y.	3,435	5,246	1,777
N. C.	(j)	(j)	2,340
N. D.	(c)	(c)	(c)
Ohio	11,537	30,092	*
Okla.	4,992	5,550	436
Ore.	210	350	72
Pa.	279	279	*
R. I.	79	98	55
S. C.	*	7	1
S. D.	*	*	*
Tenn.	610	6,370	226
Tex.	*	7,413	*
Utah	533	674	*
Vt.	510	1,665	*
Va.	2,566	4,430	2,574
Wash.	2,093	4,762	579
W. Va.	296	402	*
Wisc.	1,603	4,394	364
Wyo.	5	15	2
P. R.	*	1,994	*
V. I.	832	1,168	78

TABLE 3-4. DIAGNOSTIC BACTERIOLOGY: STAPHYLOCOCCUS
(Continued)

	Cultures	Coagulase Tube Tests	Clumping Factor Tests	Bacteriophage Typing	Antibiotic Sensitivity	Referred Cultures
Ala.	3,024	3,024				
Alaska	67	67			66	
Ariz.	67	55			5	
Ark.	101	101			68	31
Cal.	(c)	(c)	(c)	(c)	(c)	(c)
Colo.	182	72		72		170
Conn.	152	2,588		4,033		2,610
Del.	184	6			22	9
D. C.	*	*	*	*	*	*
Fla.	14,268	762				*
Ga.		642		642		642
Hawaii	5,424	8,636		3,886	42	72
Ida.	*	*	*	563	*	*
Ill.	1,740	36	18	1,382		1,382
Ind.	942	100		911		942
Iowa	13,265	1,664		1,044	1,767	1,044
Kans.	3,150	2,056		5,455	152	2,998
Ky.	95	233		806		744
La.	1,868	1,868		658		*
Me.	38	14	24			
Md.	(e)	714	11,933	1,759	2,490	
Mass.	203	*	203			11
Mich.	117,093			2,764	38,601	359
Minn.	93	93		41		41
Miss.	593	55	439			(c)
Mo.	54	22		32		
Mont.	*	*	*	*	*	*
Nebr.	12	12				2
Nev.	58	51				
N. H.	1,224		453		453	
N. J.	35	36		324	35	1
N. M.	*	*		817	76	*
N. Y.	1,811	1,811		1,583	41	*
N. C.	(j)	*	*			*
N. D.	(c)	(c)	(c)	(c)	(c)	(c)
Ohio	11,537	2,716		6,492	6,409	2,938
Oklahoma	4,992	431			111	16
Ore.	210	137			3	
Pa.				279		
R. I.	77	10		7	2	2
S. C.	3	3				1
S. D.	*	*	*	*	*	*
Tenn.	610	3,043		2,717		
Tex.	2,752	1,375		1,643		1,643
Utah	533	141				
Vt.	50	500	50	460	100	505
Va.	2,402	1,951		56	5	16
Wash.	3,388	765	10		579	20
W. Va.	296	67				39
Wisc.	1,603	2,044		337	73	337
Wyo.	5	5				5
P. R.	1,015	708			271	
V. I.	832	168			168	

TABLE 3-5. DIAGNOSTIC BACTERIOLOGY: VINCENT'S ANGINA

	Specimens	Examinations	Positives
Ala.	6	6	4
Alaska	7	7	5
Ariz.			
Ark.	25	25	
Cal.	(c)	(c)	(c)
Colo.	*	6	1
Conn.	381	426	156
Del.	21	21	6
D. C.	*	*	*
Fla.	58,913	58,913	522
Ga.	36	36	11
Hawaii			
Ida.			
Ill.	673	673	218
Ind.	42	42	
Iowa	135	270	56
Kans.	143	143	98
Ky.			
La.	*	31	19
Me.	*	31	*
Md.	*	11,007	47
Mass.	*	16	11
Mich.	*	1,343	*
Minn.	5	5	2
Miss.	24	24	13
Mo.	4	4	2
Mont.	*	*	*
Nebr.	*	3	1
Nev.	10	18	9
N. H.	47	47	21
N. J.	3	3	
N. M.			
N. Y.	6	6	6
N. C.	19	94 (k)	11
N. D.			
Ohio	37	37	4
Okla.	65	65	51
Ore.	32	24	8
Pa.	*	15	*
R. I.	8	8	2
S. C.	*	5	2
S. D.	*	*	*
Tenn.	21	21	12
Tex.			
Utah	3	3	*
Vt.	65	65	*
Va.	29	29	9
Wash.			
W. Va.		114	*
Wisc.	*	140	39
Wyo.			
P. R.			
V. I.			

TABLE 3-6. DIAGNOSTIC BACTERIOLOGY: DARKFIELD PREPARATIONS

	Specimens	Examinations	Positives
Ala.	26	26	2
Alaska	15	15	
Ariz.			
Ark.			
Cal.	12	12	
Colo.			
Conn.	2	2	
Del.	22	22	8
D. C.	*	*	*
Fla.	311 (1)	311 (1)	105 (1)
Ga.	25	25	1
Hawaii	4	4	
Ida.	*	23	4
Ill.	90	90	7
Ind.			
Iowa			
Kans.			
Ky.			
La.	*	8	1
Me.	2	2	1
Md.	17	17	3
Mass.			
Mich.	*	31	*
Minn.			
Miss.			
Mo.			
Mont.	*	*	*
Nebr.	*	13	12
Nev.	3	3	1
N. H.	11	11	2
N. J.			
N. M.	51	51	6
N. Y.	1	1	
N. C.			
N. D.			
Ohio	4	4	
Oklahoma	8	8	7
Ore.	20	19	1
Pa.			
R. I.	11	11	2
S. C.		117	17
S. D.	*	*	*
Tenn.			
Tex.			
Utah			
Vt.	10	10	1
Va.	15	15	7
Wash.			
W. Va.	4	4	
Wisc.	24	24	
Wyo.			
P. R.			
V. I.	10	10	3

TABLE 3-7. DIAGNOSTIC BACTERIOLOGY: GONORRHEA

	Specimens	Examinations	Positives
Ala.	23,409	23,563	169
Alaska	917	1,217	364
Ariz.	9,457	10,160	201
Ark.	856	945	153
Cal.	1,921	2,091	684
Colo.	*	1,545	45
Conn.	15,342	15,347	1,105
Del.	3,722	7,500	926
D. C.	*	*	*
Fla.	75,986	75,986	7,691
Ga.	13,439	13,439	1,841
Hawaii	2,029	4,846	257
Ida.	*	6,169	1,077
Ill.	39,753	39,753	5,932
Ind.	13,395	13,519	1,253
Iowa	2,038	4,146	435
Kans.	6,160	6,193	1,114
Ky.	4,296	4,301	
La.	*	10,322	3,418
Me.	2,609	2,663	433
Md.	15,282	15,931	1,900
Mass.	6,003	6,011	1,359
Mich.	*	63,253	*
Minn.	20	80	19
Miss.	626	626	69
Mo.	*	4,003	860
Mont.	*	*	*
Nebr.	*	1,020	234
Nev.	4,532	6,168	600
N. H.	1,153	1,250	253
N. J.	4,820	4,820	1,084
N. M.	2,631	2,631	665
N. Y.	2,264	2,290	234
N. C.	3,584	3,584	588
N. D.	1,629	1,629	246
Ohio	4,524	4,748	1,266
Oklahoma	5,604	5,631	1,408
Ore.	*	4,226	588
Pa.	1,789	1,791	191
R. I.	3,039	3,042	*
S. C.	*	15,074	1,116
S. D.	*	*	*
Tenn.	*		
Tex.	*	630	108
Utah	1,772	1,776	*
Vt.	1,420	2,840	192
Va.	13,417	13,417	2,083
Wash.	240	659	155
W. Va.	2,043	2,043	242
Wisc.	4,683	6,201	314
Wyo.	504	504	48
P. R.	*	5,601	*
V. I.	169	169	66

TABLE 3-7. DIAGNOSTIC BACTERIOLOGY: GONORRHEA
(Continued)

	Smears	Cultures	Fermentation	FA Direct	FA Delayed
Ala.	23,359	88	72		44
Alaska	748	200	48	221	
Ariz.	2,038	7,414	167	541	
Ark.	856	89			
Cal.	766	1,155	170		
Colo.	1,400	95	50		
Conn.	15,337	5	5		
Del.	7,500				
D. C.	*	*	*	*	*
Fla.	54,879	20,014			1,093
Ga.	13,439				
Hawaii	2,036	1,534	1,236		40
Ida.	2,196	2,041	*	1,932 (m)	(m)
Ill.	38,924	829	*		
Ind.	13,395	50	12	50	12
Iowa	4,076	60	10		
Kans.	6,125	35	9	12	12
Ky.	4,296	5			
La.	8,827	900	*	595	
Me.	2,487	122	54		
Md.	10,550	4,731	650		
Mass.	6,003	4	4		
Mich.	62,477	776			
Minn.	20	20	20		20
Miss.	626				
Mo.	4,002	1			
Mont.	*	*	*	*	*
Nebr.	988	32			
Nev.	5,790	205	173		
N. H.	1,153	10		77	10
N. J.	4,820				
N. M.	1,690	941			
N. Y.	2,238	26	26		
N. C.	3,584				
N. D.	1,588	41			
Ohio	4,371	133	18	108	118
Oklahoma	5,592	24	15		
Ore.	4,216	8	1		1
Pa.	1,789	2			
R. I.	2,766	273	3		
S. C.	15,074				
S. D.	*	*	*	*	*
Tenn.					
Tex.	334	296			
Utah	1,768	4	4		
Vt.	2,840				
Va.	13,417				
Wash.	204	99	36	92	228
W. Va.	2,043				
Wisc.	4,683	1,387	96	25	10
Wyo.	494	10			
P. R.	5,520	66	15		
V. I.	169				

TABLE 3-8. DIAGNOSTIC BACTERIOLOGY: TUBERCULOSIS

	Specimens	Examinations	Positives	
			Mycobacterium Tuberculosis	Mycobacterium, Atypical
Ala.	48,123	219,410	5,266	450
Alaska	17,600	27,660	552	13
Ariz.	4,208	8,432	310	151
Ark.	12,523	12,860	1,477	469
Cal.	4,570	25,327	407	526
Colo.	*	5,515	78	20
Conn.	5,789	24,732	367	95
Del.				
D. C.	*	*	*	*
Fla.	59,505	178,635	2,131	3,378
Ga.	41,465	182,669	1,287	680
Hawaii	7,600	40,940	114	229
Ida.	*	1,819	29	(n)
Ill.	17,322	74,831	875	347
Ind.	7,879	44,090	518	318
Iowa	1,901	14,054	112	56
Kans	5,839	12,121	362	193
Ky.	9,201	17,791	510	53
La.	*	79,035	1,362	2,293
Me.	3,028	19,031	164	18
Md.	19,999	86,732	1,533	376
Mass	4,561	25,079	322	196
Mich.	*	57,881	*	*
Minn.	13,903	66,777	434	252
Miss.	32,477	138,190	1,166	900
Mo.				
Mont	*	*	*	*
Nebr.	*	2,630	14	28
Nev.	4,626	15,244	570	47
N. H.	1,436	4,534	83	4
N. J.	24,931	81,120	1,634	831
N. M.	8,511	27,299	782	31
N. Y.	5,071	13,931	483	136
N. C.	13,314	27,744	445	228
N. D.	4,178	9,879	108	56
Ohio	16,966	38,158	754	184
Okla.	8,415	26,177	468	90
Ore	5,426	10,793	167	22
Pa.	18,318	37,410	1,296	636
R. I.	1,233	2,301	12	4
S. C.	*	26,371	522	307
S. D.	*	*	*	*
Tenn.	40,722	55,996	3,237	1,515
Tex.	*	33,078	1,381	1,148
Utah	1,341	6,486	83	44
Vt.	3,516	7,504	156	29
Va.	24,679	91,926	1,995	
Wash.	5,250	16,605	139	44
W. Va.	16,871	33,834	501	324
Wisc.	9,391	37,014	639	87
Wyo.	270	624	34	3
P. R.	*	7,783	*	*
V. I.	944	844	3	

TABLE 3-8. DIAGNOSTIC BACTERIOLOGY: TUBERCULOSIS
(Continued)

	Direct Smears	Concentration Smears	Cultures	Subcultures
Ala.		45,956	167,784	1,392
Alaska	10	2,800	16,079	312
Ariz.		3,197	4,040	
Ark.		430	11,935	
Cal.		3,218	11,436	6,389
Colo.	1,685	1,826	1,826	80
Conn.		5,457	17,085	367
Del.				
D. C.	*	*	*	*
Fla.		36,927	126,310	4,972
Ga.	32,408	8,840	137,032	514
Hawaii	20	11,620	27,546	266
Ida.	897 (o)	(o)	922	
Ill.		*	69,288	2,904
Ind.		7,879	31,516	2,019
Iowa	31	1,901	9,505	30
Kans.		5,135	5,839	555 (p)
Ky.	7,939		7,084	1,569
La.	22,034	22,034	29,553	*
Me.	3,025		15,560	99
Md.	481	17,642	60,043	1,296
Mass.		4,561	18,244	518
Mich.		21,551	13,934	
Minn.		8,845	55,612	825
Miss.	32,477		97,431	2,111
Mo.				
Mont.	*	*	*	*
Nebr.		827	1,557	132
Nev.	5	4,345	8,268	984
N. H.		1,436	2,560	
N. J.		23,812	30,533	17,255
N. M.		7,764	17,022	*
N. Y.	150	4,382	4,842	1,218
N. C.		13,314	13,455	*
N. D.		1,235	8,356	144
Ohio	75	15,907	16,966	401
Okla.		8,398	16,410	556
Ore.	59	5,092	5,426	
Pa.	2,523	15,795	15,795	636
R. I.	1,018	1,018	210	16
S. C.		12,494	12,172	451
S. D.	*	*	*	*
Tenn.		1,806	38,916	1,800
Tex.		10,070	10,617	3,907
Utah		1,338	4,023	441
Vt.		3,500	3,516	195
Va.		23,389	67,740	24
Wash.			15,750	
W. Va.		16,871	14,142	1,047
Wisc.	104	7,655	26,817	453
Wyo.		216	408	
P. R.	3,616		4,167	
V. I.	18	294	482	50

TABLE 3-8. DIAGNOSTIC BACTERIOLOGY: TUBERCULOSIS
(Continued)

	Bio-chemical	Animal Inoculations	Referred Cultures	Drug Sensitivity	
				Direct	Indirect
Ala.	3,085	808	40	180	165
Alaska	190		23	8,246	
Ariz.	632		108	455	
Ark.			240	255	
Cal.	4,050		(q)		234
Colo.	70		12	16	
Conn.	1,419		178		226
Del.					
D. C.	*	*	*	*	*
Fla.	9,198		539		689
Ga.	2,873		141	323	538
Hawaii	1,009	64	24		391
Ida.					
Ill.	2,226		85		328
Ind.	2,456	2	218		
Iowa	1,120	93	30		1,344
Kans.	(p)		42		550
Ky.	1,098		70		31
La.	4,048	148			1,218
Me.	165		3	79	100
Md.	6,480	363	43	384 (r)	(r)
Mass.	1,554		113		89 (s)
Mich.		16,803	593		5,000
Minn.	817	75	139		464
Miss.	5,334		(q)		837
Mo.					
Mont.	*	*	*	*	*
Nebr.	102		12		
Nev.	639		300	105	598
N. H.		322			216
N. J.	7,530		317	413	1,260
N. M.	1,992	12	26		483
N. Y.	2,500	428	232	150	29
N. C.	400		130	345	100
N. D.	144				
Ohio	4,010	24	310	65	400
Okla.	556		52		205
Ore.	108				108
Pa.	1,600	242	240	424	155
R. I.	16	16	5		2
S. C.	1,189		65		
S. D.	*	*	*	*	*
Tenn.	12,000		167	1,307	
Tex.	4,332	170	864	780	2,238
Utah	441		48	147	48
Vt.	195	10	10		78
Va.	773				
Wash.	696				159
W. Va.	1,303	206	8		257
Wisc.	888		57		1,040
Wyo.					
P. R.					
V. I.					

TABLE 3-9. DIAGNOSTIC BACTERIOLOGY: ENTERIC EXAMINATIONS

	Specimens	Examinations	Positives
Ala.	3,570	22,108	426
Alaska	2,605	3,321	471
Ariz.	905	1,988	384
Ark.	3,718	5,147	445
Cal.	6,757	21,414	4,729
Colo.	*	4,849	665
Conn.	10,454	62,289	775
Del.	427	1,566 (t)	23
D. C.	*	*	*
Fla.	59,161	180,601	*
Ga.	25,568	132,679	1,707
Hawaii	12,011	35,441	1,678
Ida.	*	1,377	*
Ill.	8,834	27,164	2,599
Ind.	3,315	11,443	506
Iowa	1,487	19,465	124
Kans.	10,256	12,168	898
Ky.	509	2,723	104
La.	*	54,304	1,020
Me.	1,209	5,356	78
Md.	6,950	38,668	570
Mass.	11,431	38,233	1,283
Mich.	*	90,587	*
Minn.	5,598	34,002	827
Miss.	3,465	3,800	247
Mo.	1,293	1,861	215
Mont.	*	*	*
Nebr.	*	394	14
Nev.	185	1,389	39
N. H.	1,358	5,686	794
N. J.	6,060	50,654	1,169
N. M.	4,114	23,079	934
N. Y.	4,107	6,310	294
N. C.	11,279	1,632	816
N. D.	2,578	2,894	228
Ohio	6,711	8,706	2,710
Okla.	3,844	20,596	466
Ore.	2,020	3,468	599
Pa.	*	14,740	2,114
R. I.	2,475	2,651	141
S. C.	*	664	46
S. D.	*	*	*
Tenn.	7,381	8,589	357
Tex.	*	9,648	2,272
Utah	1,814	2,674	*
Vt.	594	820	104
Va.	13,737	15,390	84
Wash.	6,859	7,758	1,229
W. Va.	672	788	59
Wisc.	4,770	23,097	1,030
Wyo.	81	15	6
P. R.	*	2,193	*
V. I.	2,806	3,656	44

TABLE 3-9. DIAGNOSTIC BACTERIOLOGY: ENTERIC EXAMINATIONS
(Continued)

	Primary Cultures	Salmonella Grouping	Salmonella Typing	Referred Cultures	Bacteriophage Typing
Ala.	19,940	1,266		214	
Alaska	2,605	26	26	26	
Ariz.	834	526	225		
Ark.	3,718	256		38	
Cal.	9,120	5,100	3,510	(q)	148
Colo.	3,397	365	365	87	
Conn.	60,270	696	696	319	9
Del.	1,077	30			
D. C.	*	*	*	*	*
Fla.	177,483	1,103	1,337	*	
Ga.	127,850	1,482	1,482	304	90
Hawaii	29,231	1,395	863	923	30
Ida.	1,236	*	*		
Ill.	20,574	1,548	1,548	3,336	67
Ind.	9,945	422	422	481	14
Iowa	17,844	403		1,070	
Kans.	9,603	810	810	617	
Ky.	2,475	75	68	79	
La.	49,356	1,894	1,894		88
Me	4,464	689		93	
Md.	32,730	954	954	1,474	1,759
Mass.	34,294	2,231	1,142	396	
Mich.	88,660		1,536		
Minn.	32,274	284	284	299	
Miss.	3,465	97	97	(q)	5
Mo.	1,293	167	167	88	
Mont.	*	*	*	*	*
Nebr.	184	184		24	
Nev.	920	22		413	
N. H.	4,658	758		80	
N. J.	47,702	322	381	544	
N. M.	20,012	389		172	19
N. Y.	2,224		971	1,568	
N. C.	*	667	667	*	
N. D.	2,578	46			
Ohio	5,084	793	793	1,627	
Okla.	19,220	260	260	355	
Ore.	2,020	425	425	215	
Pa.	12,737	741	741		
R. I.	2,375	139		100	
S. C.	615	40		3	
S. D.	*	*	*	*	*
Tenn.	7,381	133	133	292	41
Tex.	3,595	1,141	1,141	886	54
Utah	1,670	296	296	110	
Vt.	553	104	104	41	
Va.	13,730	618	618	366	
Wash.	3,788	1,010	964	1,017	
W. Va	645	54	54	6	
Wisc.	19,474	1,172	879	588	
Wyo.	6	3	3		
P. R.	1,979	9			
V. I.	2,806				

TABLE 3-9. DIAGNOSTIC BACTERIOLOGY: ENTERIC EXAMINATIONS
(Continued)

	Shigella Grouping	Shigella Typing	Referred Cultures	Enteropathogenic E. Coli:	
				FA	Method Used: Agglutination
Ala.	426		58	191	13
Alaska	82	82	82	363	29
Ariz.		259			144
Ark.	187	187	11	42	708
Cal.	1,900	1,090	(q)	273	273
Colo.	300	300	10		25
Conn.	76	76	48		99
Del.	427				
D. C.	*	*	*	*	*
Fla.	339	339	*		
Ga.	617	617	230		7
Hawaii	1,841	713	343		102
Ida.	*	*		141	*
Ill.	*	*	*	91	*
Ind.	44	44	31		40
Iowa	44		104		
Kans.	88	88	36	5	111
Ky.	15		11		
La.	301	301		112	358
Me.	40		10		60
Md.	482	161			154
Mass.	48	15	11		96
Mich.		391			
Minn.	192	192	52		420
Miss.	127		(q)	14	
Mo.	42	42	23		39
Mont.	*	*	*	*	*
Nebr.	1	1			
Nev.	6		16	6	6
N. H.	50		10	20	110
N. J.	4		18	1,356	327
N. M.	697	546	361		883
N. Y.	340	327	315	565	
N. C.	149	149	*		*
N. D.	40			230	
Ohio	20	11	18		360
Oklahoma.	206	160	10	20	105
Ore.	154	154	55	20	
Pa.	190	190	135		6
R. I.	4			3	30
S. C.	6				
S. D.	*	*	*	*	*
Tenn.	149	149	311		
Tex.	980	980	871		
Utah	99	99	70		34
Vt.	4	4		10	
Va.	32		26		
Wash.	196	196		295	292
W. Va.	5	5	5		14
Wisc.	115	85	37	68	679
Wyo.	3				
P. R.	20				185
V. I.	5	5		420	420

TABLE 3-10. DIAGNOSTIC BACTERIOLOGY: BLOOD CULTURES

	Specimens	Examinations	Positives
Ala.			
Alaska	4	4	3
Ariz.	7	7	3
Ark.	94	*	42
Cal.	41	41	
Colo.	*	6	
Conn.	49	49	5
Del.	20	20	
D. C.	*	*	*
Fla.	151	151	38
Ga.			
Hawaii	682	682	31
Ida.	43	376	4
Ill.	*	50	1
Ind	*	*	*
Iowa	61	366	12
Kans.	236	236	57
Ky.	50	37	5
La.	*	359	4
Me.	8	8	8
Md.	255	255	92
Mass.	46	*	39
Mich.	*	1,031	*
Minn.	226	226	8
Miss.	737	737	
Mo.	86	86	25
Mont.	*	*	*
Nebr.			
Nev.			
N. H.	20	20	2
N. J.	2	2	
N. M.	608	599	9
N. Y.	9	9	5
N. C.	(c)	(c)	(c)
N. D.	415	1,345	18
Ohio	3	3	2
Oklahoma.	18	32	12
Ore.	*	12	*
Pa.	1	1	1
R. I.	9	9	*
S. C.	*	2	1
S. D.	*	*	*
Tenn.	19	19	
Tex	*	49	15
Utah	*	4	*
Vt.	10	10	*
Va.	474	474	10
Wash.			
W. Va.	40	40	5
Wisc.	180	180	1
Wyo.			
P. R.	*	130	1
V. I.	47	47	

TABLE 3-11. DIAGNOSTIC BACTERIOLOGY: SPINAL FLUID CULTURES

	Specimens	Examinations	Positives
Ala.			
Alaska	21	21	15
Ariz.			
Ark.	54	*	7
Cal.	(c)	(c)	(c)
Colo.			
Conn.	3	3	1
Del.	1		
D. C.	*	*	*
Fla.	4	4	2
Ga.	98	98	12
Hawaii	30	100	5
Ida.	*	(c)	(c)
Ill.	*	*	*
Ind.			
Iowa	18	72	10
Kans.	19	19	7
Ky.	3	3	
La.	*	30	
Me.			
Md.	89	89	*
Mass.	36	*	34
Mich.	*	(c)	*
Minn.	71	71	17
Miss.			
Mo.	11	11	11
Mont.	*	*	*
Nebr.			
Nev.			
N. H.			
N. J.	5	5	
N. M.	*	*	*
N. Y.	56	56	11
N. C.	(c)	(c)	(c)
N. D.	181	362	*
Ohio			
Okla.	35	140	22
Ore.	*	3	*
Pa.			
R. I.	1	1	*
S. C.	*	5	2
S. D.	*	*	*
Tenn.			
Tex.			
Utah	*	7	*
Vt.	10	10	*
Va.	13	11	10
Wash.			
W. Va.	20	20	8
Wisc.	35	35	10
Wyo.			
P. R.	*	24	*
V. I.	24	24	

TABLE 3-12. DIAGNOSTIC BACTERIOLOGY: WOUND EXUDATE CULTURES

	Specimens	Examinations	Positives
Ala.			
Alaska	20	20	15
Ariz.			
Ark.	10	10	10
Cal.	(c)	(c)	(c)
Colo.			
Conn.	4	9	9
Del.			
D. C.	*	*	*
Fla.	*	*	*
Ga.			
Hawaii	40	137	28
Ida.	*	(c)	(c)
Ill.	*	*	*
Ind.			
Iowa	357	1,071	357
Kans.	30	30	30
Ky.			
La.			
Me.	41	123	102
Md.	*	*	*
Mass.	575	*	*
Mich.	*	(c)	*
Minn.	161	161	48
Miss.	(c)	(c)	(c)
Mo.	13	13	11
Mont.	*	*	*
Nebr.			
Nev.			
N. H.	30	60	10
N. J.	25	25	25
N. M.	*	*	*
N. Y.	17	17	
N. C.	(c)	(c)	(c)
N. D.			
Ohio			
Oklahoma	30	120	30
Ore.			
Pa.	1	1	*
R. I.	7	7	*
S. C.	*	5	1
S. D.	*	*	*
Tenn.			
Tex			
Utah	*	5	*
Vt.	10	10	*
Va.	15	15	15
Wash.	305	*	*
W. Va.	1	1	1
Wisc.	*	*	*
Wyo.			
P. R.			
V. I.	63	63	15

TABLE 3-13. DIAGNOSTIC BACTERIOLOGY: DENTAL CAVITIES CULTURES

	Specimens	Examinations	Positives
Ala.			
Alaska	2	2	1
Ariz.			
Ark.			
Cal.			
Colo.	*	318	*
Conn.			
Del.			
D. C.	*	*	*
Fla.	2,452	2,452	*
Ga.			
Hawaii	4	38	1
Ida.	*	(c)	(c)
Ill.	*	*	*
Ind.			
Iowa	9	27	4
Kans.			
Ky.			
La.	*	99	*
Me.			
Md.			
Mass.			
Mich.			
Minn.			
Miss.			
Mo.			
Mont.	*	*	*
Nebr.			
Nev.			
N. H.			
N. J.			
N. M.			
N. Y.			
N. C.			
N. D.			
Ohio			
Okla.			
Ore.			
Pa.			
R. I.			
S. C.			
S. D.	*	*	*
Tenn.	1,640	1,640	1,260
Tex.			
Utah			
Vt.			
Va.	145	145	94
Wash.			
W. Va.	463	463	27
Wisc.	*	*	*
Wyo.			
P. R.			
V. I.			

TABLE 3-14. DIAGNOSTIC BACTERIOLOGY: MISCELLANEOUS

	Specimens	Examinations	Positives
Ala.	197	1,043	*
Alaska	1,649	3,248	1,614
Ariz.	425	584	46
Ark.	883	2,094	90
Cal.	1,600	2,035	*
Colo.	*	300	*
Conn.	6,015	17,997	621
Del.	102	113	*
D. C.	*	*	*
Fla.	64,318	64,318	15,327
Ga.	1,418	3,262	*
Hawaii	2,821	42,768	2,415
Ida.	*	6,625	19
Ill.	*	*	*
Ind.	471	390	390
Iowa	662	4,426	662
Kans.	1,025	1,752	908
Ky.	286	286	
La.	*	2,342	*
Me.	148	96	131
Md.	10,106	28,232	*
Mass.	*	401	*
Mich.	*	72,772 (u)	*
Minn.	1,260	1,260	3
Miss.	407	407	135
Mo.	167	314	98
Mont.	*	*	*
Nebr.			
Nev.	66	668	*
N. H.	119	278	*
N. J.	912	1,978	123
N. M.	*	107 (v)	*
N. Y.	*	3,978	*
N. C.	2,974 (w)	2,974 (w)	1,811 (w)
N. D.	6,965	29,479	*
Ohio	*	568	*
Oklahoma	669	4,395	568
Ore.	*	3,469	*
Pa.	*	491	*
R. I.	479	598	405
S. C.	*	19	*
S. D.	*	*	*
Tenn.	1,429	2,858	792
Tex.	*	2,434	*
Utah	522	817	*
Vt.	750	1,648	*
Va.	1,071	1,015	22
Wash.	2,535	1,465	*
W. Va.	258	717	8
Wisc.	11,622	14,403 (x)	*
Wyo.	54	82	9
P. R.	*	741	*
V. I.	1,823	1,823	*

TABLE 3-14. DIAGNOSTIC BACTERIOLOGY: MISCELLANEOUS
(Continued)

	Smears	Cultures	Referred Cultures
Ala.	197	117	474
Alaska		1,649	
Ariz.	87	394	83
Ark.	1,148	883	42
Cal.		70	1,523
Colo.		135	60
Conn.	1	185	548
Del.	25	50	6
D. C.	*	*	*
Fla.	55,423	5,018	3,566
Ga.		1,715	1,547
Hawaii	2,679	35,434	769
Ida.	302	3,960	450
Ill.	*	*	*
Ind.			350
Iowa	264	2,320	648
Kans.		925	436
Ky.	10	15	261
La.	115	409	
Me.	4	46	32
Md.	297	10,106	517
Mass.			356
Mich.		14,494	830
Minn.	17		1,000
Miss.		407 (y)	
Mo.	9	115	167
Mont.	*	*	*
Nebr.			
Nev.	37	163	160
N. H.	119	119	
N. J.	185	900	173
N. M.	*	*	*
N. Y.	1,637	1,637	494
N. C.	*	2,974	*
N. D.		13,110	
Ohio	3	79	474
Okla.	1	4,014	165
Ore.	1,676	1,043	633
Pa.			429
R. I.	8	471	33
S. C.		17	
S. D.	*	*	*
Tenn.	1,429	1,429	
Tex.	758	758	758
Utah		522	270
Vt.	750	750	40
Va.	395	354	53
Wash.			442
W. Va.	258	258	100
Wisc.	*	7,422 (z)	267
Wyo.		54	
P. R.		84	
V. I.	43	665	

TABLE 3-14. DIAGNOSTIC BACTERIOLOGY: MISCELLANEOUS
(Continued)

	Animal Inoculation	Anaerobic Cultures	Antibiotic Sensitivity	Other
Ala.	46	197	12	
Alaska			1,599	
Ariz.		20		
Ark.			21	
Cal.	6			436 (aa)
Colo.		70	35	
Conn.		894		16,369 (bb)
Del.			32	
D. C.	*	*	*	*
Fla.		*	311	
Ga.				
Hawaii		518	3,368	
Ida.			1,913	
Ill.	*	*	*	*
Ind.		40		
Iowa		398	796	
Kans.	3	204	184	
Ky.				
La.	12	312		1,494 (cc)
Me.		14		
Md.	*	10,450	6,862	
Mass.		45		
Mich.			57,448	
Minn.		202		41 (dd)
Miss.				
Mo.		13	10	
Mont.	*	*	*	*
Nebr.				
Nev.		58	250	
N. H.		40		
N. J.	7	657	56	
N. M.	*	*	107	
N. Y.		89	41	80 (ee)
N. C.		*		
N. D.		*	8,584	7,785 (ff)
Ohio		10	2	
Oklahoma		103	112	
Ore.	12	75	30	
Pa.		11	51	
R. I.	56	7	23	
S. C.		2		
S. D.	*	*	*	*
Tenn.				
Tex.	85	50	25	
Utah	4	1	20	
Vt.		10	98	
Va.	2	78	103	30 (gg)
Wash.	8		1,015	
W. Va.	12	50	39	
Wisc.		2,941	3,773	
Wyo.			28	
P. R.			657	
V. I.		15	1,100	

FOOTNOTES. TABLES 3-1 THROUGH 3-14.

- (a) States reporting branch or regional laboratory activities.
- (b) Rabies only.
- (c) Reported with Miscellaneous Bacteriology and included in Table 3-14.
- (d) This includes 359 Beta streptococcal isolations from miscellaneous sources, including referred cultures. Data on this group incomplete due to tornado loss of records. All 359 were checked for Group A by FA procedure; those that were not Group A were grouped by precipitin test.
- (e) Reported with Diphtheria and included in Table 3-2.
- (f) Branch lab figures not available
- (g) Includes Staphylococcus.
- (h) Records not kept on Other Groups or Referred Cultures.
- (i) Specimens for staphylococcus culture other than those from oral and respiratory tract are tabulated under Miscellaneous Bacteriology, Table 3-14.
- (j) Included with Streptococcus totals, Table 3-3.
- (k) Some of these examinations are on T.B. specimens.
- (l) Darkfield examinations performed in local health department clinics are not included.
- (m) FA Direct and Delayed combined. Separate record not kept.
- (n) All follow-up work handled by State T.B. Hospital Laboratory.
- (o) Direct and concentration smears combined.
- (p) Data incomplete due to tornado loss of records.
- (q) Tests done on "Referred Cultures" are counted in appropriate test categories.
- (r) Includes Direct and Indirect.
- (s) Includes only last three months of reporting period.
- (t) Includes 32 antibiotic sensitivity exams not shown in further breakdown.
- (u) Includes wound and spinal fluid cultures.
- (v) Figure represents only antibiotic sensitivity exams of central laboratory. No other figures available.
- (w) Includes blood, spinal fluid and wound cultures, as well as other miscellaneous bacteriology.
- (x) Does not include number of smears, for which figures were not available.
- (y) Kinds of examination not tabulated separately.
- (z) Includes 3,670 urine cultures and 870 PPLO cultures.
- (aa) Serologic identification, 405; Phage Typing, 4; Fluorescent Antibody, 27.
- (bb) Represents 5,013 Research and Development and miscellaneous exams of 2,468 specimens, and 11,356 Research Studies on M typing of streptococci (biochemical and immunological) of 2,870 specimens.
- (cc) Cultures for identification not reported elsewhere.

FOOTNOTES. TABLES 3-1 THROUGH 3-14.
(Continued)

- (dd) Foods for food poisoning.
- (ee) Includes 40 examinations for Neisseria meningitidis and 40 Neisseria sensitivities.
- (ff) Urine examinations.
- (gg) Uroscreen, 26; Donovan bodies, 4.

TABLE 3-15. SANITARY BACTERIOLOGY: WATER SAMPLES

Specimens	Examinations	Coliform MPN	Coliform Confirmed	Membrane Filter	Standard Plate Count
Ala.	31,129	35,471	2,312	1,343	2,179
Alaska	10,911	11,625 (a)	7,064	1,074	3,222
Ariz.	26,469	34,069	26,412 (b)	7,296	174
Ark.	24,270	27,516	18,683	3,820	5,013
Cal.	20,811	29,538 (c)	*	*	*
Colo.	*	24,201	19,462	850	3,750
Conn.	12,468	13,875 (d)	270	270	12,442
Del.	3,726	4,191	465	310	3,416
D.C.	*	*	*	*	*
Fla.	121,486	137,946	16,460	16,460	105,026
Ga.					
Hawaii	8,679	19,777 (e)	8,706	2,279	40
Ida.	*	21,893	18,581	2,618	694
Ill.	*	*	*	*	*
Ind.	33,701	38,542 (f)	2,352	13,516	17,551
Ia.	33,375 (g)	37,578 (g)	33,010	4,203	15
Kans.	(h)				
Ky.	19,421	20,728	1	282	20,425
La.	*	49,231	5,782	5,782	37,667
Me.	(h)				
Md.	42,234 (i)	60,405 (j)	38,098	(k)	4,137
Mass.					2,283
Mich.	56,357	*	*	*	*
Minn.					
Miss.	17,241	23,705 (l)	17,241	5,818	(m)
Mo.	40,772	41,566	66	66	40,706
Mont.	*	*	*	*	*
Nebr.	11,140	804		804	
Nev.	7,871	9,135	446	274	8,415
N.H.					
N.J.	24,285 (n)	35,235 (o)	24,281	9,790	148
N.M.	17,848	2,875	259	2,589	27
N.Y.	*	34,924	17,462	(p)	(m)
N.C.	20,609 (q)	66,202 (r)	20,139		17,462
N.D.	4,729	4,944			4,729
Ohio	46,946	47,593 (s)	199	46,946	180
Oklahoma	31,555	36,086	31,555	3,762	267
Ore.	31,167	21,466	14,332	7,084	769
Pa.	*	76,862	55,080	12,328	50
R.I.	(t)				9,454
S.C.	*	9,666	4,682	87	4,897
S.D.	*	*	*	*	*
Tenn.	19,075	19,075			19,075
Tex.	*	18,604	18,548		56
Utah	21,840	25,072	21,840		3,232
Vt.	9,857	9,857			9,857
Va.	40,377 (u)	9,130 (v)	84	7,379	
Wash.	9,276	13,221 (w)	8,812	2,192	
W. Va.	15,710	20,304 (x)	7,998	1,203	6,994
Wisc.	54,060	53,353		50,261	3,092
Wyo.	6,731	7,252	6,731	521	
P.R.	*	24,300	23,760	(m)	540
V.I.	1,114	1,521	231		1,114
					176

FOOTNOTES FOR TABLE 3-15.

- (a) Includes 283 detergent tests.
- (b) Coliform presumptive tests.
- (c) Examinations not broken down by type. Includes plankton examinations as well as the others listed in the table.
- (d) Includes 28 miscellaneous examinations.
- (e) Includes 30 fecal coliform, MPN, and 30 Enterococci, MPN examinations.
- (f) Includes 2,144 fecal strep examinations and 282 coliform completed examinations not shown in further breakdown.
- (g) Includes 350 examinations for algae and iron bacteria.
- (h) Handled by the Sanitary Engineering Laboratory.
- (i) Water includes drinking water, shellfish waters, river waters, and swimming waters.
- (j) Includes 15,887 E. coli examinations.
- (k) All positive presumptive lauryl sulfate tubes are subjected to the confirmed test.
- (l) Includes 646 fecal coliform MPN examinations not shown in further breakdown.
- (m) Not tabulated.
- (n) Of this total, the Branch Laboratories had 11,133 specimens of potable and shellfish-growing waters, and the Central Laboratory had 13,152 specimens of potable, streams, effluents, and waste waters.
- (o) Includes 1,016 coliform completed examinations (on potable water).
- (p) All samples yielding positive presumptive tests are confirmed.
- (q) In addition, the following examinations were made on sea water: 1,674 specimens; 1,679 coliform tests and 167 E. coli tests.
- (r) Includes 134 microbiology and miscellaneous tests and 45,929 physical tests not shown in further breakdown.
- (s) Includes 1 Salmonella culture.
- (t) Not performed in Division of Laboratories.
- (u) Includes 12,024 specimens from the Branch Laboratories for which no other data was available and which are not included in further breakdown in this table.
- (v) Includes 1,667 coliform completed examinations.
- (w) Includes 1,899 miscellaneous special tests of 232 samples.
- (x) Represents 2,742 Sewage Pollution tests (MPM and membrane filter) and 1,367 tests including completed tests, verified membrane filter tests, algae identification, and O.T. tests for residual chlorine.

TABLE 3-16. SANITARY BACTERIOLOGY: MILK AND CREAM SAMPLES

	Specimens	Exams.	Standard Plate Count	Coliform Count	Bacterial Inhibitors	Direct Microscopic Count
Ala.	48,304	84,503	45,392	22,986	16,125	
Alaska	1,254	2,174 (a)	1,095	1,066		
Ariz.	2,565	4,936	2,437	2,149	303	47
Ark.						
Cal.	772	761	761			
Colo.	*	8,498	4,043	2,023	2,432	
Conn.	20,516	50,013 (b)	12,909	4,597	8,214	
Del.	3,390	3,390	1,754	1,040	596	
D.C.	*	*	*	*	*	*
Fla.	25,472 (c)	52,218 (c)	25,472	19,104	6,368	1,274
Ga.	21,522	42,270	16,160	11,814	14,296	
Hawaii	2,551	5,526 (d)	2,551	978	1,652	
Ida.	*	15,813	6,191	6,292	3,330	
Ill.	*	*	*	*	*	*
Ind.	4,143	9,370 (e)	4,274	3,720	1,328	
Ia.	8,066	27,243 (f)	8,066	4,605	7,650	3,461
Kans.	17,517	39,551	17,327	7,614	14,610	
Ky.	15,209	25,369 (g)	13,615	5,356	776	
La.	*	123,121 (h)	13,158	14,601	20,676	
Me.	(i)					
Md.	15,681	26,162 (j)	9,845	7,303	8,975	
Mass.						
Mich.	15,816	*	*	*	*	*
Minn.						
Miss.	66,791	106,530	66,791	16,188	23,551	
Mo.	3,176	7,967	3,176	2,028	2,763	
Mont.	*	*	*	*	*	*
Nebr.						
Nev.	3,473	5,338	3,512	1,514	312	
N.H.						
N.J.	2,132	4,594	2,132	2,132	330	
N.M.	7,030 (c)	18,747 (c)	7,030	5,599	5,913	205
N.Y.	*	9,688	4,646	4,236	396	410
N.C.						
N.D.	9,172	18,344 (k)	9,172	5,310		
Ohio	331	1,220 (l)	331	318	280	
Okla.	17,053	35,978	17,053	6,292	12,633	
Ore.						
Pa.						
R.I.	(m)					
S.C.	*	6,593	2,901	1,665	2,027	
S.D.	*	*	*	*	*	*
Tenn.	33,983 (c)	49,300 (n)	33,983	10,012	3,701	
Tex.	*	5,610 (c)	2,743	1,372	1,495	
Utah						
Vt.						
Va.	7,584	15,818 (o)	6,375	6,529	1,742	
Wash.	179	499	190	169	140	
W. Va.	5,108	8,151 (p)	1,835	1,424	305	3,165
Wisc.						
Wyo.						
P.R.	*	6,229	4,002	1,018	1,209	
V.I.	293	872 (q)	293	293		

FOOTNOTES FOR TABLE 3-16.

- (a) Includes 13 tests for antibiotics.
- (b) Includes the following tests: leucocyte counts, 8,149; brucella ring tests, 7,643; laboratory pasteurization count, 8,169; Q fever, 247; miscellaneous, 85.
- (c) Includes milk and milk products.
- (d) Includes 345 staphylococcus examinations (phage types).
- (e) Includes 48 coliform confirmations not shown in further breakdown.
- (f) Includes 3,461 thermoduric examinations.
- (g) Includes 5,622 plate loop counts.
- (h) Examinations for milk and milk products. Includes 32,160 oval tube tests; 23,257 mastitis tests, 9,288 butterfat tests, and 9,981 phosphatase tests not shown in further breakdown.
- (i) Handled by the Sanitary Engineering Laboratory.
- (j) Includes 39 yeast and mold plate counts.
- (k) Includes 3,862 penicillin detection exams.
- (l) Includes 291 phosphatase exams.
- (m) Not performed in Division of Laboratories.
- (n) Includes 1,604 WMT examinations.
- (o) Includes 202 coliform completed, and 970 butterfat examinations.
- (p) Includes 1,422 phosphatase tests.
- (q) Includes 286 membrane filter examinations.

TABLE 3-17. SANITARY BACTERIOLOGY: FROZEN DESSERTS

	Specimens	Examinations	Standard Plate Counts	Coliform Counts	Bacterial Inhibitors
Ala.					
Alaska					
Ariz.					
Ark.					
Cal.					
Colo.					
Conn.	1,467	2,934	1,467	1,467	
Del.	24	24	12	12	
D.C.	*	*	*	*	*
Fla.	(a)	(a)	(a)	(a)	(a)
Ga.	14	28	14	14	
Hawaii	998	1,793	998	795	
Ida.	(b)				
Ill.	*	*	*	*	*
Ind.	1,284	2,960 (c)	1,270	1,272	
Ia.	97	194	97	97	
Kans.	1,521	2,982	1,491	1,491	
Ky.					
La.	*	(a)	(a)	(a)	(a)
Me.					
Md.	2,205	4,420	2,202	2,204	14
Mass.					
Mich.					
Minn.					
Miss.					
Mo.	27	54	27	27	
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N.H.					
N.J.	4	8	4	4	
N.M.	(a)	(a)	(a)	(a)	(a)
N.Y.					
N.C.					
N.D.	2,282	4,564	2,282	2,282	
Ohio					
Oklahoma					
Ore.					
Pa.					
R.I.	(d)				
S.C.	*	276	138	138	
S.D.	*	*	*	*	*
Tenn.	(a)	(a)	(a)	(a)	(a)
Tex.	(a)	(a)	(a)	(a)	(a)
Utah					
Vt.					
Va.	7,420	11,567 (e)	3,707	3,706	441
Wash.					
W. Va.					
Wisc.					
Wyo.					
P.R.	*	2,370	790	1,580	
V.I.					

TABLE 3-18. SANITARY BACTERIOLOGY: "OTHER" DAIRY PRODUCTS

	Specimens	Examinations	Standard Plate Count	Coliform Count
Ala.	*	15,687 (f)		
Alaska				
Ariz.				
Ark.				
Cal.				
Colo.				
Conn.	1,001	1,977 (g)	976	988
Del.				
D.C.	*	*	*	*
Fla.	(a)	(a)	(a)	(a)
Ga.	469	938	469	469
Hawaii				
Ida.	(b)			
Ill.	*	*	*	*
Ind.	446	814 (h)	138	265
Ia.	332	664 (i)	332	332
Kans.	2,532	3,627 (j)	1,102	2,501
Ky.	1,673	2,052	1,129	923
La.	*	(a)	(a)	(a)
Me.				
Md.	263	316 (k)	75	241
Mass.				
Mich.				
Minn.				
Miss.				
Mo.	34	55	34	21
Mont.	*	*	*	*
Nebr.				
Nev.				
N.H.				
N.J.	4	8	4	4
N.M.	(a)	(a)	(a)	(a)
N.Y.				
N.C.				
N.D.				
Ohio				
Okla.				
Ore.				
Pa.				
R.I.	(d)			
S.C.	*	20	10	10
S.D.	*	*	*	*
Tenn.	(a)	(a)	(a)	(a)
Tex.	(a)	(a)	(a)	(a)
Utah				
Vt.				
Va.				
Wash.				
W. Va.				
Wisc.				
Wyo.				
P.R.	32	320	160	160
V.I.				

TABLE 3-19. SANITARY BACTERIOLOGY: FOOD SAMPLES

	Specimens	Examinations	Standard Plate Count	Coliform Count
Ala.	122	985	28	
Alaska	38	49	10	8
Ariz.	131	228	51	37
Ark.				
Cal.	171 (1)	257 (m)	17	
Colo.	*	673	258	258
Conn.	437	920 (n)		
Del.	71	426	71	71
D.C.	*	*	*	*
Fla.	1,331	5,151	1,331	1,331
Ga.	999	1,407 (o)		
Hawaii	198	429 (p)	101	8
Ida.	*	660	191	191
Ill.	164	492		
Ind.	1,049	1,742	474	243
Ia.	21	168	63	21
Kans.	105	175	104	39
Ky.	217	968	183	180
La.	*	2,738	483	483
Me.				
Md.	928	*	*	*
Mass.				
Mich.				
Minn.	862	862		
Miss.	19	38		
Mo.	251	297 (q)	7	10
Mont.	*	*	*	*
Nebr.				
Nev.	85	566	109	9
N.H.				
N.J.	265	862	120	156
N.M.	1,172 (r)	674 (r)	163	156
N.Y.				
N.C.				
N.D.				
Ohio	40	138 (s)	18	11
Oklahoma	502	2,199	223	223
Ore.	94	376	94	
Pa.	*	388		
R.I.	407	1,543	397	82
S.C.	*	1,255	374	197
S.D.	*	*	*	*
Tenn.	318	1,399	318	318
Tex.	*	1,073 (t)	40	40
Utah	615	438		
Vt.	40	75	10	10
Va.	10	71		
Wash.	250	170	16	2
W. Va.				
Wisc.	438	438	180	180
Wyo.	4	8		
P.R.	*	2,961	940	940
V.I.				

TABLE 3-19. SANITARY BACTERIOLOGY: FOOD SAMPLES
(Continued)

	Staphylococcal Culture	Enteric Culture	Enterococcus Culture	Anaerobic Culture	Animal Inoculation	Filth
Ala.	102	612	148	74	1	20
Alaska	12	16		1		2
Ariz.	50	61		28		1
Ark.						
Cal.	15	125	15	7	16	*
Colo.	60	60		35		2
Conn.	213	402		213		
Del.	71	71	71			71
D.C.	*	*	*	*	*	*
Fla.	1,331	892	133	67	33	33
Ga.	500	278		15		
Hawaii	121	172	8	6	2	1
Ida.	186		80		9	3
Ill.	164	164		164		
Ind.	200	188		71	17	549
Ia.	21	21	21	21		
Kans.	16	16				
Ky.	52	281	95	29	148	
La.	68	68	68	68		1,500
Me.						
Md.	*	*	*	*	*	*
Mass.						
Mich.						
Minn.		862				
Miss.	19	19				
Mo.	13	35	4	11		
Mont.	*	*	*	*	*	*
Nebr.						
Nev.	97	183	75	93		
N.H.						
N.J.	120	198	70	135	8	55
N.M.	56	170		122	5	2
N.Y.						
N.C.						
N.D.						
Ohio	20	35	9	8	3	
Okla.	358	837	279	279		
Ore.	94	94		94		
Pa.	97	97	97	97		
R.I.	407	407	74	172	4	
S.C.	204	180	170	130		
S.D.	*	*	*	*	*	*
Tenn.	318	318		127		
Tex.	95	95		20	10	
Utah	30	374	30	4		
Vt.	10	10	10	5		20
Va.	34	11	11	15		
Wash.	32	75	8	22	15	
W. Va.						
Wisc.		68		10		
Wyo.	4	4				
P.R.	360	216	360	144	1	
V.I.						

FOOTNOTES FOR TABLES 3-17 - 3-19

- (a) Included with milk and cream, Table 3-16.
- (b) Handled by the Department of Agriculture in Idaho.
- (c) Includes 414 coliform confirmations and 4 enteric cultures not shown in further breakdown.
- (d) Not performed by Division of Laboratories.
- (e) Includes 3253 phosphatase and 460 coliform complete examinations.
- (f) Represents specific gravity tests of dairy products.
- (g) Includes 78 yeast and mold counts not shown in further breakdown.
- (h) Includes 180 yeast and mold counts, 152 enteric cultures, and 79 staphylococci examinations not shown in further breakdown.
- (i) Baby formula.
- (j) Includes 17 sterility tests and 7 whey brucella flocculations.
- (k) Cottage cheese and sour cream.
- (l) Includes only specimens for microbiological examinations. Does not include specimens for filth examinations.
- (m) Includes 5 fluorescent antibody tests and 57 antigenic typings.
- (n) Includes 16 examinations for yeast and mold and 76 identification of species examinations, meat serology, which are not recorded elsewhere in this table.
- (o) Includes 614 pH examinations.
- (p) Includes 9 fungi examinations and 1 for bacterial inhibitors.
- (q) Includes 217 enteric examinations of animal feed.
- (r) Central Laboratory figures only. Branch Laboratory figures not available.
- (s) Includes 24 aerobic cultures and 10 enrichments.
- (t) Includes 40 fecal coliform MPN examinations, 685 lactobacillus counts, and 48 DMC counts of frozen eggs.

TABLE 3-20. SANITARY BACTERIOLOGY: SEA FOOD SAMPLES

	Specimens	Examinations	Standard Plate Count	Coliform MPN	Coliform Count	Fecal Coliform MPN
Ala.	1,516	6,826 (a)	865	1,053	1,053	1,066
Alaska	1	1 (b)				
Ariz.						
Ark.						
Cal.						
Colo.						
Conn.	46	138	46	46		46
Del.	110	330	110	110		110
D.C.	*	*	*	*	*	*
Fla.	77 (c)	185 (c)	54	54		54
Ga.	21	63	21	21		21
Hawaii	22	66	22	22		22
Ida.						
Ill.						
Ind.	78	174	72	60		42
Ia.						
Kans.						
Ky.	13	52	13	13	13	13
La.	*	1,726 (d)	429	429	429	429
Me.						
Md.	1,890	4,674	1,883	922	1,869	
Mass.						
Mich.						
Minn.						
Miss.	312	936	312	312		312
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.	370	1,064	370	370		324
N.M.						
N.Y.						
N.C.	81	510 (e)	89		97	
N.D.						
Ohio	5	17 (f)	4		4	
Okla.	2	6	2	2		2
Ore.						
Pa.						
R.I.	137	308	137	137	34	
S.C.	*	400	63	177	*	160
S.D.	*	*	*	*	*	*
Tenn.						
Tex.	*	84	28	28		28
Utah						
Vt.						
Va.						
Wash.	2,157	2,169 (g)	48	47		47
W. Va.						
Wisc.						
Wyo.						
P.R.						
V.I.	12	70	35		35	

TABLE 3-21. SANITARY BACTERIOLOGY: UTENSIL BACTERIAL COUNTS

	Specimens	Examinations	Standard Plate Counts	Coliform Counts
Ala.				
Alaska				
Ariz.	155	155	*	*
Ark.				
Cal.				
Colo.	*	278	139	139
Conn.	373	373 (h)	201	
Del.		*	*	*
D.C.	*	*	*	*
Fla.				
Ga.	111	111 (i)	*	*
Hawaii	964	1,112	964	148
Ida.	*	1,496	748	748
Ill.				
Ind.				
Ia.	1,371	1,758 (j)	674	*
Kans.	143	143	143	
Ky.				
La.	*	1,239	*	*
Me.				
Md.	1,659	1,667 (k)	*	*
Mass.				
Mich.				
Minn.				
Miss.				
Mo.				
Mont.	*	*	*	*
Nebr.				
Nev.				
N.H.				
N.J.				
N.M.	695	695	*	*
N.Y.				
N.C.				
N.D.	3,428	3,428	*	*
Ohio				
Oklahoma	873	1,095	*	*
Ore.				
Pa.				
R.I.	*	23	*	*
S.C.	*	376	*	*
S.D.	*	*	*	*
Tenn.				
Tex.	*	48	*	*
Utah		(l)		
Vt.				
Va.				
Wash.				
W. Va.				
Wisc.	1,080	1,080	*	*
Wyo.				
P.R.	6,146	6,146	*	*
V.I.	552	1,104	552	552

FOOTNOTES FOR TABLES 3-20 - 3-21

- (a) Includes the following tests not shown in further breakdown: IMVIC, 343; fluid content, 216; shucked, 657; unshucked, 1,407; check specimen, 166.
- (b) Shellfish.
- (c) Examinations of shellfish in Marine Laboratory (Bureau of Sanitary Engineering) not included. Includes 23 chemical toxin (shellfish) examinations.
- (d) Includes 10 examinations for Ciguatera Poisoning.
- (e) Includes 324 miscellaneous tests not shown in further breakdown.
- (f) Includes 1 Staphylococcus culture, 7 Salmonella - Shigella cultures and 1 Anaerobic culture.
- (g) Includes 183 paralytic shellfish toxins and 1,844 special miscellaneous examinations.
- (h) Includes 100 miscellaneous plate counts and 72 broth rinses of 172 specimens for sterility tests on milk, plant equipment and milk containers. In addition, Connecticut performed 156 coliform, MPN tests, 3 membrane filter tests, and 3 standard plate counts on 156 sewage specimens, and 78 miscellaneous tests of 39 specimens, which are not listed elsewhere under "Sanitary Bacteriology."
- (i) Examinations for enteric organisms.
- (j) Includes 430 examinations of plastic ice kools and 674 dish swabs (standard plate counts).
- (k) Includes 521 sterility tests of bottles and cartons.
- (l) Utah reported 102 special studies not included elsewhere under "Sanitary Bacteriology."

TABLE 3-22. MYCOLOGY: DERMATOPHYTES

	Specimens	Examinations	Positives	Microscopic Exams.	Cultures
Ala.	20	120	14	20	100
Alaska	49	52	16	3	49
Ariz.	2	4		2	2
Ark.	343 (a)	24	11	12	12
Cal.	1,091 (a)	2,306 (b)	203	1,088 (a)	1,031 (a)
Colo.					
Conn.	335	15,681	73	15,346	335
Del.					
D.C.	*	*	*	*	*
Fla.	4,255 (a)	8,510 (a)	1,744 (a)	4,255 (a)	4,255 (a)
Ga.	378	379	150		379
Hawaii	1,003	334	352	70	264
Ida.	*	404 (a)	*	55 (a)	349 (a)
Ill.	473	473	151		473
Ind.	692	2,076	249	692	1,384
Ia.	2	4	2	2	2
Kans.	10	20	5	10	10
Ky.	29	40	8	10	30
La.	*	174	87	87	87
Me.	16	164	16	100	64
Md.	1,536 (a)	*	627 (a)	*	*
Mass.	291 (a)	*	9	*	*
Mich.	*	29,270	*	14,635	14,635
Minn.	79	127	23	48	79
Miss.	909 (a)	*	270 (a)	*	*
Mo.	14	28	3	14	14
Mont.	*	*	*	*	*
Nebr.					
Nev.	31 (a)	81 (a)		36 (a)	35 (a)
N.H.					
N.J.	12	84	2	24	60
N.M.	206	412	8	206	206
N.Y.	1,009 (a)	2,018	262	1,009	1,009
N.C.	218 (a)	218 (a)	27	*	218 (a)
N.D.	134	268	4	134	134
Ohio	33	66	33	33	33
Oklahoma	68	826	6	10	816
Ore.	177 (a)	354 (a)	52	177 (a)	177 (a)
Pa.	18	37	3		37
R.I.	6	12	1	6	6
S.C.	*	14	3	9	5
S.D.	*	*	*	*	*
Tenn.	529	529	139		529
Tex.	*	*	50	*	*
Utah	26	52	1	26	26
Vt.	10	*	*	*	*
Va.	16	47	4	26	21
Wash.	70	290	34	75	215
W. Va.					
Wisc.	803	5,621	154	803	4,818
Wyo.	1	2	1	1	1
P.R.	*	20	6		20
V.I.	12	24		12	12

TABLE 3-23 MYCOLOGY: SYSTEMIC FUNGI

	Specimens	Examinations	Positives	Microscopic Examinations	Cultures	Referred Cultures
Ala.	320	1,965	109	320	1,608	37
Alaska	5	5	2		5	
Ariz.	960	2,029	179	955	919	155
Ark.	(c)	2,875	105	1,044	1,749	82
Cal.	(c)	(c)	255	(c)	(c)	968
Colo.						
Conn.	429	470	196		387	83
Del.						
D.C.	*	*	*	*	*	*
Fla.	(c)	(c)	(c)	(c)	(c)	(c)
Ga.	270	374	132		270	104
Hawaii	194	4,018	352	43	266	3,709
Ida.	*	(c)	*	(c)	(c)	*
Ill.	706	1,144	162	438	438	268
Ind.	161	2,481	348	483	1,771	227
Ia.	909 ^b	3,801	382	1,818	1,818	
Kans.	167	346	263	167	167	12
Ky.	159	1,001	81	159	733	109
La.	*	232	116	116	116	
Me.	39	196	39	75	121	
Md.	(c)	*	(c)	*	*	*
Mass.	(c)	*	160	*	*	*
Mich.	*	17,268	*	8,510	8,510	248
Minn.	1,579	3,244	440	1,579	1,579	86
Miss.	(c)	*	(c)	*	*	*
Mo.	47	135	29	47	47	41
Mont.	*	*	*	*	*	*
Nebr.						
Nev.	(c)	(c)	2	(c)	(c)	10
N.H.						
N.J.	51	385	10	102	255	28
N.M.	124	248	49	124	124	(b)
N.Y.	(c)	865	331	221	221	423
N.C.	(c)	(c)	39	*	(c)	*
N.D.	230	460	25	230	230	
Ohio	468	538	385	57	131	337
Oklahoma	179	2,150	72	20	2,064	66
Ore.	(c)	(c)	34	(c)	(c)	
Pa.	*	164	36	*	*	164
R.I.	2,794	2,795	13	2,781 (d)	13	1
S.C.	*	255	34	127	128	
S.D.	*	*	*	*	*	*
Tenn.	1,217	1,273	62		1,217	56
Tex.	*	*	*	*	*	35
Utah	660	1,340	53	660	660	20
Vt.	24	48	24	24	24	
Va.	541	546	188	23	523	
Wash.	170	687	78	173	514	
W. Va.	167	235	45	67	67	100
Wisc.	2,306	20,956	144	2,306	18,448	202
Wyo.	1	2		1	1	
P.R.	*	124	32		54	70
V.I.	10	20	9	10	10	

TABLE 3-24. MYCOLOGY: FA EXAMINATIONS FOR SYSTEMIC FUNGI

	<i>Blastomyces dermatitidis</i>		<i>Coccidioides immitis</i>		<i>Histoplasma capsulatum</i>		<i>Sporotrichum schenckii</i>	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.								
Alaska								
Ariz.								
Ark.								
Cal.								
Colo.								
Conn.								
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.								
Ga.								
Hawaii								
Ida.								
Ill.								
Ind.								
Ia.			5		160		1	
Kans.								
Ky.								
La.								
Me.								
Md.								
Mass.								
Mich.								
Minn.								
Miss.								
Mo.								
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.								
N.J.								
N.M.	*		*	2	*	1	*	
N.Y.								
N.C.								
N.D.								
Ohio							13	13
Okla.								
Ore.	*		*	4	*	1	*	2
Pa.								
R.I.								
S.C.								
S.D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.	*	*	*	*	*	*	*	*
Utah								
Vt.								
Va.								
Wash.								
W. Va.							1	1
Wisc.								
Wyo.								
P.R.								
V.I.								

TABLE 3-25. PARASITOLOGY: INTESTINAL PARASITES

	Specimens	Examinations	Positives
Ala.	18,080	34,981	3,790
Alaska	581	721	30
Ariz.	117	254	14
Ark.	866	1,701	223
Cal.	1,254	3,420	206
Colo.	*	960	57
Conn.	12,966	16,343	2,629
Del.	230	302	6
D.C.	*	*	*
Fla.	124,360	125,628	19,877
Ga.	77,318	77,359	10,533
Hawaii	7,528	18,136	176
Ida.	*	434	10
Ill.	2,130	4,809	386
Ind.	3,331	3,405	697
Ia.	355	585	30
Kans.	5,643	6,433	738
Ky.	3,743	7,022	1,122
La.	*	108,313	17,144
Me.	64	193	5
Md.	10,119	13,173	2,862
Mass.	36	72	9
Mich.	*	7,649	*
Minn.	2,930	5,417	260
Miss.	11,770	11,770	3,221
Mo.	39	78	6
Mont.	*	*	*
Nebr.	*	212	35
Nev.	222	293	*
N.H.	275	245	5
N.J.	980	974	114
N.M.	283	566	13
N.Y.	207	341	32
N.C.	18,480	18,480	3,025
N.D.	834	106	88
Ohio	752	1,597	145
Okla.	2,119	8,804	403
Ore.	565	1,141	46
Pa.	376	589	235
R.I.	271	532	19
S.C.	*	17,516	2,636
S.D.	*	*	*
Tenn.	3,020	3,155	253
Tex.	*	6,403	1,573
Utah	1,547	3,093	216
Vt.	184	224	10
Va.	22,101	22,088	1,867
Wash.	1,164	1,291	160
W. Va.	563	1,138	200
Wisc.	2,844	3,703	422
Wyo.	35	35	
P.R.	*	37,483	8,190
V.I.	6,700	6,807	1,183

TABLE 3-25. PARASITOLOGY: INTESTINAL PARASITES
(Continued)

	Examinations				
	Direct Wet Mount	Concentration Wet Mount	Stained Smear	Pinworm Slide	Culture amebae
Ala.	16,631 (e)	17,471	30	849	
Alaska	465	204	39	13	
Ariz.	79	89	85	1	
Ark.		1,697		4	
Cal.		2,211	1,197	12	
Colo.	320	320	320		
Conn.	354	3,969	3,576	8,444	
Del.	82	82		138	
D.C.	*	*	*	*	*
Fla.	1,243	111,924	25	12,436	
Ga.		56,820	544	19,945	50
Hawaii	7,452	10,608		76	
Ida.	211	183		40	
Ill.	1,793	1,793	403	348	472
Ind.	80	1,263	1,232	825	5
Ia.	15	275	275	20	
Kans.		5,275	790	368	
Ky.	3,348	3,348	75	251	
La.	53,987	53,987		339	
Me.	64	64	64	1	
Md.	3,399	3,398		6,376	
Mass.	36	36			
Mich.	3,814	3,814		21	
Minn.	2,487	2,487		443	
Miss.		11,770		(f)	
Mo.	39	39			
Mont.	*	*	*	*	*
Nebr.		160		52	
Nev.	237	43	13		
N.H.	175	70			
N.J.	3	864	105	2	
N.M.	283	283		*	
N.Y.	156	156		29	
N.C.		18,471		9	
N.D.	*	*	*	106	*
Ohio	752	752	25	68	
Oklahoma	40	2,192	16	52	6,504
Ore.	565	565	10	1	
Pa.	130	220	102	137	
R.I.	261	261		10	
S.C.		17,361		155	
S.D.	*	*	*	*	*
Tenn.		3,020		135	
Tex.	25	6,098	6	269	5
Utah	1,546	1,546		1	
Vt.	6	184	24	10	
Va.		12,283	18	9,787	
Wash.	112	822	34	323	
W. Va.	563	563		12	
Wisc.	918	918	60	1,448	359
Wyo.		35			
P.R.	2,839	34,644			
V.I.		6,663	107	37	

TABLE 3-25. PARASITOLOGY: INTESTINAL PARASITES
(Continued)

		Positives	
	Entamoeba histolytica	Other Protozoa	Helminths
Ala.	52	1,437	2,138
Alaska	*	14	17
Ariz.	*	*	*
Ark.	6	213	4
Cal.	38	84	84
Colo.	*	*	*
Conn.	16	395	2,218
Del.	2	3	
D.C.	*	*	*
Fla.	63	7,506	14,941
Ga.	12	498	10,023
Hawaii	2	42	132
Ida.	*	*	*
Ill.	5	22	
Ind.	10	374	313
Ia.	5	23	2
Kans.	9	629	100
Ky.	12	239	871
La.	135	6,089	10,718
Me.			
Md.	170	873	253
Mass.	8		1
Mich.	*	*	*
Minn.	2	159	62
Miss.	6	1,208	2,007
Mo.		1	5
Mont.	*	*	*
Nebr.	1	34	22
Nev.	*	*	*
N.H.			
N.J.	3	32	79
N.M.	*	*	*
N.Y.	5		27
N.C.		120	1,410
N.D.		50	38
Ohio	3	85	47
Okla.	157	129	117
Ore.	1	9	36
Pa.	6	68	87
R.I.		9	10
S.C.	1		1,563
S.D.	*	*	*
Tenn.	21	126	
Tex.	75	1,262	236
Utah	1	172	43
Vt.	*	*	*
Va.	41	171	1,095
Wash.	2	52	106
W. Va.	1	65	63
Wisc.	40	87	43
Wyo.			
P.R.	117	2,731	5,342
V.I.	4	154	1,025

TABLE 3-26. PARASITOLOGY: TRICHOMONAS

	Examinations of Genital Smears:		
	Specimens	Examinations	Positives
Ala.	23,409	23,409	1,082
Alaska	3	3	2
Ariz.	(g)	77	77
Ark.			
Cal.			
Colo.			
Conn.	(g)	15,331	1,551
Del.		*	*
D.C.	*	*	*
Fla.	54,879	54,879	5,698
Ga.	(g)	13,439	2,722
Hawaii			
Ida.			
Ill.	38,924	38,924	4,969
Ind.	(g)	13,395	1,889
Ia.	133	*	133
Kans.			
Ky.			
La.			
Me.			
Md.	10,550	10,550	833
Mass.			
Mich.	*	261	*
Minn.			
Miss.			
Mo.	4,000	4,000	402
Mont.	*	*	*
Nebr.			
Nev.			
N.H.			
N.J.			
N.M.	*	*	*
N.Y.			
N.C.			
N.D.	47	67	67
Ohio	(g)	(g)	561
Oklahoma	3,358	3,358	46
Ore.			
Pa.	*	3	*
R.I.	2,766	2,766	323
S.C.	*	*	998
S.D.	*	*	*
Tenn.	101	101	14
Tex.			
Utah			
Vt.	10	10	*
Va.			
Wash.			
W. Va.		2,028	196
Wisc.	3,296	3,296	527
Wyo.			
P.R.			
V.I.			

TABLE 3-27. PARASITOLOGY: BLOOD PARASITES

		Microscopic	
	Specimens	Examinations	Positives (h)
Ala.	22	*	
Alaska			
Ariz.			
Ark.	15	13	2
Cal.	8	8	7
Colo.			
Conn.	11	11	4
Del.			
D.C.	*	*	*
Fla.	34	34	3
Ga.	105	105	1
Hawaii			
Ida.			
Ill.	18	18	
Ind.	5	5	5
Ia.	38	76	12
Kans.	4	4	
Ky.			
La.	*	17	
Me.			
Md.	10	*	*
Mass.	*	3	
Mich.	*	11	*
Minn.	15	15	7
Miss.	99	99	2
Mo.	11	11	
Mont.	*	*	*
Nebr.			
Nev.			
N.H.			
N.J.	3	3	2
N.M.			
N.Y.	18	18	13
N.C.	20	20	2
N.D.			
Ohio			
Okla.	30	30	2
Ore.	6	6	
Pa.	1	1	1
R.I.			
S.C.	*	*	13
S.D.	*	*	*
Tenn.	44	44	2
Tex.	*	*	2
Utah	5		
Vt.	2	2	
Va.	11	11	
Wash.	1	1	
W. Va.			
Wisc.	40	40	
Wyo.	*	14	
P.R.	*	152	
V.I.			

TABLE 3-28. PARASITOLOGY: PARASITES AND ARTHROPODS

	Parasites for Identification		Arthropods for Identification	
	Specimens	Examinations	Specimens	Examinations
Ala.	2	2	3	3
Alaska			1	1
Ariz.	6	6		
Ark.	1	1		
Cal.				
Colo.				
Conn.	6	6	22	22
Del.				
D.C.	*	*	*	*
Fla.	60	60		
Ga.	98	98		
Hawaii	5	5		
Ida.			*	6
Ill.	3	3	2	2
Ind.	5	5	21	21
Ia.	6	6	6	6
Kans.	3	3		
Ky.				
La.	*	3		
Me.				
Md.	8	8	1	1
Mass.				
Mich.				
Minn.	26	26	6	6
Miss.				
Mo.				
Mont.	*	*	*	*
Nebr.				
Nev.				
N.H.				
N.J.	5	5		
N.M.	*	*	*	*
N.Y.				
N.C.				
N.D.			25	25
Ohio	9	9	1	1
Okla.	10	10	2	2
Ore.	2	2	12	12
Pa.	5	5	8	8
R.I.	6	6	3	3
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.	60	60		
Utah			1	1
Vt.	3	3		
Va.				
Wash.				
W. Va.	2	2		
Wisc.	14	14	12	12
Wyo.				
P.R.				
V.I.				

FOOTNOTES FOR TABLES 3-22 - 3-28

- (a) Includes Systemic Fungi.
- (b) Includes examinations of Systemic Fungi, and includes 187 animal inoculations not shown in further breakdown.
- (c) Included with Dermatophytes, Table 3-22.
- (d) 2,766 of these smears were routine vaginal or urethral smears (241 candida albicans positives, 229 of which were from microscopic examination and 12 from cultures).
- (e) Salt flotation rather than direct wet mount.
- (f) Included under "concentration wet mount."
- (g) Examination for trichomonas made on smears submitted for Neisseria gonorrhoeae.
- (h) All positives reported represent malaria with the exception of one positive for Filaria reported by Oklahoma.

TABLE 3-29. VIROLOGY

	Total Specimens	Total Examinations	Total Positives
Ala.	108	508	10
Alaska			
Ariz.	1,828	6,124	*
Ark.	333	853	13
Cal.	9,194 ✓	7,860	607
Colo.	409	740	*
Conn.	1,440	3,809	44
Del.			
D.C.	*	*	*
Fla.	18,310 ✓	11,894	109
Ga.	513	3,707	34
Hawaii	829	2,606	89
Ida.	*	2,134	60
Ill.	1,624	5,889	220
Ind.			
Ia.	263 ✓	5,091 ✓	34
Kans.	728	18,231	67
Ky.	398	818	37
La.	*	26,106	3
Me.			
Md.	*	1,946	47
Mass.	768	3,201	23
Mich.	977	10,104	49
Minn.	*	6,835	133
Miss.			
Mo.	118	224	8
Mont.	*	*	*
Nebr.			
Nev.			
N.H.			
N.J.	20,642	115,424	149
N.M.	428	233	*
N.Y.	6,301	16,967	28
N.C.	3,077	3,800	105
N.D.	*	100	*
Ohio	1,560	2,050	44
Okla.	152	351	19
Ore.	459 ✓	354	*
Pa.	2,326	34,934	78
R.I.			
S.C.	84	*	*
S.D.	*	*	*
Tenn.	746	826	81
Tex.	*	34,026	171
Utah	1,285 ✓	921	33
Vt.	83	244	11
Va.	146	284	4
Wash.	580	6,763	35
W. Va.	117	1,399	2
Wisc.	5,207	5,538	208
Wyo.			
P.R.	*	2,631	2
V.I.			

TABLE 3-30. VIROLOGY: HUMAN SOURCE SPECIMENS

	Throat Washings	Fecal	CSF	Blood	Tissue	Miscellaneous
Ala.	6	40	11	15	4	
Alaska						
Ariz.	52	3				
Ark.	18	36	6	99		
Cal.	675	1,075	115	6,554	189	222
Colo.	147	192	23	47		
Conn.	402	786	68	10	110	64
Del.						
D. C.	*	*	*	*	*	*
Fla.	105	1,319	53	8,372	52	
Ga.	121	134	69	11		71
Hawaii	369	202	50	154	38	16
Ida.	*	*	*	*	*	*
Ill.	405	644	225	6	195	149 (a)
Ind.						
Iowa	111	80	36	8	2	6
Kans.	45	580	67	3	8	9
Ky.	73	198	107	3	1	15
La.	*	*	*	*	*	*
Me.						
Md.	*	*	*	*	*	*
Mass.	62	117	70	7	21	57
Mich.	46	856	43		9	23
Minn.	*	*	*	*	*	*
Miss.						
Mo.	15	71	25		3	4
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N. H.						
N. J.	95	1,196	320	1,910	69	
N. M.	14	28	47	319	2	15
N. Y.	3	573	120	1,886	51	282
N. C.	236	126	150	2,424		97
N. D.	*	*	*	*	*	*
Ohio	219	204	123	32	41	29 (b)
Okla.	48	86	7			11
Ore.	179	163	38	5	20	54
Pa.	671	996	352	10	159	55
R. I.						
S. C.	9	58	9	5	1	2
S. D.	*	*	*	*	*	*
Tenn.	56	356	286		31	17
Tex.	*	*	*	*	*	*
Utah	236	368	118	430	34	99
Vt.	32	19	21	1	7	3
Va.	80	41	16	1	6	2 (b)
Wash.	60	226	(c)	(c)	(c)	39
W. Va.	21	64	7		7	18
Wisc.	652	730	189	3,242	76	318
Wyo.						
P. R.	*	*	*	*	*	*
V. I.						

TABLE 3-31. VIROLOGY: ISOLATION ATTEMPTS

	Embryonated Eggs	Monkey Kidney	HEP Cells	HeLa TC	Adult Mice	Suckling Mice	Human Amnion	WI-38	Other
Ala.	20	100		100	124				
Alaska									
Ariz.	156	117							7 (d)
Ark.		186							
Cal.	69	2,016				665			2,522 (e)
Colo.	120	235							
Conn.	91	2,225	1,345						
Del.									
D. C.	*	*	*	*	*	*	*	*	*
Fla.		1,529	1,498		12	229			
Ga.	229	1,687	894						599 (f)
Hawaii	36	829		829			429	400	
Ida.	289	475	334						
Ill.		1,591 (g)	461			15			2,005 (h)
Ind.									
Iowa	38	2,023 (i)	277	786	44	437	1,463		5 (j)
Kans.	468	1,466		8,305	1,132		6,786		
Ky.	62	513		137					
La.	10	363				133	1		
Me.									
Md.	31	941							5 (k)
Mass.	80	354							530 (l)
Mich.		666							
Minn.	70	1,630		1,638					1,640
Miss.									
Mo.		118							
Mont.	*	*	*	*	*	*	*	*	10 (m)
Nebr.									
Nev.									
N. H.									
N. J.	950	6,444	6,444		1,242 (n)				560 (o)
N. M.	7	118							102 (l)
N. Y.	190	1,050				2,163	1,050		1,240 (p)
N. C.	488	1,120		560					13
N. D.		50		50					
Ohio	52	641	65	65	36				
Oklahoma	15	21		115	1				13 (q)
Ore.	154	158							
Pa.	4,094	21,084	349	5,212					1,894
R. I.									
S. C.	*	*	*	*	*	*	*	*	*
S. D.	*	*	*	*	*	*	*	*	*
Tenn.		746							
Tex.	68	1,040	40	1,040		(r)	1,320	200	
Utah	51	552			292				
Vt.	32	110	47						33 (d)
Va.	30	145	81		4			4	
Wash.	102	5,100		450					450 (s)
W. Va.	54	255	62	52	16	37			7 (t)
Wisc.	60	1,828							3,475 (l)
Wyo.									
P. R.	135	1,705		512	26				
V. I.									

FOOTNOTES. TABLES 3-29-31.

- (a) 18 urine, 131 TC fluids.
- (b) Body fluids.
- (c) Included under "Miscellaneous."
- (d) Animal inoculations.
- (e) Human fetal diploid kidney, 2,004; Grivet monkey kidney cell line, 265; Rabbit kidney-13 cells, 246; Primary Grivet monkey, 7.
- (f) Chick embryo tissue culture, 273; animal inoculation, 326.
- (g) Rhesus and African Green.
- (h) H. E. Fibroblast (IDH), 1,593; L-132 (Embryonic lung), 59; T-35, 74; McCoy, 39; KB, 133; RK-13, 71; and BHK-21, 36.
- (i) Monkey kidney: Primary, 1,058 exams; continuous, 848 exams; African Green, 117 exams.
- (j) Rabbit kidney, 3; Guinea Pig, 2.
- (k) PPLO isolation, 1; Rubella isolation, 4.
- (l) Isolations not listed by type.
- (m) Duck embryo.
- (n) Suckling and RW mice.
- (o) DETC.
- (p) Human embryonic lung, 1,050; Diploid human lung, 190.
- (q) Primary monkey kidney.
- (r) Suckling mice are employed for at least 70 percent of virus isolation attempts.
- (s) Human diploid.
- (t) FLAM, 7.

TABLE 3-32. VIROLOGY: IDENTIFICATIONS BY METHOD

	Hemagglutination Inhibition	Hemadsorption Inhibition	Complement Fixation	Tissue Culture Neutralization	Animal Neutralization	FA	Other
Ala.	2	1		7	1		
Alaska						51 (a)	
Ariz.	72	12					
Ark.	22	4	467				
Cal.	81		11	556			
Colo.	121	6	220	38			
Conn.	4		7	137			
Del.							
D. C.	*	*	*	*	*	*	*
Fla.	4		65	40			
Ga.	32	12		139	8		
Hawaii	8	2	21	44	8		
Ida.	19		709			308	
Ill.		36	59	1,055			667 (c)
Ind.							
Iowa							
Kans.	4	4	4	59			
Ky.	5	2	23	76			
La.			228	22	12		
Me.							
Md.	527					442 (d)	
Mass.	10		9	12			
Mich.			9,256	170	12		
Minn.	3			280		1,201 (e)	
Miss.							
Mo.				82		13 (f)	
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.							
N. H.							
N. J.	6	3	6	49			
N. M.		1		2			
N. Y.	12	32	7,063	1,954	397	339	
N. C.	46	181	6	1,272	102		12 (a)
N. D.							
Ohio	4	2	7	38	1		
Okla.	34			152			
Ore.	30			12			
Pa.	166	57		313			1,682 (g)
R. I.							
S. C.	*	*	*	*	*	*	*
S. D.	*	*	*	*	*	*	*
Tenn.			1	79			
Tex.	24	12	6	410	50	1	
Utah	8			17	1		
Vt.	18	4					
Va.	10		3	6			
Wash.	60	60	2	28		256 (e)	
W. Va.	10	6	850	50			
Wisc.	20	2	6	147			
Wyo.							
P. R.				2		251 (h)	
V. I.							

TABLE 3-33. VIROLOGY: ANIMAL SOURCE SPECIMENS

	Total Specimens	Total Examinations
Ala.	32	102
Alaska		
Ariz.	1,773	5,760
Ark.	174	174
Cal.	364	1,257
Colo.		
Conn.		
Del.		
D. C.	*	*
Fla.	8,409	8,409
Ga.	107	107
Hawaii		
Ida.		
Ill.		
Ind.		
Iowa	6	*
Kans.	3	3
Ky.	1	
La.	*	25,337
Me.		
Md.		
Mass.	434	2,206
Mich.		
Minn.	*	112
Miss.		
Mo.	*	1
Mont.	*	*
Nebr.		
Nev.		
N. H.		
N. J.	17,052	99,720
N. M.	3	3
N. Y.	3,386	1,477
N. C.	44	(1)
N. D.		
Ohio	912	1,139
Okla.		
Ore.		
Pa.		
R. I.		
S. C.	*	*
S. D.	*	*
Tenn.		
Tex.	*	29,815
Utah		
Vt.		
Va.	1	1
Wash.	255	255
W. Va.		
Wisc.		
Wyo.		
P. R.		
V. I.		

TABLE 3-34. VIROLOGY: ANIMAL SOURCE EXAMINATIONS

	Horses		Birds		Mosquitoes		Others	
	Spec.	Exam.	Spec.	Exam.	Spec.	Exam.	Spec.	Exam.
Ala.	8	16	4	12	14 (j)	56	6	18
Alaska								
Ariz.			1,773 (k)	5,760				
Ark.							174 (l)	174
Cal.	137	531					227	726
Colo.								
Conn.								
Del.								
D. C.	*	*	*	*	*	*	*	*
Fla.	1	1	289 (m)	289	1,826 (j)	1,826	6,293 (n)	6,293 (n)
Ga.	22	22	6	6	77 (j)	77	2 (o)	2
Hawaii								
Ida.								
Ill.								
Ind.								
Iowa	1	*	1	1			5 (p)	*
Kans.	2	2	1	1				
Ky.			1					
La.	*	12	*	325	*	25,000		
Me.								
Md.								
Mass.			*	1,428	434 (j)	434	*	344 (q)
Mich.								
Minn.	*	112						
Miss.								
Mo.	*	1						
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N. H.								
N. J.	18	342	7,091	35,455	1,776 (j)	23,088	8,167 (r)	40,835 (r)
N. M.	3	3	10	28	2,966	237	410 (j)	1,212 (s)
N. Y.			38	*	6	*		
N. C.								
N. D.								
Ohio			*	4	912 (j)	1,134	*	1
Oklahoma								
Ore.								
Pa.								
R. I.								
S. C.	*	*	*	*	*	*	*	*
S. D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.	*	5	*	37	*	29,763	*	10 (t)
Utah								
Vt.								
Va.			1	1				
Wash.			255	255				
W. Va.								
Wisc.								
Wyo.								
P. R.								
V. I.								

TABLE 3-35. VIROLOGY: SEWAGE

	Specimens	Examinations
Ala.		
Alaska		
Ariz.		
Ark.		
Cal.		
Colo.		
Conn.		
Del.	*	
D. C.		*
Fla.		
Ga.		
Hawaii		
Ida		
Ill.		
Ind.		
Iowa	14	
Kans.	13	
Ky.		
La.		
Me.		
Md.		
Mass.		
Mich.		
Minn.	*	
Miss.		261 (u)
Mo.		
Mont.	*	
Nebr.		
Nev.		
N. H.		
N. J.		
N. M.		
N. Y.		
N. C.		
N. D.		
Ohio		
Okla.		
Ore.		
Pa.	(v)	
R. I.		
S. C.		
S. D.	*	
Tenn.		
Tex.		
Utah		
Vt.		
Va.		
Wash.		
W. Va.		
Wisc.		
Wyo.		
P. R.		
V. I.		

TABLE 3-36. VIROLOGY: TOTAL POSITIVE FINDINGS

	Total Positives	Adenovirus	Bunyamwera	California Complex	Colorado Tick Fever	Coxsackie	Coxsackie A 9	Coxsackie B	Cytomegalic Inclusion Bodies	EEE	ECHO	ECHO 4
Ala.	10	1					2	1		1		
Alaska												
Ariz.	*											
Ark.	13											
Cal.	607	100			14	11	6	12		94	39	
Colo.	*											
Conn.	44	12						2		10		
Del.												
D. C.	*											
Fla.	109	4	11	22			3	5		15	31	
Ga.	34	2							1	7	3	
Hawaii	89	14					6	4	20		7	
Ida.	60								1		1	
Ill.	220	59							12		20	
Ind.												
Iowa	34	1							4			
Kans.	67	9							1	19		17
Ky.	37								32		2	
La.	3											
Me.												
Md.	47	3					1	9		3	22	
Mass.	23							1	2		1	1
Mich.	49	4					1		10		1	
Minn.	133	25						2	8		41	
Miss.												
Mo.	8										2	
Mont.	*											
Nebr.												
Nev.												
N. H												
N. J.	149	9					5			97	11	
N. M.	*											
N. Y.	28	6										
N. C.	105	3					2	4	8		7	2
N. D.	*											
Ohio	44											
Okla.	19								1			1
Ore.	*											
Pa.	78	12						1	19		20	
R. I.												
S. C.	*											
S. D.	*											
Tenn.	81											
Tex.	171	4							3	8		5
Utah	33	1						4	8	14		21
Vt.	11	2						1		1		
Va.	4										1	
Wash.	35	5							4	4		4
W. Va.	2											
Wisc.	208	26						14	15		69	
Wyo.												
P. R.	2									1		
V. I.												
Totals	2,557	302	11	22	21	7	46	35	205	1	131	385
												43

TABLE 3-36. VIROLOGY: TOTAL POSITIVE FINDINGS
(Continued)

	ECHO 6	ECHO 9	Hart-Park	Herpes Simplex	Influenza	LCM	Measles	Mumps	Parainfluenza	Polio I	Polio II	Polio III	Psittacosis	REO
Ala.					1					1	1	1		1
Alaska														
Ariz.														
Ark.														
Cal.	31	91		24	19			5	8	4	3	1		7
Colo.														
Conn.	4				2						3	6		3
Del.														
D. C.														
Fla.			6		4			2	1				1	
Ga.		13			1	3				4				
Hawaii	4	10			6	5		3		1				3
Ida.						15					1			
Ill.	4	61		18	12			3		3	5	4		
Ind.														
Iowa		16			1					4		1		
Kans.					1	3				17				
Ky.	1	1								1				
La.											3			
Me.														
Md.											6			
Mass.		3				9				1				
Mich.	1	10			3	2				2		2		
Minn.	7	6			7	3				4	17	12		
Miss.														
Mo.	1	4									1			
Mont.														
Nebr.														
Nev.														
N. H.														
N. J.					1	6				2	6			
N. M.					6	3	1		2	2				
N. Y.														
N. C.	13	56										3		
N. D.														
Ohio		1	11		1	3					1	1		
Oklahoma					1	1				2		5		5
Ore.														
Pa.				16					8	1				1
R. I.														
S. C.														
S. D.														
Tenn.	1	58			1						4	1		
Tex.	15		20			3				60	3	3		
Utah	8				2	8					1	2		
Vt.					1	4			1	2				
Va.		2			1									
Wash.	1	2				8			1		4	1	1	
W. Va.					40	18		1	4	1				1
Wisc.									2					
Wyo.														
P. R.														
V. I.														
Totals	68	357	37	131	134	1	1	19	28	130	69	51	2	20

TABLE 3-36. VIROLOGY: TOTAL POSITIVE FINDINGS
(Continued)

	Respiratory Syncytial	Rhinovirus	Rocky Mt. Spotted Fever	Rubella	SLE	Turlock	Vaccinia	WEE	Unidentified	Other
Ala.										
Alaska										
Ariz.										
Ark.										
Cal.	19		75				6		3	3 (w)
Colo.									3	3 (x)
Conn.										2 (y)
Del.										
D. C.										
Fla.							4			
Ga.										
Hawaii								6		
Ida.									42 (z)	
Ill.			7				5		7	
Ind.										
Iowa				4					3	
Kans.										
Ky.										
La.										
Me.										
Md.							3			
Mass.								1	3	1
Mich.					8				5	
Minn.								1		
Miss.										
Mo.										
Mont.										
Nebr.										
Nev.										
N. H.										
N. J.						2			10	
N. M.										
N. Y.	3						3		1	1 (aa)
N. C.								7		
N. D.										
Ohio								22	4 (aa)	
Okla.								3		
Ore.										
Pa.										
R. I.										
S. C.										
S. D.										
Tenn.										
Tex.					6		1	2		4
Utah										2 (bb)
Vt.										
Va.										
Wash.										
W. Va.										
Wisc.				16			2			
Wyo.										
P. R.										
V. I.										
Totals	22		110	8			21	17	60	62

TABLE 3-37. VIROLOGY: RABIES

	Specimens	Exams	Positive Specimens	Direct Smears (Sellers)		FRA		Animal Inoculations	
				Exams	Positives	Exams	Positives	Exams	Positives
Ala.	*	*	*	*	*	*	*	*	*
Alaska	70	78	8			70	8	8	8
Ariz.	2,277	4,834	64	1,997	*	1,988	*	849	*
Ark.	1,214	4,448	81	2,224	81	2,224	81		
Cal.	1,817	1,819	75	1	*	1,817	*	1	*
Colo.	*	500	*			341	9	159	2
Conn.	489	1,216	3	489	1	396	3	331	2
Del.	85	255		85		85			
D. C.	*	*	*	*	*	*	*	*	*
Fla.	3,701	7,296	79	3,643	72	3,605	76	48	3
Ga.	2,114	3,945	91	1,751	80	2,098	87	96	16
Hawaii									
Ida.	*	420	26			308	26	112	*
Ill.	3,017	3,244	63			3,017	63	227	63
Ind.	3,551	7,133	115	3,551	61	3,434	52	148	2
Iowa	1,060	1,875	*			1,060	79	815	
Kans.			(cc)						
Ky.	1,345	2,475	89	849	53	881	88	745	10
La.	*	4,547	*	1,690	47	1,829	52	1,028	12
Me.	205	205	16			205	16		
Md.	723	2,161	6	723	6	799	9	639	7
Mass.	*	2,137 (dd)	*	520		526	3	531	3
Mich.	1,903	2,857	*	301	2	1,602	54	954	52
Minn.	*	2,803	57	396 (ee)	16	1,201	56	1,206	56
Miss.	972	1,652	22	680		972	22		
Mo.	1,384	3,196	*	845	77	1,384	143	967	5
Mont.	*	*	*	*	*	*	*	*	*
Nebr.	*	890	*	50	*	834	16	6	4
Nev.									
N. H.	260	931	19	351	10	507	49	73	38
N. J.	2,004	16,510	20	3,910	9	2,746	44	9,854	72
N. M.	519	1,389	20	519	7	510	20	360	6
N. Y.	2,123	5,047	204	2,123	*	2,123	*	801	*
N. C.	900	1,591	3	680	2	905	3	6	1
N. D.	*	916	*	452	18	452	30	12	10
Ohio	3,469	4,952	*	2,328 (ee)	296	2,624	111		
Oklahoma	2,275	4,441	*	2,166	206 (ff)	2,275			
Ore.	287	582	8	287	8	287	8		
Pa.	202	606		202		202		202	
R. I.	150	340	1	150	1	150	1	40	1
S. C.	*	1,047	*	576	*	471	*		
S. D.	*	*	*	*	*	*	*		
Tenn.	3,480	6,169	329	3,480	329	2,689	83		
Tex.	*	8,988	*	4,751	186	4,228	305	9	1
Utah	*	318	2	112	*	103	*	103	*
Vt.	295	369	24	22	3	295	24	52	
Va.	1,468	3,232	188	1,468	188	1,014	57	750	21
Wash.	256	453	5	2	*	256	5	195	1
W. Va.	496	1,460	*	496	29	477	48	487	33
Wisc.	1,597	3,078	56			1,543	54	1,535	45
Wyo.									
P. R.	*	109	*	55	3	11	6	43	10
V. I.									

FOOTNOTES. TABLES 3-32-37.

- (a) Serum neutralization.
- (b) Metabolic inhibition neutralization.
- (c) Rubella interference, 104; Hemadsorption, 563.
- (d) Animal inoculation.
- (e) Rabies.
- (f) Hemagglutination, 5; Hemadsorption, 8.
- (g) Isolation attempts in animals.
- (h) HA
- (i) Included with "Isolation Attempts," Table 3-31.
- (j) Represents pools.
- (k) Includes chickens.
- (l) Rats.
- (m) Includes other animals.
- (n) Blood for arbovirus serology.
- (o) Rats, 1; cows, 1.
- (p) Dogs, 4; cows, 1.
- (q) Mammals, 288; reptiles, 56.
- (r) Represents the following: Amphibian and Reptile - 1,766 specimens; 8,830 exams; non-avian, 5,808 specimens, 29,040 exams; referral from rabies, 593 specimens, 2,965 exams.
- (s) Mammalian species, 393 specimens, 1,162 exams; amphibians and reptiles, 17 specimens, 50 exams.
- (t) Snakes.
- (u) In three cell lines.
- (v) Water - 83 specimens, 83 exams, 1 positive.
- (w) Eaton agent PPLO.
- (x) Varicella zoster.
- (y) Rubeola.
- (z) Leptospiral.
- (aa) California Encephalitis Virus.
- (bb) Rabies.
- (cc) Performed by Veterinary Diagnostic Laboratory, Kansas State University.
- (dd) Includes 560 Direct Smear (Mann's) examinations, with no positives.
- (ee) Direct Smears (Williams).
- (ff) Total rabies positives; not broken down by type of examination.

TABLE 3-38. SEROLOGY: EXAMINATIONS OF BLOOD FOR SYPHILIS

	Specimens	Examinations	VDRL Qualitative		VDRL Quantitative	
			Examinations	Positives	Examinations	Positives
Ala.	348,708	349,336	325,481	15,572	22,426	7,832
Alaska	20,507	20,967	20,500	443	467	299
Ariz.	49,782	54,392	49,033	3,410	3,472	*
Ark.	135,693	114,504	110,251	4,590	4,123	*
Cal.	45,841	54,629	44,956	5,006	5,410	5,410
Colo.	*	139,553	128,789	2,800	2,800	*
Conn.	103,065	114,383	101,824	5,435	5,612	*
Del.	38,288	43,760	38,288	2,736	2,736	2,202
D.C.	*	*	*	*	*	*
Fla.	773,005	831,329	773,005	36,858	54,738	*
Ga.	478,436	490,265	475,023	10,998	10,953	*
Hawaii	27,352	36,151	27,296	1,604	3,244	1,292
Ida.	*	38,492			1,531	630
Ill.	479,524	505,227	201,820	6,323	22,033	18,218
Ind.	157,490	170,991				
Ia.	202,674 ¹⁰⁴	228,522 ¹³⁴	202,674	3,981	3,981	3,981
Kans.	111,018	117,434	111,018	4,331	4,121	2,907
Ky.	138,889	329,946	323,522	4,401	5,343	4,883
La.	*	390,816	217,320	13,799	9,419	9,419
Me.	43,844	48,318	43,844	1,177	1,199	512
Md.	137,446	166,292	44,968	69	10,235	5,712
Mass.	*	453,195				
Mich.	*	403,318	378,634	*	8,734	*
Minn.	180,194	192,407	172,533	5,423	4,603	*
Miss.	212,562	221,270	211,765	8,708	8,708	8,708
Mo.	54,057	72,824	54,057	4,087	7,850	2,705
Mont.	*	*	*	*	*	*
Nebr.	*	105,603	7,645	197	2,480	2,480
Nev.	27,657	30,546	28,043	1,380	1,757	916
N.H.	40,086	40,407	40,086	820	152	109
N.J.	236,778	257,153	236,778	11,784	14,628	*
N.M.	51,284	58,508	51,284	3,902	2,797	*
N.Y.	120,533	135,257	120,408	*	6,951	6,374 (a)
N.C.	340,660	357,499	339,396	12,641	14,338	12,641
N.D.	47,884	48,056	47,392	332	332	*
Ohio	119,118	191,307	111,381	11,040	8,721	*
Oklas.	139,711	149,713	138,460	3,423	7,488	5,344
Ore.	84,832	174,512	84,832	3,294	3,294	*
Pa.	41,645	50,985	40,617	617	4,759	617
R.I.	36,530	40,027	36,530	1,060	753	753
S.C.	*	331,037	312,031	12,930	18,156	*
S.D.	*	*	*	*	*	*
Tenn.	452,503	470,130	452,503	16,907	16,907	16,907
Tex.	*	91,394	75,620	7,729	9,576	*
Utah	90,106	90,378	86,425			
Vt.	40,091	41,211	38,803	1,041	1,041	898
Va.	199,504	205,931	197,757	7,490	5,488	4,623
Wash.	36,016	38,830	35,122	*	3,278	*
W. Va.	37,658	43,624	37,658	2,901	3,781	2,900
Wisc.	216,581	224,195	215,487	4,919	6,305	5,990
Wyo.	12,226	12,551	12,226	292	325	325
P.R.	*	76,967	69,980	6,069	6,069	6,069
V.I.	8,261	9,177	7,992	303	916	*

TABLE 3-38. SEROLOGY: EXAMINATIONS OF BLOOD FOR SYPHILIS
(Continued)

	Kolmer Qualitative		Kolmer Quantitative		Rapid Reagins			
	Exams	Positives	Exams	Positives	USR Exams	Positives	RPR Exams	Circle Card Positives
Ala.	*	*	*	*	*	*	*	*
Alaska								
Ariz.								
Ark.								
Cal.								
Colo.								
Conn.								
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.							200	*
Ga.	1,004	362			1,006	517		
Hawaii								
Ida.			13		6	35,754	*	
Ill.					277,704		15,020	
Ind.	10,072	3,630						
Ia.	12,990	1,523	1,523	1,523				
Kans.	290	139	28	16				
Ky.	191	89	5	2				
La.	161,947	12,188						
Me.	2,474	810						
Md.					1,369			
Mass.						*	105,863	6,398
Mich.								
Minn.	12,687	2,468						
Miss.								
Mo.	7,332	1,979	1,369	190			107	59
Mont.	*	*	*	*			*	*
Nebr.					95,478		2,283	
Nev.								
N.H.			169	88				
N.J.								
N.M.								
N.Y.								
N.C.								
N.D.								
Ohio	3,952	2,576						
Oklahoma	1,251	535	15	8				
Ore.								
Pa.	1,489	563	21	(b)			2,019	109
R.I.			1,987	932				
S.C.								
S.D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.								
Utah	3,112	*						
Vt.								
Va.								
Wash.							220	*
W. Va.	20	9	260	140			280	189
Wisc.								
Wyo.								
P.R.								
V.I.								

TABLE 3-38. SEROLOGY: EXAMINATIONS OF BLOOD FOR SYPHILIS
(Continued)

	KRP(RPCF)		FTA-200		FTA-ABS.		Other	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.					224	137		
Alaska							1,205 (c)	*
Ariz.								
Ark.	130	34	1,887	708				
Cal.								
Colo.	7,380	1,759	584	211	3,378	1,571	885 (d)	302
Conn.			5,608	3,315	1,339	917		
Del.	2,736	2,202						
D.C.	*	*	*	*	*	*	*	*
Fla.	546	*	947	*	1,893	*		
Ga.			816	334	443	205		
Hawaii	3,195	832	1,208	651	1,208	781	1,020 (e)	346
Ida.			585	149	609	170		
Ill.	1,835	658	1,338	513	497	246		
Ind.	854	337					160,065 (f)	10,155
Ia.	4,469	909	225	142	2,660	1,526		
Kans.			1,006	392	671	446	350 (e)	215
Ky.	463	155	213	102	209	121		
La.	2,071	1,244			59	34		
Me.					801	291		
Md.	310	102	2,994	1,714	27	16	526 (d)	255
Mass.	2,255	676			232	106	450,708 (g)	12,570
Mich.	15,373	*	577	*				
Minn.	2,083	522	501	250				
Miss.	620	197			177	119		
Mo.	1,988	1,039	121	67				
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.			426	168	320	158		
N.H.								
N.J.	3,218	*			2,529	*		
N.M.			3,883	1,308	544	204		
N.Y.	6,951	*	414	*	408	*	125 (d)	65
N.C.					3,756	1,994	9 (h)	2
N.D.					332	*		
Ohio	12,294	5,605	2,668	975	199	103	52,092 (i)	9,407
Okla.	1,235	515	1,264	501				
Ore.	891	250			663	364	84,832 (e)	3,294
Pa.	2,080	332						
R.I.	276	75	75	35	6	6	400 (j)	242
S.C.					850	449		
S.D.	*	*	*	*	*	*	*	*
Tenn.			673	430	47	28		
Tex.					6,198	4,523		
Utah			841	*				
Vt.	1,041	266	326	118				
Va.	284	107	351	184	2,051	7		
Wash.							210 (k)	*
W. Va.			260	123	1,365	665		
Wisc.					2,403	993		
Wyo.								
P.R.	553	*			365	*		
V.I.			269	269				

TABLE 3-39. SEROLOGY: EXAMINATIONS OF SPINAL FLUIDS FOR SYPHILIS

Specimens	Examinations	VDRL Qualitative		VDRL Quantitative	
		Examinations	Positives	Examinations	Positives
Ala.	623	1,231	608	15	15
Alaska	147	149	81	2	2
Ariz.	47	60	47	1	8
Ark.	65	116	65	5	5
Cal.	133	298 (1)	129	6	
Colo.	*	682	620	19	19
Conn.	1,051	2,111	1,051	17	17
Del.	140	140	140		*
D.C.	*	*	*	*	*
Fla.	1,149	1,811	1,149	17	17
Ga.	457	591	427	10	10
Hawaii	292	319 (m)		30	1
Ida.	*	253	117	*	
Ill.	1,407	1,764	1,407	23	21
Ind.	1,219	2,487			
Ia.	2,200	3,734	803	13	13
Kans.	461	924	461	13	2
Ky.	522	1,239	519	14	8
La.	*	1,772			8
Me.	637	1,911	637	6	
Md.	1,377	1,412 (n)			396
Mass.	*	8,499 (o)			*
Mich.	*	671	671	*	
Minn.	5,115	13,161	3,424	13	
Miss.	36	72	36		
Mo.	281	633	64	6	6
Mont.	*	*	*	*	*
Nebr.	*	1,637			635
Nev.	115	123	42	1	7
N.H.	502	987	502	5	5
N.J.	2,264	3,612	2,264	*	7
N.M.	*	183	179	8	4
N.Y.	6,613	19,839 (p)			*
N.C.	*	1,939	1,167	28	28
N.D.	444	444	444		
Ohio	739	3,168 (q)	739	51	
Okla.	434	1,615 (r)	422	13	422
Ore.	367	734	367	17	13
Pa.	133	137 (s)			
R.I.	596	1,192	596	8	
S.C.	*	780	634	12	
S.D.	*	*	*	*	*
Tenn.	1,226	1,616	1,226	31	31
Tex.	*	166	158	8	31
Utah	*	561			31
Vt.	*	1,568	784	3	
Va.	637	946	697	40	32
Wash.	1,060	1,061	1,054	*	2
W. Va.	111	222	111	6	*
Wisc.	1,717	1,879 (t)			13
Wyo.	27	61	24		1
P.R.					
V.I.	9	9	9		

TABLE 3-39. SEROLOGY: EXAMINATIONS OF SPINAL FLUIDS FOR SYPHILIS
(Continued)

	<u>Kolmer Qualitative</u> Exams	<u>Positives</u>		<u>Kolmer Quantitative</u> Exams	<u>Positives</u>	Total Protein Exams	Colloidal Tests
Ala.						608	
Alaska							66
Ariz.						5	
Ark.						46	
Cal.						2	
Colo.	19	19		19	19	5	34
Conn.						1,001	
Del.							42
D.C.	*	*	*	*	*	*	*
Fla.						645	
Ga.						154	
Hawaii						5	
Ida.						136	
Ill.						336	
Ind.	1,219	97		295	60		
Ia.	1,459	36		1,459	36		973
Kans.						461	
Ky.	513	95		33	25	166	
La.				1,055	29	95	
Me.	637	3					622
Md.				981	40		637
Mass.							
Mich.							
Minn.	4,859	47				2,084	
Miss.						36	
Mo.				281	14	280	
Mont.	*	*	*		*	*	
Nebr.						400	
Nev.						2	
N.H.						124	
N.J.						1,341	
N.M.							
N.Y.						6,613	
N.C.						744	
N.D.							
Ohio	633	83				562	
Oklahoma	12					408	
Ore.						367	
Pa.	16	*		117	10		
R.I.	596	8					
S.C.						39	
S.D.	*	*	*		*	*	
Tenn.						359	
Tex.							
Utah	255	*		248	*	58	
Vt.						784	
Va.						217	
Wash.							
W. Va.						111	
Wisc.						251	
Wyo.						10	
P.R.							26
V.I.							

FOOTNOTES FOR TABLES 3-38 AND 3-39

- (a) This figure represents total positives.
- (b) Included with "qualitative" positives.
- (c) Check specimen, 1,175; Homocystinuria, 30.
- (d) TPI.
- (e) Kline Standard.
- (f) Represents the following: Mazzini Qualitative, 156,240 exams, 6,404 positives; Mazzini Quantitative, 3,825 exams, 3,751 positives.
- (g) Represents the following: Hinton qualitative, 434,908 tests with 6,556 positives; Hinton quantitative, 12,923 tests with 5,984 positives; and Davies-Hinton Micro Floc., 2,877 tests with 30 positives.
- (h) Darkfield microscopy.
- (i) Kline qualitative, 48,271 examinations, 6,521 positives; Kline quantitative, 325 examinations; Mazzini, 3,475 examinations, 2,883 positives; Kahn, 21 examinations, 3 positives.
- (j) Hinton, which was discontinued in November 1966.
- (k) RPR Teardrop.
- (l) Includes the following: FTA-ABS, 114 exams, 18 positives; TPI, 19 exams, no positives.
- (m) Includes 256 KRPF quantitative, 9 positives and 28 Gum mastic examinations not shown in further breakdown.
- (n) Includes 35 TPI (CDC) tests with 2 positives.
- (o) Represents Hinton quantitative examinations, with 90 positives reported.
- (p) Includes 6,613 Cardiolipin CF examinations with 187 positives. New York also reported 733 latex slides, *H. influenzae* meningitis, and 364 latex slides, cryptococcus meningitis, spinal fluid exams which are not reported elsewhere.
- (q) Includes 658 Kline examinations with no positives and 576 Kolmer Reiter Protein exams with no positives.
- (r) Includes 12 RPCF exams with no positives
- (s) Includes 4 RPCF exams with 2 positives not shown in further breakdown.
- (t) Includes 8 FTA-ABS exams with 2 positives.

TABLE 3-40. SEROLOGY: BACTERIAL

Specimens	Examinations	Typhoid			
		H Antigens		O Antigens	
		Examinations	Positives	Examinations	Positives
Ala.	255	255			
Alaska	6,052	1,465	154	154	14
Ariz.	103	320	43	42	2
Ark.	1,320	5,874	612 (a)	15 (a)	(a)
Cal.	787	2,262 (b)	363	58 (a)	363
Colo.	*	710	55	54	(a)
Conn.	9,301	16,280 (c)	22	14	484
Del.	21	110	21	21	75
D.C.	*	*	*	*	*
Fla.	2,332	8,303		2,332	39
Ga.	6,690	12,371 (d)	1	1,732	1
Hawaii	2,921	3,254	111	111	8
Ida.	*	6,924	1,317	7 (a)	1,318
Ill.	13,439	28,602	2,732	2,732	72
Ind.	3,025	15,338	57	3,019	187
Ia.	20,490	32,972	3,376	3,376	238
Kans.	8,003	18,101		2,091	25
Ky.	842	4,478	682	682	6
Ia.	*	6,054	1,620 (a)	83 (a)	(a)
Me.	1,618	3,483	276	276	2
Md.	4,909	6,144			
Mass.	5,157	8,770	820	820	(a)
Mich.	*	8,557	636	636	82
Minn.	*	22,652	1,589	1,589	(a)
Miss.	1,319	2,999		774	2
Mo.	531	3,525	531	531	3
Mont.	*	*	*	*	*
Nebr.	*	18,535		5,029	40
Nev.	244	733	75	75	*
N.H.	163	840	163	163	13
N.J.	*	5,496			
N.M.	1,133	2,701	678	678	*
N.Y.	*	5,197 (e)	285	285	
N.C.	2,052	5,638	71	71	
N.D.	5,416	24,527	5,416	5,416	
Ohio	1,167	5,233 (f)	170	627	37
Oklahoma	1,959	6,192	924	924	7
Ore.	3,627	5,718	350	350	7
Pa.	150	470	71	73	*
R.I.	48	353	41	41	
S.C.	*	6,218	961	343	
S.D.	*	*	*	*	*
Tenn.	3,050	9,274	1,881	202	
Tex.	*	1,506		201	13
Utah	11,012	11,754	126	126	*
Vt.	1,539	15,753	1,539	1,539	26
Va.	5,015	18,484		2,777	97
Wash.	3,951	8,330	1,468	1,468	*
W. Va.	164	538	63	63	1
Wisc.	24,830	29,270	562	562	7
Wyo.	546	1,527	222	222	3
P.R.	*	2,147	27	49	18
V.I.	436	884	2	2	*

TABLE 3-40. SEROLOGY: BACTERIAL
(Continued)

	Paratyphoid A		Paratyphoid B		Brucella		P. tularensis	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.					95	5	107	4
Alaska	151		151	1	162	1	126	1
Ariz.	43		42	4	50	2	8	
Ark.	522	1	522	8	1,308	11	1,307	103
Cal.	49	5 (g)	49	(g)	330	6	43	3
Colo.	54	38			75	9	25	6
Conn.	21	11	28	15	168	24	16	
Del.	21		21		21			
D.C.	*	*	*	*	*	*	*	*
Fla.					2,332	6	233	2
Ga.					1,876	34	1,713	4
Hawaii	111		111	2	81	3	2	
Ida.			1,356	1	1,410	7	89	7
Ill.					5,058	184	2,819	132
Ind.	60	5	60	6	3,009	4	3,009	47
Ia.	618	19	618	53	16,149	1,715	120	36
Kans.					5,816	53	5,816	146
Ky.	682	1	682	6	701	12	15	3
La.	13	1	13	1	1,662	35	200	34
Me.	276	10	276	12	274	2	2	
Md.					725	40	440	59
Mass.	40	1	820	5	951	13	33	5
Mich.	636	1	672	35	1,050	8	127	
Minn.	62		1,589	399	4,923	178	366	8
Miss.					774	25	774	19
Mo.					531	6	531	4
Mont.	*	*	*	*	*	*	*	*
Nebr.			4,753	56	4,944	51		
Nev.	62	*	62	*	61	*	48	*
N.H.	163	13	163	13	163	2	10	
N.J.					411 (h)	6	(h)	
N.M.	79	*	79	*	708	*	44	*
N.Y.					328	41	163	3
N.C.	14 (i)				579	8	561	3
N.D.					5,416		15	
Ohio	50	1	55	1	868	7	65	5
Okla.			924	1	1,257	29	735	23
Ore.	350		350		364	2	34	6
Pa.	62	*	62	*	84	*	20	*
R.I.	32		41		37			
S.C.	676	57			683	8	93	9
S.D.	*	*	*	*	*	*	*	*
Tenn.	242	3	242	24	1,881	15	1,881	22
Tex.					235	28	223	9
Utah			76	*	2,565	*	2,529	*
Vt.	1,539	7	1,539	14	1,539	6	7	
Va.			2,780	284	3,515	87	2,552	29
Wash.					1,468	*	89	
W. Va.	63		63		103		40	
Wisc.			562	11	3,610	12	3,592	15
Wyo.			212	6	272		294	25
P.R.	33	2	31		41	1	1	
V.I.	2	*	2	*	2	*	2	*

TABLE 3-40. SEROLOGY: BACTERIAL
(Continued)

	OX-19		Weil Felix		OX-K	
	Examinations	Positives	Examinations	Positives	Examinations	Positives
Ala.						
Alaska	153		153		153	
Ariz.	52	2				
Ark.	419	1	419	11		
Cal.						
Colo.	52	7	52	7	52	7
Conn.						
Del.	3		1		1	
D.C.	*	*	*	*	*	*
Fla.	233	4				
Ga.	1,790	8				
Hawaii	62	4				
Ida.	12		11		11	
Ill.	1,195	66	1,195	6	1,195	7
Ind.	1,682	126	31	5	31	2
Ia.	169	20	169	4	169	4
Kans.	9					
Ky.	696	4	14		14	4
La.	1,630	7				
Me.	11		11		11	
Md.	368	168	145	31	6	1
Mass.	43	3	43		43	
Mich.						
Minn.	287	44	287	52		
Miss.	24	3				
Mo.	306	6	306		306	
Mont.	*	*	*	*	*	*
Nebr.	7					
Nev.	51	*	51	*	51	*
N.H.	5		5		5	
N.J.	(j)	30	(j)	*	(j)	
N.M.	8	*	8	*	2	*
N.Y.	194	32	5		3	2
N.C.	439	3	435		4	
N.D.						
Ohio	97	14	78	10	80	3
Okla.	891	2				
Ore.	17		17			
Pa.	36	*	31	*	31	*
R.I.	1					
S.C.	177	24				
S.D.	*	*	*	*	*	*
Tenn.	1,881	12				
Tex.	317	14				
Utah	1,637	*				
Vt.	1,539	6	1,539	3	1,539	9
Va.	2,596	164	153	20		
Wash.	30	*	3	*	8	*
W. Va.	62	11	8		3	
Wisc.	52		52		52	
Wyo.	25					
P.R.	37	8				
V.I.	2	*				

TABLE 3-40. SEROLOGY: BACTERIAL
(Continued)

	INFECTIOUS MONONUCLEOSIS							
	Sheep Cell Agglutination		Absorption		Ox Cell Hemolysin		Beef Cell Absorption	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.								
Alaska	17	3	17	3			17	3
Ariz.	5		5				5	
Ark.	687 (k)	57 (k)	(k)	(k)			(k)	(k)
Cal.	172	13 (1)	*	*			*	*
Colo.	121	71	121	71				
Conn.	8,202	2,739	2,862	2,119	1,862	658		
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.	2,332	296						
Ga.	4,441	550	524	*				
Hawaii	390	50	76	6			76	
Ida.	1,026	*	82	61				
Ill.	10,620	1,147	823 (m)	1,147				
Ind.	2,171	148	2,171	148				
Ia.	4,190	809	809	809				
Kans.	2,806	310	273	201	819	138	273	201
Ky.	224	43	43	31			43	1
La.	813	386	*	*				
Me.	1,324	741	741	690				
Md.	1,644	604	564	296				
Mass.	5,157	997	*	*				
Mich.	3,790	1,053	65					
Minn.	11,112	3,273						
Miss.	544	36						
Mo.	439	154	44	29				
Mont.	*	*	*	*	*	*	*	*
Nebr.	2,965	560	807	563				
Nev.	80	4						
N.H.								
N.J.	3,671	278	278	261			278	261
N.M.					152	*		
N.Y.	1,853	508	508	*				
N.C.	1,526	107	*	107				
N.D.	5,416	216	216					
Ohio	855	389			779	515		
Oklahoma	381	40						
Ore.	2,767	674	674	694				
Pa.								
R.I.	158	18	1				1	
S.C.	3,654	487	*	287				
S.D.	*	*	*	*	*	*	*	*
Tenn.	771	97	97	97				
Tex.	60	16	16	15			16	15
Utah	3,542	*	362	*			362	*
Vt.					2,764	641		
Va.	2,921	846	256	256	501	400	286	183
Wash.	1,090	*	72	*			72	*
W. Va.	63	7	7	7				
Wisc.	7,310	2,436	2,436	2,182	776	242		
Wyo.	255	25	25	21				
P.R.	103	6	25	2			24	
V.I.								

TABLE 3-40. SEROLOGY: BACTERIAL
(Continued)

Eaton Agent (Cold Agglutination)			Leptospiral		Antistreptolysin O		C-Reactive Protein	
	Examinations	Positives	Examinations	Positives	Examinations	Positives	Examinations	Positives
Ala.		53						
Alaska					57	52		
Ariz.					25			
Ark.			78	3				
Cal.	496	23	393	2				
Colo.	1	1						
Conn.	1,796	313			48			
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.			841	24				
Ga.	65	13	164	7				
Hawaii	5		2,118	99				
Ida.			292	42				
Ill.	91	6	142	9				
Ind.			38					
Ia.			2,098	38	151	72	151	19
Kans.			19	4	179	*		
Ky.								
La.			75	17	12	*	16	*
Me.			5	1				
Md.	86	*	144	7	2,022	*		
Mass.								
Mich.	636	22	309					
Minn.					424		424	
Miss.			37	2	72	*		
Mo.								
Mont.	*	*	*	*	*	*	*	*
Nebr.			30	6				
Nev.					54	*	63	*
N.H.								
N.J.	119	7	386	6	353	*		
N.M.			*	*	265	*		
N.Y.			336	10	334	*	367	*
N.C.	38		159	7	1,133	580	608	80
N.D.	230	85			2,397		5	
Ohio	352	57	972	36				
Okla.	63	19	64	7	28		1	
Ore.	348	7	97	3				
Pa.								
R.I.								
S.C.			4					
S.D.	*	*	*	*	*	*	*	*
Tenn.	320	32	78	3				
Tex.			285	37	153	127		
Utah	131	*	44	*	248	*	6	*
Vt.			670	1				
Va.			147	10				
Wash.	50	9	100	*	2,412	*		
W. Va.								
Wisc.	945	99	72	8	5,518	502	3,169	540
Wyo.								
P.R.	131	34	15	4	1,020		610	119
V.I.					434	*	436	*

FOOTNOTES FOR TABLE 3-40

- (a) Includes both H and O Antigens.
- (b) Includes 4 examinations for Streptobacillus moniliformis, with no positives. Number of positive exams by serologic procedures are not tabulated. The number of individuals reported as positive by type of agent or disease tested are tabulated.
- (c) Includes 118 Eaton Agent-Isolations, no positives; and 701 Evaluations of Mono Test Reagents.
- (d) Includes 65 Streptococcus MG examinations with 3 positives.
- (e) Includes 536 Rheumatoid arthritis examinations with 82 positives.
- (f) Includes 182 Typhoid Vi Hemagge tests with 42 positives; 1 Salmonella Group B test with 0 positives; and 2 Salmonella Group C and E tests with 0 positives.
- (g) Includes both A and B.
- (h) Represents febrile agglutinations.
- (i) Represents Paratyphoid O, 7 exams; Paratyphoid H, 7 exams.
- (j) Listed as febrile agglutinations with "Brucella."
- (k) Sheep cell agglutination, guinea pig kidney absorption, and beef cell absorption combined.
- (l) Specimens positive for Infectious Mononucleosis following guinea pig kidney and beef cell absorption.
- (m) Central laboratory figures only. Figures for branch laboratories not available.

TABLE 3-41. SEROLOGY: FUNGAL

	Total Specimens	Total Examinations	Total Positives
Ala.	724	2,896	*
Alaska	2	3	1
Ariz.	4,619	8,901	953
Ark.	808	3,232	219
Cal.	2,753	8,259	687
Colo.			
Conn.			
Del.			
D.C.	*	*	*
Fla.			
Ga.	569	2,276	50
Hawaii			
Ida.			
Ill.	3,236	9,076	981
Ind.	1,212	3,675	1,014
Ia.	972	3,888	559
Kans.	539	2,156	131
Ky.	1,221	5,822	444
La.	*	3,495	317
Me.			
Md.	310	(a)	(a)
Mass.			
Mich.	*	6,272	519
Minn.	1,267	4,050	187
Miss.	1,781	5,432	861
Mo.	1,229	4,834	308
Mont.	*	*	*
Nebr.			
Nev.			
N.H.			
N.J.			
N.M.			
N.Y.	1,268	4,094	303
N.C.	325	1,343	70
N.D.			
Ohio	712	6,465	1,716
Okla.			
Ore.			
Pa.			
R.I.			
S.C.			
S.D.	*	*	*
Tenn.	3,188	3,188	610
Tex.	*	8,480	881
Utah			
Vt.	37	113	3
Va.	670	2,679	159
Wash.	178	(a)	(a)
W. Va.	93	320	17
Wisc.	1,285	2,570	57
Wyo.			
P.R.			
V.I.			

TABLE 3-41. SEROLOGY: FUNGAL
(Continued)

	BLASTOMYCOSIS		CF Blastomycin	
	CF Yeast Exams	Positives	Exams	Positives
Ala.	724	*		
Alaska	2	1		
Ariz.				
Ark.			808	68
Cal.				
Colo.				
Conn.				
Del.				
D.C.	*	*	*	*
Fla.				
Ga.	569	24		
Hawaii				
Ida.				
Ill.	1,311	119		
Ind.	1,181	581		
Ia.			972	145
Kans.	539	64		
Ky.	1,402	62		
La.	503	47	503	47
Me.				
Md.				
Mass.				
Mich.	1,568	50		
Minn.	783	21		
Miss.	1,781	295		
Mo.	1,229	187		
Mont.	*	*	*	*
Nebr.				
Nev.				
N.H.				
N.J.				
N.M.				
N.Y.	942 (b)			
N.C.	325	14	325	22
N.D.				
Ohio			712	197
Okla.				
Ore.				
Pa.				
R.I.				
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.	2,120	385		
Utah				
Vt.			2	
Va.	670	71		
Wash.				
W. Va.			67	2
Wisc.	433	2		
Wyo.				
P.R.				
V.I.				

TABLE 3-41. SEROLOGY: FUNGAL
(Continued)

	COCCIDIOIDOMYCOSIS:		HISTOPLASMOSIS:			
	Exams	CF Positives	Exams	CF Yeast Positives	Exams	CF Histoplasmin Positives
Ala.	724	*	724	*	724	*
Alaska				1		
Ariz.	4,410 (c)	827	103	15	103	11
Ark.	808	4	808	106	808	41
Cal.	2,753	302	2,753	183	2,753	202
Colo.						
Conn.						
Del.						
D.C.	*	*	*	*	*	*
Fla.						
Ga.	569	4	569	7	569	15
Hawaii						
Ida.						
Ill.	1,293	5	3,236	686	3,236	171
Ind.	70	2	1,212	415	1,212	16
Ia.	972	24	972	278	972	112
Kans.	539	3	539	32	539	32
Ky.	1,269	3	1,672	270	1,479	109
La.	503	3	993	110	993	110
Me.						
Md.						
Mass.						
Mich.	1,568	49	1,568	311	1,568	109
Minn.	859	6	1,204	134	1,204	26
Miss.	89	1	1,781	565 (a)	1,781	(a)
Mo.	1,229	6	1,188	89	1,188	26
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.						
N.M.						
N.Y.	(e)		942 (e)	269		
N.C.	43	5	325	18	325	11
N.D.						
Ohio	707	64	2,520	935	2,526	520
Okla.						
Ore.						
Pa.						
R.I.						
S.C.						
S.D.	*	*	*	*	*	*
Tenn.					3,188	610
Tex.	2,120	82	2,120	249	2,120	165
Utah						
Vt.	37		37	3	37	
Va.	670		670	68	669	20
Wash.						
W. Va.	67	1	93	7	93	7
Wisc.	433	2	852	30	852	23
Wyo.						
P.R.						
V.I.						

TABLE 3-42. SEROLOGY: PARASITOLOGICAL

	Specimens	Exams	TRICHINOSIS				Cholesterol			
			Bentonite Flocculation		Latex		Flocculation			
			Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.										
Alaska	9	7	3	2						
Ariz.										
Ark.										
Cal.	131	135			135	7				
Colo.										
Conn.	101	101 (f)								
Del.										
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.	345	690								
Ga.										
Hawaii										
Ida.										
Ill.	1,009	1,009								
Ind.	106	92							20	3
Ia.	258	264							61	12
Kans.										
Ky.										
La.	*	33								
Me.	2	2								
Md.	*	87			87	15				
Mass.	(a)									
Mich.										
Minn.	794	1,240								
Miss.	12	12								
Mo.										
Mont.	*	*	*	*	*	*	*	*	*	*
Nebr.										
Nev.										
N.H.										
N.J.	*	194							194	15
N.M.										
N.Y.	*	760			190 (g)	19 (g)			(g)	(g)
N.C.	315	496								
N.D.										
Ohio	154	154 (h)								
Oklahoma										
Ore.	17	17	17	*						
Pa.	26	26	26	*						
R.I.										
S.C.										
S.D.	*	*	*	*	*	*	*	*	*	*
Tenn.										
Tex.	*	1,317			73	8				
Utah	1	1			1	1				
Vt.										
Va.	98	98	98	2						
Wash.	23	23							23	*
W. Va.										
Wisc.	495	548			65	2				
Wyo.										
P.R.										
V.I.										

TABLE 3-42. SEROLOGY: PARASITOLOGICAL
(Continued)

	TOXOPLASMOSIS		FA Inhibitions	
	Dye Test Examinations	Positives	Examinations	Positives
Ala.				
Alaska			4	
Ariz.				
Ark.				
Cal.				
Colo.				
Conn.			33	14
Del.				
D.C.	*	*	*	*
Fla.	345 (i)	141		
Ga.				
Hawaii				
Ida.				
Ill.	1,009	419		
Ind.	64	13		
Ia.	189	42		
Kans.				
Ky.				
La.			33	14
Me.				
Md.				
Mass.				
Mich.				
Minn.	794 (j)	242		
Miss.	(k)			
Mo.				
Mont.	*	*	*	*
Nebr.				
Nev.				
N.H.				
N.J.				
N.M.				
N.Y.				
N.C.			570	134
N.D.	(l)			
Ohio				
Okla.				
Ore.				
Pa.				
R.I.				
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.	1,196	613	48	25
Utah				
Vt.				
Va.				
Wash.				
W. Va.				
Wisc.	430	122	53	5
Wyo.				
P.R.				
V.I.				

TABLE 3-42. SEROLOGY: PARASITOLOGICAL
(Continued)

/	ECHINOCOCCOSIS: Bentonite Flocculation		SCHISTOSOMIASIS: Cholesterol-lecithin Flocculation		FA	
	Exams	Positives	Exams	Positives	Exams	Positives
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.						
Colo.						
Conn.						
Del.	*	*	*	*	*	*
D.C.						
Fla.						
Ga.						
Hawaii						
Ida.						
Ill.						
Ind.	2		6	1		
Ia.	2		6	1	6	1
Kans.						
Ky.						
La.						
Me.	2	1				
Md.						
Mass.						
Mich.						
Minn.						
Miss.						
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.						
N.M.						
N.Y.						
N.C.						
N.D.						
Ohio						
Oklahoma.						
Ore.						
Pa.						
R.I.						
S.C.						
S.D.	*	*	*	*	*	*
Tenn.						
Tex.						
Utah						
Vt.						
Va.						
Wash.						
W. Va.						
Wisc.						
Wyo.						
P.R.						
V.I.						

FOOTNOTES FOR TABLES 3-41 AND 3-42

- (a) Referred to NCDC.
- (b) New York also reported 942 agargel precipitation exams with no positives.
- (c) Arizona also reported 1960 agargel precipitation exams with 45 positives and 2325 tube precipitation exams with 55 positives.
- (d) Includes CF histoplasmin positives.
- (e) New York performed 123 agargel precipitation exams for Coccidioidomycosis with no positives, 942 agargel precipitation exams for Histoplasmosis with no positives, and 203 exams for Cryptococcus with 34 positives in addition to figures listed in the table.
- (f) Includes 68 Suessenguth-Kline exams for Trichinosis with 8 positives.
- (g) Includes both latex and CF.
- (h) Suessenguth-Kline examinations.
- (i) In addition, 345 HA tests were performed.
- (j) In addition, there were 446 CF tests with 49 positives.
- (k) Reported 12 Hemagglutinations with 6 positives.
- (l) Other examinations used: 248 CF, 37 positives; and 248 HA with 53 positives.

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL

Specimens	Exams	COMPLEMENT FIXATION			
		Exams	Influenza A Positives	Exams	Influenza B Positives
Ala.	828	4,026	426	*	213
Alaska	2	2			*
Ariz.	1,865	5,852	20		
Ark.	159	410	54	2	50
Cal.	*	29,725 (a)	2,648	194	2,209
Colo.	*	1,650			16
Conn.	4,963	26,485	1,796	1,574	1,796
Del.					1,543
D.C.	*	*	*	*	*
Fla.	1,885	*	*	4	*
					32
Ga.	2,049	5,028 (b)	388	58	386
Hawaii	1,338	2,241	144	13	144
Ida.	*	4,731	676	23	676
Ill.	3,917	31,729	1,753	37	1,520
Ind.	447	3,058	90		90
Ia.	1,736	6,151	76	37	76
Kans.	1,094	4,711	134	87	131
Ky.	992	7,737	231		229
La.	*	538	26 (c)	8 (c)	(c)
Me.					(c)
Md.	3,890	6,481	106	*	84
Mass.	*	3,550	324		323
Mich.	*	9,294	490		624
Minn.	*	8,298	999	38	996
Miss.	23	50	2		2
Mo.	*	1,494			
Mont.	*	*	*	*	*
Nebr.	*	60			
Nev.					
N.H.	4,099	12,297			
N.J.	*	24,738 (a)	256		264
N.M.	720	2,680	2		2
N.Y.	*	9,211 (e)	585	4	580
N.C.	2,568	4,214 (f)	127	*	130
N.D.	*	2,030	36	3	36
Ohio	2,647	15,651 (g)	830	315	828
Oklahoma	292	1,261	18	1	16
Ore.	439	6,457	439	45	139
Pa.	*	23,045	1,831	16	1,831
R.I.					9
S.C.	*	565	56	*	56
S.D.	*	*	*	*	*
Tenn.	1,692	4,574	360	7	360
Tex.	*	29,530	331	20	331
Utah	*	5,953	18	7	18
Vt.	64	244	19		19
Va.	391	1,518	122	38	122
Wash.	1,548	5,233	1,090	798	1,088
W. Va.	200	916	125	11	125
Wisc.	4,527	30,273	2,822	91	2,622
					103
Wyo.					
P.R.	*	5,521	99	*	99
V.I.					*

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	COMPLEMENT FIXATION							
	Parainfluenza I		Parainfluenza II		Parainfluenza III		Parainfluenza IV	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.								
Alaska								
Ariz.								
Ark.								
Cal.	56		56	2	59	2	692	3
Colo.								
Conn.								
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.								
Ga.	201 (h)	9						
Hawaii								
Ida.								
Ill.	756	1	765	2	772	3		
Ind.								
Ia.								
Kans.								
Ky.	15	2	15		15			
La.								
Me.								
Md.								
Mass.								
Mich.	55		546	11	557	4	20	1
Minn.								
Miss.								
Mo.								
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.								
N.J.								
N.M.								
N.Y.	40		40		40		40	
N.C.								
N.D.								
Ohio	637	14	631	104	634	66		
Okl.								
Ore.								
Pa.	1,073		1,073		1,073			
R.I.								
S.C.								
S.D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.	5 (h)							
Utah								
Vt.	19				19			
Va.	92	8	92	13	92	28		
Wash.								
W. Va.								
Wisc.								
Wyo.								
P.R.								
V.I.								

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	Respiratory Syncytial		COMPLEMENT FIXATION				Mycoplasma Pneumoniae	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.			412	*	235	*		
Alaska					2	1		
Ariz.					41			
Ark.	44		8					
Cal.	648	14	2,623	14	819	1	2,449	3
Colo.								73
Conn.	1,796	1,287	1,796	1,456	1,827	45	875	126
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.	*		*	5	*		*	25
Ga.	200	6	212	7	375	26	110	9
Hawaii			122		61	3		
Ida.	379	6	676	76	84		259	1
Ill.	1,536	3	2,090	7	1,806	7	1,788	10
Ind.			90	1	84		34	
Ia.	2		66	14	491	63	60	2
Kans.			52	32	34	3	45	3
Ky.			232	2	117			
La.			12	4				
Me.								
Md.	43	*	80	*	252	*		
Mass.	232		325	1	334	4	6	
Mich.	342	5	921	14	69		636	5
Minn.			1,029	7	2,433	9		
Miss.	2		3	1	2		2	
Mo.			2		25			
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.								
N.J.	8		36		160	5	4	2
N.M.	24		26	2	21			
N.Y.	40	1	561	7	637	5		
N.C.			124	*	95	*		
N.D.					6		150	48
Ohio	505	29	566	219	37	12	514	59
Okla.					15	3		
Ore.			439	5	439	19	439	
Pa.	519	4	1,735	26	673	4	2,410	9
R.I.								
S.C.	42	1	39	3	13	1		
S.D.	*	*	*	*	*		*	*
Tenn.	360	6	423	9	345	14		
Tex.			281	4	251	64	198	12
Utah			49	11	28	3		
Vt.			19		20			
Va.	88	11	102	41	62	32	86	9
Wash.	10	2	715	614	299	16	26	
W. Va.			57	2	13			
Wisc.	528	2	1,036	16	151	1	1,209	218
Wyo.								
P.R.								
V.I.								

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	COMPLEMENT FIXATION				Polio III	
	Exams	Polio I Positives	Exams	Polio II Positives	Exams	Polio III Positives
Ala.	43	*	43	*	43	*
Alaska						
Ariz.						
Ark.	8		8		8	
Cal.	904		858		924	
Colo.	60 (1)	3 2 (1)	(1)	3 (1)	(1)	3 (1)
Conn.						
Del.						
D.C.	*	*	*	*	*	*
Fla.	*		*	1	*	
Ga.	88	4	86		86	6
Hawaii	110		110		68	
Ida.	76	6	76	1	76	3
Ill.	925		918		927	
Ind.	214		214		214	
Ia.						
Kans.	18	8	22	3	22	3
Ky.	1,541		1,508	(1)	1,672	(1)
La.	81 (1)	(1)	(1)	(1)	(1)	(1)
Me.						
Md.	126	*	126	*	126	*
Mass.	39		39		39	
Mich.	458		458		460	
Minn.						
Miss.	2		2		2	
Mo.	71		71		71	
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.	4,099	617	4,099	648	4,099	566
N.J.	26	2	23	7	31	10
N.M.	115	1	117	1	118	
N.Y.	100		100		100	
N.C.	144	*	142	*	144	*
N.D.	15		15		15	
Ohio	218	22	220	4	220	7
Oklahoma	10	1	10	1	10	1
Ore.			1	1		
Pa.	570		570		570	
R.I.						
S.C.	58	1	58		58	
S.D.	*	*	*	*	*	*
Tenn.						
Tex.	354	36	354		354	4
Utah	1,143	*	1,143	*	1,143	*
Vt.	12		12		12	
Va.	31	4	31	1	31	
Wash.	14	3	14	8	14	7
W. Va.	74	4	74		74	1
Wisc.						
Wyo.						
P.R.	1,730	*	1,730	*	1,730	*
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

		COMPLEMENT FIXATION										
	ECHO	Exams	Positives	LCM	Exams	Positives	WEE	Exams	Positives	EEE	Exams	Positives
Ala.				237	*	345	*	345	*			
Alaska					51	1		47				
Ariz.												
Ark.	4											
Cal.	400	25		17		781	10					
Colo.				28		387	106					
Conn.				925		923		923				
Del.												
D.C.	*	*	*	*	*	*	*	*	*	*	*	
Fla.				*	3	*		*	*		1	
Ga.				101		168	1	222			4	
Hawaii												
Ida.	128			4		81						
Ill.				870		876		870				
Ind.				210		191		191				
Ia.				207	7	501	79	501		79		
Kans.				192	18	488	62					
Ky.	322			195		119		121				
La.						370 (J)	(J)	(J)	(J)	(J)		
Me.												
Md.	757	*		107	*	49	*	56	*			
Mass.				152		152		152				
Mich.	1,127	3				83		30				
Minn.				237	1	633	3					
Miss.						6		6				
Mo.				48		57	3	57				
Mont.	*	*	*	*	*	*	*	*	*		*	
Nebr.												
Nev.												
N.H.												
N.J.						268		268				
N.M.				48		181	36	178				
N.Y.	100	1		64	1	249		249		7		
N.C.				33	*	121	*	126				
N.D.				330	2	330		330				
Ohio				533	3	752	2	743		2		
Okla.				176	9	178	9	180		3		
Ore.				439	1	439	11					
Pa.				712	2	841		841				
R.I.												
S.C.				41				67		1		
S.D.	*	*	*	*	*	*	*	*		*		
Tenn.				35		214		165				
Tex.				12		1,872	72					
Utah				4	1	76	8		2			
Vt.				12					12			
Va.				37		18	2			2		
Wash.				28	3	73	4	31				
W. Va.				57		59		59				
Wisc.				873		1,035	2	1,012				
Wyo.												
P.R.												
V.I.												

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	COMPLEMENT FIXATION									
	St. Louis		Other Encephalitis		Mumps		Rubeola		Rubella	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.	345	*	221	*	484	*				
Alaska					49	3				
Ariz.	52									
Ark.										
Cal.	755	4	210	5	2,090	112	272	15	906	51
Colo.	387	20			31	5				
Conn.	923	4			1,773	1,415	31	21		
Del.										
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.	*		*		*	34	*	1	*	2
Ga.	166		244	4	441	46	16	3		
Hawaii					322	30	158	10		
Ida.	81				132	4	18			
Ill.	878	2			2,945	40	125	6	46	45
Ind.	197		344	2	235	7			11	11
Ia.	501	79	24	6	233	139				
Kans.	461	12			610 (k)	236				
Ky.	133				882	31	9			
La.		(j)	(j)		29	1				
Me.										
Md.	54	*	208	*	278 (k)	*	115	*	27	*
Mass.	149								36 (l)	
Mich.	87	1	173		746	52	286	13		
Minn.					690	30				
Miss.	6				1	1	1			
Mo.	41	1								
Mont.	*	*	*	*	*	*	*	*	*	*
Nebr.										
Nev.										
N.H.										
N.J.	1,172		2,344		938	48	29	2		
N.M.	178	10			119	25	30			
N.Y.	252	1	23		460	4	374	10		
N.C.	107	*	2	*	173	*	6	*		
N.D.	330				356	32				
Ohio	750	1	679	36	1,220 (k)	743	72	58		
Oklahoma	180	3			222	134	134	7		
Ore.	439	1			439	21	10	3	22	7
Pa.	841		469		1,700	20	884	5		
R.I.										
S.C.	43				105	1	7	1		
S.D.	*	*	*	*	*	*	*	*	*	*
Tenn.	247				795	37				
Tex.	1,872	738	145	1	437	46	40	12		
Utah	26				28	25				
Vt.					12					
Va.	21				80	33				
Wash.	73	2			378	268	152	2		
W. Va.	58				53	6				
Wisc.	1,004		1,435	18	1,012	31	41	2		
Wyo.										
P.R.										
V.I.										

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	COMPLEMENT FIXATION						Rickettsialpox	Positives
	Herpes Simplex		Vaccinia		RMSF			
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.	254	*					83	*
Alaska								
Ariz.	1	1			1			
Ark.								
Cal.	1,993	30	101	1	144	1		
Colo.	23	5			71	1	5	
Conn.	1,768	1,229			916		916	
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.	*	3	*		*		*	
Ga.	408	167					126	12
Hawaii	94	2			1		1	
Ida.	402	13			68		68	
Ill.	2,641	11			118	18		
Ind.	228	2	16		21		23	1
Ia.	13	7			55	6	24	2
Kans.					45	1		
Ky.	199	3			27	2	10	
La.								
Me.								
Md.	123	*	3	*	161	*	5	*
Mass.	188	6	9					
Mich.	821	20			27	1	42	
Minn.	606	5						
Miss.	3	1			3			
Mo.	4				2		2	
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.								
N.J.	387	37			132	9	132	1
N.M.	131	5			33		32	
N.Y.	418	11	11	2	69	1	38	
N.C.	118	*	2	*	187	2		
N.D.					3		3	
Ohio	527	158			73	7	73	9
Okla.					47	6		
Ore.	439	2						
Pa.	1,256	3	167		333	8	333	3
R.I.								
S.C.	2				47	1	6	
S.D.	*	*	*	*	*	*	*	*
Tenn.	308	7			123	8		
Tex.	127	6	2	1	125	11	102	4
Utah					1			
Vt.	33	2						
Va.	50	16	3	3	29	3	5	
Wash.	111	12			4		3	
W. Va.					18 (m)	1		
Wisc.	83	2	2		24	1	36 (m)	
Wyo.								
P.R.								
V.I.								

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	Epidemic Typhus		COMPLEMENT FIXATION		Q Fever	
	Exams	Positives	Exams	Murine Typhus Positives	Exams	Positives
Ala.			83	*	1	*
Alaska						
Ariz.					35	
Ark.			174			
Cal.			203		1,732	25
Colo.					26	1
Conn.	916	7			1,796	14
Del.						
D.C.	*	*	*	*	*	*
Fla.	*		*		*	
Ga.			124		10	
Hawaii			172	1	54	
Ida.			8		686	21
Ill.	99	2			39	
Ind.	14		16		86	
Ia.	11	1	11		(n)	(n)
Kans.			37	1	401	13
Ky.			25		80	
La.			20	1		
Me.						
Md.	5	*	33	*	1	*
Mass.					318	1
Mich.			2		52	
Minn.					91	
Miss.			3		2	
Mo.					3	
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.						
N.M.					38	2
N.Y.	74	1			92	
N.C.			40	2	14	*
N.D.					3	
Ohio			5		634	7
Okla.			15		16	1
Ore.						
Pa.	43		87		52	
R.I.						
S.C.			39		24	
S.D.	*	*	*	*	*	*
Tenn.			125		66	
Tex.			199	9	178	11
Utah					37	5
Vt.						
Va.	1				83	2
Wash.					26	1
W. Va.					4	
Wisc.					161	4
Wyo.						
P.R.						
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	Influenza A		Hemagglutination and/or Hemadsorption Inhibitions		Other	
	Exams	Positives	Exams	Positives	Exams	Positives
Ala.					213 (o)	*
Alaska						
Ariz.						
Ark.	2		368	20		
Cal.	622	*	111	*	34 (p)	*
Colo.	101	10	101	12		
Conn.	145	143	139	139		
Del.						
D.C.	*	*	*	*	*	*
Fla.		4	*	32		
Ga.	69		71	4		
Hawaii	63	14	63		284 (q)	3
Ida.	15	14	15	1		
Ill.					67 (r)	2
Ind.					4 (s)	
Ia.					24 (t)	6
Kans.						
Ky.	22		12			
La.						
Me.						
Md.	3	*	3	*	221 (u)	*
Mass.					579 (v)	18
Mich.						
Minn.	3	5				
Miss.						
Mo.	22		14		40 (w)	2
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.	26		31	8		
N.M.	73	5	73			
N.Y.	5		5	3		
N.C.	279	*	279	*	3 (w)	2
N.D.	36	6	36	6		
Ohio						
Okla.	22	3	8		4 (x)	2
Ore.	355	28	355	11		
Pa.	116				16 (y)	1
R.I.						
S.C.	5		5	1		
S.D.	*	*	*	*	*	*
Tenn.	162	1	268	2		
Tex.						
Utah	252	13 (c)	126	(c)	30	
Vt.	12		12	1		
Va.	69	66	140	111		
Wash.	104		104	8		
W. Va.	5		5			
Wisc.	61	4	67	15	40 (w)	4
Wyo.						
P.R.	66	*	66	*		
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	Parainfluenza I		Parainfluenza II		Parainfluenza III	
	Exams	Positives	Exams	Positives	Exams	Positives
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.	93	*	95	*	95	*
Colo.	95		96	4	95	3
Conn.						
Del.						
D.C.	*	*	*	*	*	*
Fla.	*	3	*		*	
Ga.						
Hawaii	78	2	40	1	56	1
Ida.						
Ill.						
Ind.	7					8
Ia.						
Kans.						
Ky.	2		2			2
La.						
Me.						
Md.	3	*	3	*	3	*
Mass.	23		23	1	23	
Mich.						
Minn.						
Miss.						
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.						
N.M.						
N.Y.	3	1	3		3	1
N.C.						
N.D.						
Ohio						
Okla.						
Ore.	439				439	4
Pa.						
R.I.						
S.C.						
S.D.	*	*	*	*	*	*
Tenn.						
Tex.						
Utah						
Vt.						
Va.						
Wash.			12			
W. Va.	2		2	2		2
Wisc.						
Wyo.						
P.R.						
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	WEE		EEE		St. Louis		Other Encephalitis	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.								
Alaska								
Ariz.	1,729	2	1,729		1,729	46		
Ark.								
Cal.								
Colo.								
Conn.							52	47
Del.	*	*	*	*	*	*	*	*
D.C.			1	1				
Fla.								
Ga.	67		23	2	75			
Hawaii								
Ida.								
Ill.	130		130		130	2		
Ind.	32		32		32		51	
Ia.	9	5	9	5	9	5		
Kans.	999	282	3		997	295		
Ky.								
La.								
Me.								
Md.	375	*	375	*	400	*		
Mass.								
Mich.								
Minn.								
Miss.								
Mo.	342	192	342	46	167	16		
Mont.	*	*	*	*	*	*	*	*
Nebr.	20	1	20	1	20			
Nev.								
N.H.								
N.J.	5,664	36	5,731	67	6,228	201		
N.M.	370	36	361		367	41		
N.Y.	86		86		86	3		
N.C.								
N.D.								
Ohio	749		749		657			
Oklahoma								
Ore.								
Pa.								
R.I.								
S.C.	*	*	*	*	*	*	*	*
S.D.								
Tenn.								
Tex.	5,490	96	5,490		5,490	744	5,490	744
Utah								
Vt.								
Va.								
Wash.	7	7						
W. Va.								
Wisc.	2,075	5	2,075		2,075		2,075	
Wyo.								
P.R.								
V.I.								

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

California Group		Hemagglutinations and/or Hemadsorption Inhibitions					
Exams	Positives	Colorado		Tick Fever		ECHO Virus	Adenovirus
		Exams	Positives	Exams	Positives	Exams	Positives
Ala.							
Alaska							
Ariz.							
Ark.							
Cal.							
Colo.		74	19				70
Conn.							4
Del.							
D.C.	*	*	*	*	*	*	*
Fla.							
Ga.					64	9	
Hawaii							
Ida.							
Ill.							
Ind.	21						
Ia.	6						
Kans.							
Ky.							
La.							
Me.							
Md.							
Mass.							
Mich.							
Minn.							
Miss.							
Mo.	31	1					
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.							
N.H.							
N.J.							
N.M.	69 (z)						
N.Y.						6	6
N.C.							
N.D.							
Ohio	945						
Oklahoma							
Ore.		7	4			439	3
Pa.							
R.I.							
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.							
Utah							
Vt.							
Va.							
Wash.							
W. Va.							
Wisc.	2,075	49					2
Wyo.					1	*	
P.R.							
V.I.							

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	Polio I		Neutralization: TC-Tube			
	Exams	Positives	Exams	Positives	Exams	Positives
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.	40	*	40	*	40	*
Colo.						
Conn.	17	12	15	8	17	14
Del.						
D.C.	*	*	*	*	*	*
Fla.	*	1	*		*	
Ga.	4	1	2		6	1
Hawaii						
Ida.	14		14	1	14	
Ill.	1,983 (aa)	*	1,983	*	1,983	*
Ind.	5		5		5	
Ia.					42	2
Kans.					2	1
Ky.						
La.						
Me.						
Md.	5	*	9	*	5	*
Mass.	1					
Mich.						
Minn.	1		2	1	1	
Miss.						
Mo.	8		8	1	8	
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N.H.						
N.J.	2	1	2	1	2	1
N.M.						
N.Y.	55		55		55	
N.C.						
N.D.						
Ohio						
Okla.						
Ore.						
Pa.	1					
R.I.						
S.C.						
S.D.	*	*	*	*	*	*
Tenn.	56	1	57		57	
Tex.						
Utah	486	*	486	*	486	*
Vt.						
Va.						
Wash.	96	4	24	1	24	1
W. Va.	10		10		10	
Wisc.						
Wyo.						
P.R.						
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	ECHO		Neutralization: TC-Tube Coxsackie		Other	
	Exams	Positives	Exams	Positives	Exams	Positives
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.	400	*	421	*	498 (bb)	*
Colo.						
Conn.	8	7	1,612	620	2,784 (cc)	1
Del.						
D.C.	*	*	*	*	*	*
Fla.	*	28	*	7		
Ga.	64	9	119	4		
Hawaii	14	2	80	13	2 (dd)	1
Ida.	1	1	4	1		
Ill.			260	5		
Ind.			18		25 (ee)	23
Ia.	855	51	2,269	36	76 (ff)	1
Kans.	6	2	6	4	6 (gg)	2
Ky.						
La.						
Me.						
Md.	498	*	1,653	*		
Mass.					84 (hh)	
Mich.					182 (ii)	*
Minn.					523 (jj)	
Miss.						
Mo.	51	5	3	3		
Mont.	25	7	33			
Nebr.	*	*	*	*	*	*
Nev.						
N.H.						
N.J.			2	2	9 (kk)	8
N.M.						
N.Y.	1,795	30	1,020	41	9 (ll)	9
N.C.						
N.D.						
Ohio						
Okla.						
Ore.						
Pa.	1		180	100	244 (mm)	76
R.I.						
S.C.						
S.D.	*	*	*	*	*	*
Tenn.	35	10	12		1	
Tex.						
Utah	236	2	115	5	20 (nn)	
Vt.						
Va.						
Wash.	168	7	196	8	378	14
W. Va.	7	1	5		8 (oo)	1
Wisc.	56	10	9	2	4,579 (pp)	104
Wyo.						
P.R.						
V.I.						

TABLE 3-43. SEROLOGY: VIRAL AND RICKETTSIAL
(Continued)

	BLOOD FACTOR ANTIBODY EXAMINATIONS:	
	Rh Antibody	Others
Ala.		
Alaska		
Ariz.		
Ark.		
Cal.	847	184
Colo.		
Conn.		
Del.		
D.C.	*	*
Fla.	18,665	
Ga.	729	930 (qq)
Hawaii		
Ida.		
Ill.		
Ind.		
Ia.		
Kans.		
Ky.	30,347	
La.		
Me.		
Md.		
Mass.		
Mich.		
Minn.		
Miss.		
Mo.		
Mont.	*	*
Nebr.		
Nev.		
N.H.		
N.J.		
N.M.		
N.Y.		
N.C.		
N.D.		
Ohio		
Okla.		
Ore.		
Pa.		
R.I.		
S.C.	16,567	
S.D.	*	*
Tenn.	437	
Tex.		
Utah	7,602	40
Vt.	996	
Va.		
Wash.		
W. Va.		
Wisc.	8,617	
Wyo.		
P.R.	43	967
V.I.		

FOOTNOTES FOR TABLE 3-43

- (a) Includes the following CF tests: California Virus, 729 exams, 3 positives; and Varicella, 169 exams, 23 positives. California also reported fluorescent antibody tests: Colorado Tick Fever, 70; Herpes Simplex, 103; Influenza A, 9; Influenza B, 9; Rubella, 1,424, Vaccinia, 99; and Varicella, 75.
- (b) Includes the following: Rubella, 68 FA exams, 33 positives; 238 LGV CF exams, 109 positives.
- (c) Influenza A and B combined.
- (d) Includes 563 Coxsackie exams with 3 positives.
- (e) Includes 600 Coxsackie CF exams with 9 positives.
- (f) Includes 1,821 exams not broken down by type with a total of 677 reactive results.
- (g) Includes 650 Psittacosis exams with 25 positives not shown in further breakdown.
- (h) Parainfluenza exams not broken down by type.
- (i) Polio I, II, and III were combined.
- (j) WEE, EEE and St. Louis combined.
- (k) Viral and soluble.
- (l) FA tests.
- (m) Includes Rickettsialpox.
- (n) Included with Psittacosis-LGV.
- (o) Eaton agent.
- (p) Q fever, 8; Reovirus, 26.
- (q) REO 1, 2, and 3.
- (r) Varicella zoster.
- (s) Atypical pneumonia, 2; yellow fever, 2.
- (t) CLE.
- (u) Rubeola, 121; Eaton agent, 100.
- (v) Mumps, HI, 221 exams, 13 positives; and cold agglutinins, HA, 358 exams, 5 positives.
- (w) Mumps.
- (x) Cat scratch fever.
- (y) Measles, 13 exams, 1 positive; Vaccinia, 3 exams, 0 positives.
- (z) C. F. tests.
- (aa) Population immunity study (vaccine assistance program).
- (bb) Rubella, 456; SLE, 24; WEE, 12; other, 6.
- (cc) 2 Reovirus Type 1 exams, and 2,782 special studies, Virology Laboratory.
- (dd) REO 3.
- (ee) Serum Neutralization, Rabies.

FOOTNOTES FOR TABLE 3-43
(Continued)

- (ff) Vaccinia.
- (gg) ECHO.
- (hh) Represents the following plaque reductions: EEE, 42 and WEE, 42, with 0 positives.
- (ii) Enterovirus, 145 exams; baby mice, 12; Rubella, 25.
- (jj) St. Louis, 349 exams, 2 positives; WEE (including horses), 159, 2 positives; Adenovirus, 12 with 7 positives; and Herpes simplex, 3 exams with 2 positives.
- (kk) EEE - 8 exams, 8 positives; Herpes simplex - 1 exam, no positives.
- (ll) Vaccinia, 3; Herpes simplex, 6.
- (mm) Rubella.
- (nn) Herpes simplex.
- (oo) Adenovirus, 3; Parainfluenza A, 5.
- (pp) Represents the following: Rhinovirus, 300 exams, 21 positives; 461 neutralizations in mice - California group, 83 positives; 3,810 latex titers; and neutralization, Respiratory Syncytial, 8 prs., 0 positives.
- (qq) Rh antibody titration, 79; indirect Coombs, 851.

TABLE 3-44. HEMATOLOGY

	Specimens	Exams	CELL COUNTS				
			rbc	wbc	diff	platelets	retics
Ala.	7,394	8,926					
Alaska	6,677	13,234					
Ariz.	1,101	2,254	10	10	10		
Ark.							
Cal.	241 (a)	10,806					
Colo.							
Conn.							
Del.	396	387	2	30	32		29
D. C.	*	*	*	*	*	*	*
Fla.	40,017	40,017	(b)	(b)	(b)	(b)	(b)
Ga.	85,517	171,028					
Hawaii	1,105	1,146	4	4	4		
Ida.	*	1,573					
Ill.							
Ind.							
Iowa							
Kans.	*	22					
Ky.							
La.	*	1,557	239	243	243		
Me.	10,170	11,294					
Md.	49,327	119,230	216	17,025	11,689	133	529
Mass.							
Mich.	*	32,303	4,017	4,017			
Minn.							
Miss.	2,562	2,562		183	341		
Mo.							
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.	1,817	6,089		1,054	1,068		
N. H.	3,907	19,609	119	3,995	6,955	248	4
N. J.	*	444 (c)					
N. M.	966	1,306					
N. Y.	*	25,364	92	92	92		92
N. C.							
N. D.	*	15,111					
Ohio	3,461	6,804		5	6		1
Oklahoma	9,411	9,411		268	64		
Ore.							
Pa.							
R. I.	1,468	1,468					
S. C.	*	12,442	1,779	1,057	992	185	
S. D.	*	*	*	*	*	*	*
Tenn.	15,169	30,327					
Tex.							
Utah	*	56,144		336	279		
Vt.	10,288	19,615					
Va.	2,770	5,540					
Wash.							
W. Va.	177	707	177	176	176		
Wisc.	391	30,012				331	
Wyo.	91	91					
P. R.	*	78,815		24,839	8,934		
V. I.							

TABLE 3-44. HEMATOLOGY
(Continued)

	Smears, "L-E" Cells	Smears, Sickled Cells	Erythrocyte Fragility	Erythrocyte Volume (hematocrit)	Erythrocyte Sedimentation Rate
Ala.					
Alaska					
Ariz.					
Ark.				11	
Cal.					
Colo.					
Conn.					
Del.		8			
D. C.	*	*	*	142	*
Fla.	(b)	(b)	(b)	(b)	(b)
Ga.					
Hawaii					
Ida.					
Ill.				797	776
Ind.					
Iowa					
Kans.					
Ky.					
La.		3		125	186
Me.					
Md.	1	228		21,992	3,664
Mass.					
Mich.					
Minn.					
Miss.		6		755	
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.		4		1,430	274
N. H.			26	3,993	
N. J.					
N. M.					
N. Y.				92	92
N. C.					
N. D.					
Ohio					
Oklahoma				340	40
Ore.					
Pa.					
R. I.					
S. C.		160		2,148	98
S. D.	*	*	*	*	*
Tenn.					
Tex.					
Utah				467	434
Vt.					
Va.					
Wash.					
W. Va.					2
Wisc.	20				
Wyo.					
P. R.				3,454	
V. I.					

TABLE 3-44. HEMATOLOGY
(Continued)

Bone Marrow Examination	Coagulation Time	Hemoglobin	Alkali Resistant Hemoglobin	Prothrombin Time	Electrophoresis
Ala.					
Alaska					
Ariz.		11			
Ark.					
Cal.					
Colo.					
Conn.					
Del.	*	*	144	*	*
D. C.	(b)	(b)	18,536		*
Fla.					
Ga.					
Hawaii		4			
Ida.					
Ill.					
Ind.					
Iowa					
Kans.		13			
Ky.					
La.		518			
Me.					
Md.	2	25,558		58	
Mass.					
Mich.		4,103			
Minn.					
Miss.		595			
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.		1,149			
N. H.	5	4,192		70	
N. J.					
N. M.					
N. Y.	280	92	81		629
N. C.					
N. D.					
Ohio					
Okla.		323			
Ore.					
Pa.					
R. I.		1,468			
S. C.		6,023			
S. D.	*	*	*	*	*
Tenn.					
Tex.					
Utah		332			
Vt.					
Va.					
Wash.					
W. Va.		176			
Wisc.	40				
Wyo.					91
P. R.					
V. I.					

TABLE 3-44. HEMATOLOGY
(Continued)

	Blood Group (ABO)	Blood Type (RH)	Cross Matches	Paternity Studies	Other
Ala.		8,926			
Alaska	6,677	6,557			
Ariz.	1,072	1,079			51 (d)
Ark.					
Cal.	3,922	6,884			
Colo.					
Conn.					
Del.					
D. C.	*	*	*	*	*
Fla.		15,564			
Ga.	85,517	85,511			
Hawaii		1,130			
Ida.					
Ill.					
Ind.					
Iowa					
Kans.					9 (e)
Ky.					
La.					
Me.	1,124	10,170			
Md.	6,876	24,175			7,084 (f)
Mass.					
Mich.	8,458	10,052		1,656	
Minn.					
Miss.	308	374			
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.	555	555			
N. H.					
N. J.	222	222			
N. M.	340	966			
N. Y.	9,752	9,752			4,226 (g)
N. C.					
N. D.	5,324	9,787			
Ohio	3,461	3,331			
Okla.	3,015	5,360		1	
Ore.					
Pa.					
R. I.					
S. C.					
S. D.	*	*	*	*	*
Tenn.	15,158	15,169			
Tex.					
Utah	25,172	28,661			463 (h)
Vt.	8,431 (i)	10,288			896 (j)
Va.	2,770	2,770			
Wash.					
W. Va.					
Wisc.	801	28,820			
Wyo.					
P. R.	495	12,731			
V. I.					

TABLE 3-45. EXFOLIATIVE CYTOLOGY

	<u>Specimens</u>	<u>Examinations</u>	<u>Papanicolaou</u>	<u>Fluorescent Stain</u>
Ala.	7,381	7,381		7,381
Alaska				
Ariz.				
Ark.				
Cal.				
Colo.				
Conn.				
Del.	35,716	35,716	35,716	
D. C.	*	*	*	*
Fla.				
Ga.				
Hawaii				
Ida.				
Ill.				
Ind.				
Iowa				
Kans.				
Ky.				
La.	*	12,596	1,228	
Me.				
Md.	56,598	58,335	58,335	
Mass.				
Mich.				
Minn.				
Miss.				
Mo.				
Mont.	*	*	*	*
Nebr.				
Nev.				
N. H.				
N. J.				
N. M.				
N. Y.	11,292	11,292	7,377	
N. C.	101,131	101,131	101,131	
N. D.				
Ohio				
Okla.				
Ore.				
Pa.				
R. I.	3,660	7,320		
S. C.				
S. D.	*	*	*	*
Tenn.				
Tex.				
Utah				
Vt.				
Va.				
Wash.				
W. Va.				
Wisc.	127,588	129,351	116,490	
Wyo.				
P. R.				
V. I.				

TABLE 3-46. HISTOPATHOLOGY

	Tissue, Human, Micro Specimens	Exams	Tissue, Animal, Micro Specimens	Exams	Tissue, Gross Specimens	Exams
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.						
Colo.						
Conn.						
Del.	*	*	*	*	*	*
D. C.						
Fla.						
Ga.						
Hawaii						
Ida.						
Ill.						
Ind.						
Iowa						
Kans.						
Ky.						
La.	*	5,684			*	5,684
Me.						
Md.						
Mass.						
Mich.						
Minn.						
Miss.						
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N. H.						
N. J.						
N. M.						
N. Y.	3,662	3,662		253	253	
N. C.						
N. D.						
Ohio						
Oklahoma						
Ore.						
Pa.						
R. I.	1,830	5,490			1,830	1,830
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.						
Utah						
Vt.						
Va.						
Wash.						
W. Va.						
Wisc.	11,098	12,259		*	602	
Wyo.						
P. R.						
V. I.						

FOOTNOTES. TABLES 3-44 THROUGH 3-46.

- (a) An additional 3,201 specimens received for syphilis serology testing were also tested under "Hematology."
- (b) Breakdown by type of test not reported. Thirteen types of tests included in total of 5,917 examinations.
- (c) Routine Hematology and Blood Bank procedures not performed by this lab. Blood Group and Rh performed as a courtesy for the State Police.
- (d) Heterophile.
- (e) Copper.
- (f) Coombs, 2,803; Rh Special Tests, 4,281.
- (g) Rh sensitization.
- (h) Electrocardiograms.
- (i) Discontinued in April 1966.
- (j) D^u.

TABLE 3-47. CLINICAL CHEMISTRY: BLOOD

	<u>Specimens</u>	<u>Exams</u>	<u>Glucose Qualitative Examinations</u>	<u>Glucose Quantitative Examinations</u>	<u>Cholesterol, Total Examinations</u>	<u>Bilirubin, Quantitative Examinations</u>
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.						
Colo.						
Conn.	2,821	5,912 (a)		1,791	1,548	549
Del.	2,757	2,757	2,757	*	*	*
D. C.	*	*	*	*	*	*
Fla.	23,880	23,880		21,182	2,613	
Ga.	1,864	1,864		1,864		
Hawaii						
Ida.	*	56	28			
Ill.	*	84				
Ind.						
Iowa						
Kans.	*	3		3		
Ky.	1,333	1,333		1,262		
La.	*	173				
Me.	9,724	9,724		9,724		
Md.	36,843	43,470		26,893	3,407	698
Mass.						
Mich.	*	155,631	155,631			
Minn.						
Miss.	49,031	49,031		48,988		
Mo.	2	2		2		
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N. H.	6,890	8,449	4,841		39	107
N. J.	*	7,445		6,832	97	
N. M.						
N. Y.						
N. C.	1,207	1,207		1,207		
N. D.						
Ohio	37,699	37,749		37,699	50	
Okla.	2,967	2,967		2,895		
Ore.						
Pa.	*	13,450		9,304	1,495 (b)	
R. I.	27,454	36,732		23,313	1,371	
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.						
Utah	*	724		724		
Vt.	6,575	6,575		5,819	756	
Va.	7,714	7,714	7,106	608		
Wash.	1,230	1,230				
W. Va.	3,464	3,652	2,711	549	182	
Wis.	120,811	117,885 (c)		58,259	14,540	1,202
Wyo.	81	81				
P. R.	*	25,439		16,547	1,112	695
V. I.						

TABLE 3-47. CLINICAL CHEMISTRY: BLOOD
(Continued)

	Total Protein Examinations	Cephalin Flocculation Examinations	Chloride Examinations	Creatinine Examinations	Thymol Turbidity Examinations
Ala.					
Alaska					
Ariz.					
Ark.					
Cal.					
Colo.					
Conn.	17				
Del.		*	*	*	*
D. C.	*				
Fla.					
Ga.					
Hawaii					
Ida.					
Ill.					
Ind.					
Iowa					
Kans.					
Ky.					
La.					
Me.					
Md.	325	351	316		371
Mass.					
Mich.					
Minn.					
Miss.					
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N. H.	21	130	3		115
N. J.	19		14	36	8
N. M.					
N. Y.					
N. C.					
N. D.					
Ohio					
Okla.	70				
Ore.					
Pa.			144 (b)		
R. I.				373	
S. C.					
S. D.	*	*	*	*	*
Tenn.					
Tex.					
Utah					
Vt.					
Va.					
Wash.	1,230				
W. Va.					
Wisc.	739		177	174	
Wyo.	81				
P. R.	469	1,047	47	94	58
V. I.					

TABLE 3-47. CLINICAL CHEMISTRY: BLOOD
(Continued)

	Urea Nitrogen Exams	Uric Acid Exams	Transaminase Examinations	Globulin Albumin	Phenylalanine Quantitative	Calcium	Alkaline Phosphatase	Acid Phosphatase
Ala.								
Alaska								
Ariz.								
Ark.								
Cal.								
Colo.								
Conn.			1,040 (d)					
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.	25	60						
Ga.								
Hawaii								
Ida.	28							
Ill.					84			
Ind.								
Ia.								
Kans.								
Ky.					71			
La.					173			
Me.								
Md.	7,518	2,814	8	599		163	8	
Mass.								
Mich.								
Minn.								
Miss.	43							
Mo.								
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.	3,000	83		9		33	43	25
N.J.	115	42		3	242	37		
N.M.								
N.Y.								
N.C.								
N.D.								
Ohio								
Okla.	2							
Ore.								
Pa.	1,890 (b)				617			
R.I.	11,608	67						
S.C.								
S.D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.								
Utah								
Vt.								
Va.								
Wash.								
W. Va.	195				15			
Wisc.	10,687	7,643		325		434	1,151	
Wyo.								
P.R.	3,815	128	565	469		140	253	
V.I.								

TABLE 3-48. CLINICAL CHEMISTRY: URINE

	Specimens	Exams	Microscopic	Glucose	Acetone	Diacetic Acid	Total Acidity
Ala.							
Alaska							
Ariz.	6,263	13,909	1,532	6,142			6,235
Ark.							
Cal.							
Colo.							
Conn.	8,958	8,958 (e)		8,956			
Del.	720	2,880 (f)	720	720			720
D.C.	*	*	*	*	*	*	*
Fla.	2,431	7,293	2,431	2,431			2,431
Ga.							
Hawaii							
Ida.							
Ill.	*	84 (g)					
Ind.							
Ia.							
Kans.							
Ky.							
La.	*	2,271	2,271				
Me.							
Md.	13,166	24,812 (h)	10,945	12,981	79	1	
Mass.							
Mich.	*	*	*	*	*	*	*
Minn.							
Miss.							
Mo.							
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.	2,425	3,067	801	2,266			
N.H.	3,575	6,907	238	2,223	2,223		2,223
N.J.	*	236 (i)		118			
N.M.							
N.Y.							
N.C.							
N.D.							
Ohio							
Oklahoma	377	377	372	2	2		1
Ore.							
Pa.							
R.I.	12,251	30,449	10,070	10,196	110		10,070
S.C.	*	6,987	2,030	4,957			
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.							
Utah	*	689 (j)	275	275			
Vt.							
Va.							
Wash.							
W. Va.							
Wisc.	337	224 (k)					
Wyo.							
P.R.	*	45,832 (l)	20,763	20,763			
V.I.							

TABLE 3-48. CLINICAL CHEMISTRY: URINE (m)
(Continued)

Bile	17 Keto-steroids	Bence-Jones Protein	Uroblinogen	Amino-aciduria	5 Hydroxyindole Acetic Acid
Ala.					
Alaska					
Ariz.					
Ark.					
Cal.					
Colo.					
Conn.					
Del.					
D.C.	*	*	*	*	*
Fla.					
Ga.					
Hawaii					
Ida.					
Ill.					
Ind.					
Ia.					
Kans.					
Ky.					
La.					
Me.					
Md.	3				
Mass.					
Mich.	*	*	*	*	*
Minn.					
Miss.					
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N.H.					
N.J.					
N.M.					
N.Y.					
N.C.					
N.D.					
Ohio					
Okla.					
Ore.					
Pa.					
R.I.	3				
S.C.					
S.D.	*	*	*	*	*
Tenn.					
Tex.					
Utah			40		
Vt.					
Va.					
Wash.					
W. Va.					
Wisc.	139	1			3
Wyo.					
P.R.	18				
V.I.					

FOOTNOTES FOR TABLES 3-47 AND 3-48

- (a) Includes 967 Triglyceride examinations.
- (b) For evaluation purposes only.
- (c) Includes 22,554 Protein Bound Iodine exams.
- (d) Transaminase, SGOT, 520; Transaminase, SGPT, 520.
- (e) Includes the following exams: Chondroitin Sulfate, 1, Chromatographic, 1.
- (f) Includes 720 albumin tests.
- (g) Tyrosine exams.
- (h) Includes 803 occult blood exams.
- (i) Includes 118 albumin tests.
- (j) Includes 99 phenylpyruvic acid examinations not shown in further breakdown in this table.
- (k) Includes 81 17-OH-Steroids exams.
- (l) Includes 4,288 exams not shown in further breakdown in this table.
- (m) There were no tests reported under the following categories: kidney function test; gastric exams; free HCl tests; or total acidity tests. Other clinical chemistry exams were as follows: Florida reported 1,860 cholinesterase examinations; Maryland, 1,173 occult blood (stool) exams; and New Jersey, 84 other electrolytes. West Virginia performed 20 sodium exams and 20 potassium exams. Wisconsin reported the following tests: blood phosphorus, 386; Icterus Index, 85; and Gamma Globulin, 89.

TABLE 3-49. PHENYLKETONURIA

	Total Specimens	Total Exams	Total Positives
Ala.	68,960	73,889	*
Alaska			
Ariz.			
Ark.			
Cal.			
Colo.	*	24,207	2
Conn.	91,818	91,818	247
Del.	18,217	18,217	148 (a)
D.C.	*	*	*
Fla.	*	44,599	4,313
Ga.	25,171	23,307	122 (b)
Hawaii			
Ida.	*	11,916	3 (c)
Ill.	*	60,780	115 (d)
Ind.			
Ia.	3,728	3,728	*
Kans.	17,397	17,397	242 (b)
Ky.	17,743	17,743	
La.	*	64,200	1,861
Me.	24,075	24,117	21
Md.	52,265	52,523	100
Mass.	*	238,856	6 (e)
Mich.	*	90,067	8 (f)
Minn.	*	66,414	49
Miss.			
Mo.	44,353	44,423	114
Mont.	*	*	*
Nebr.			
Nev.	13,845	13,845	145
N.H.	16,481	16,513	6
N.J.	87,069	85,244	45
N.M.	11,814	11,814	1
N.Y.	*	88,326	250
N.C.	49,130	48,981	*
N.D.	13,657	13,657	93 (g)
Ohio	163,197	164,328	207 (h)
Oklahoma	22,579	22,579	818
Ore.	54,358 (i)	54,467	5
Pa.	*	64,698	7
R.I.	31,268	71,625	3
S.C.	*	18,204	292
S.D.	*	*	*
Tenn.	19,157	19,157	47
Tex.	*	109,287	518 (b)
Utah			
Vt.			
Va.	49,739	49,739	216
Wash.	6,388	6,388	8
W. Va.	215	215	2
Wisc.			
Wyo.			
P.R.			
V.I.	871	871	1

TABLE 3-49. PHENYLKETONURIA
(Continued)

	Screening Tests:									
	Guthrie		Fluorometric		Paper		Chromatography		Other	
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives
Ala.	68,960	*								
Alaska										
Ariz.										
Ark.										
Cal.										
Colo.	24,207	2								
Conn.	91,605	34 (j)								
Del.	18,217	148 (k)								
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.	43,570	4,313								
Ga.	23,307	*								
Hawaii										
Ida.	11,913	3								
Ill.	60,696	115								
Ind.										
Ia.	*	*	*	*	*	*	*	*	*	*
Kans.	17,248	154								
Ky.	17,672	44 (k)								
La.	64,027	1,861	173	*						
Me.	24,075	21								
Md.	52,275	100								
Mass.	204,529 (m)	6								
Mich.	90,067	8								
Minn.	66,378	49								
Miss.										
Mo.	44,423	114								
Mont.	*	*	*	*	*	*	*	*	*	*
Nebr.										
Nev.	13,845	73								
N.H.	16,501	*					6	6		
N.J.	85,023	37								
N.M.	11,814	1								
N.Y.	88,096	197 (o)								
N.C.										
N.D.	13,657	93								
Ohio	163,197	207 (k)								
Okla.	22,579	818								
Ore.	54,358	81								
Pa.	64,081	73								
R.I.	31,268	*	351	*	40,000	*				
S.C.	18,204	292								
S.D.	*	*	*	*	*	*	*	*	*	*
Tenn.	19,157	47								
Tex.	109,022	408								
Utah										
Vt.										
Va.	49,739	216								
Wash.	5,378	8	615							
W. Va.	215	2								
Wisc.										
Wyo.										
P.R.										
V.I.	870	1								

TABLE 3-49. PHENYLKETONURIA
(Continued)

	Confirmatory Tests:									
	Fluorometric		Paper Chromatography		LaDu		Other		Exams	Positives
	Exams	Positives	Exams	Positives	Exams	Positives	Exams	Positives		
Ala.	37	*	4,892	*						
Alaska										
Ariz.										
Ark.										
Cal.										
Colo.	*	*	*	*	*	*	*	*		
Conn.	102	102					111	111		
Del.										
D.C.	*	*	*	*	*	*	*	*		
Fla.	959	*	70	*						
Ga.										
Hawaii										
Ida.			3	3						
Ill.							84	7		
Ind.										
Ia.	*	*	*	*	*	*	*	*		
Kans.	134	82							15 (q)	6
Ky.	71									
La.										
Me.	21	3	21	3						
Md.										
Mass.			670	6						
Mich.	*	*	*	*	*	*	*	*		
Minn.			36	*						
Miss.										
Mo.	*	*	*	*	*	*	*	*		
Mont.	*	*	*	*	*	*	*	*		
Nebr.										
Nev.	(r)	(r)	6	6						
N.H.										
N.J.			221	44			(s)	8		
N.M.										
N.Y.	230	53 (t)								
N.C.										
N.D.	(u)	(u)								
Ohio	138	*	267	*						
Oklta.										
Ore.	28	5 (v)	81	5						
Pa.	617	7								
R.I.	3	*	3	*						
S.C.										
S.D.	*	*	*	*	*	*	*	*		
Tenn.										
Tex.					265		110			
Utah										
Vt.										
Va.										
Wash.	15	*								
W. Va.	*	*	*	*	*	*	*	*		
Wisc.										
Wyo.										
P.R.										
V.I.	1	1								

TABLE 3-49. PHENYLKETONURIA
(Continued)

	Range of Positives:			
	0 - 4 mg %	5 - 10 mg %	11 - 19 mg %	20 + mg %
Ala.	*	*	*	*
Alaska				
Ariz.				
Ark.				
Cal.				
Colo.	*	*	*	*
Conn.	88	50	49	26
Del.	42 (k)	76 (k)	13 (k)	17 (k)
D.C.	*	*	*	*
Fla.	4,277	28	8	
Ga.	(w)	(v)	(v)	11
Hawaii				
Ida.	*	*	*	*
Ill.	2	3	2	
Ind.				
Ia.	*	*	*	*
Kans.	16,750	175	42	25
Ky.				
La.	*	*	*	*
Me.	4	14	2	1
Md.	*	*	*	*
Mass.				6
Mich.	*	*	*	*
Minn.		39	6	4
Miss.				
Mo.	61	48	2	3
Mont.	*	*	*	*
Nebr.				
Nev.	31	22	49	43
N.H.				6
N.J.	(x)	(x)	(x)	5
N.M.	*	*	*	1
N.Y.	*	*	*	*
N.C.	*	*	*	*
N.D.	*	*	*	*
Ohio	140	52	11	4
Okla.	816 (y)	(y)	(y)	2
Ore.				5
Pa.				7
R.I.			1	2
S.C.	292 (b)	*	*	*
S.D.	*	*	*	*
Tenn.	342 (z)	31	3	8
Tex.	*	*	*	*
Utah				
Vt.				
Va.	*	*	*	*
Wash.		8 (aa)	*	
W. Va.	*	*	*	*
Wisc.				
Wyo.				
P.R.				
V.I.				1

FOOTNOTES FOR TABLE 3-49

- (a) Presumed positives. There were 2 total positive cases.
- (b) 4 mg % and above.
- (c) These positives are not on infants.
- (d) 5 PKU cases diagnosed.
- (e) These are confirmed cases of PKU. A total of 670 had intermediate elevations of 4 - 20 mgs %.
- (f) 6 of these were in older children.
- (g) Includes repeat examinations.
- (h) There were 4 confirmed and diagnosed positive cases.
- (i) 29,458 newborns tested.
- (j) 10 confirmed as PKU by fluorometric and LaDu methods.
- (k) Presumptive positives.
- (l) Urine screening exams.
- (m) This includes 94,288 follow-up blood samples which were also tested.
- (n) Broken down as follows: newborns, 13,693; follow-up blood, 12,847; urines, 2,538; special studies, 4,579.
- (o) 4 mg % or more considered positive.
- (p) Fluorometric automated.
- (q) Enzyme.
- (r) Sent to Guthrie's laboratory.
- (s) 242 exams which are recorded as "Phenylalanine Quantitative."
- (t) 6 mg % or more considered positive.
- (u) Sent to reference laboratories.
- (v) Newborns, 3 positives; others, 2 positives.
- (w) Range broken down as follows: 0 - 3.9%, 22,753; 4.0 - 9.9%, 98; 10 - 19.9%, 13.
- (x) Percentages broken down as follows: 4.0 - 4.9 mg %, 9; 5.0 - 9.9 mg %, 19; 10.0 - 19.9 mg %, 12.
- (y) Readings under 20 mg % reported as one figure.
- (z) Readings in this range considered negative.
- (aa) Of these eight positives, 1 initially 8 mg % diagnosed as PKU; others were slightly elevated levels which subsequently dropped to normal.

TABLE 3-50. SANITARY CHEMISTRY: WATER

			EXAMINATIONS FOR:				Biochemical Oxygen Demand
	Total Samples	Total Exams	Acidity	Alkalinity	Aluminum	Arsenic	
Ala.	*	28,550					
Alaska	(a)						
Ariz.	1,235	11,613		662		27	
Ark.							
Cal.	4,033	20,553 (b)	*	*	*	*	*
Colo.	*	10,592	405	405		303	
Conn.	6,472	43,061	1	3,165	1	3	169
Del.	(c)						
D.C.	*	*	*	*	*	*	*
Fla.	2,445	12,589	975	975			
Ga.							
Hawaii	4,020	8,373		166	166	166	6
Ida.	*	2,864 (b)	*	*	*	*	*
Ill.	*	86,673		4,423			3,522
Ind.	56,045	56,040	130	4,411	45	92	3,163
Ia.	*	38,123	522	1,895		62	2,779
Kans.	(d)						
Ky.	1,838	10,205	506	508	9	5	
La.	*	5,059		510	1		73
Me.	(e)						
Md.	12,080	6,311	6	162	3	5	120
Mass.							
Mich.	11,978	*	*	*	*	*	*
Minn.	*	10,679		391			433
Miss.	646	3,914	10	248	4		52
Mo.	1,993	10,525		531	324	234	
Mont.	*	*	*	*	*	*	*
Nebr.	*	16,872	30	1,288			272
Nev.	(f)						
N.H.							
N.J.	*	32,910 (g)	24	932	60	44	2,016
N.M.	1,611	15,959		689		3	230
N.Y.	7,388	*	*	*	*	*	*
N.C.	4,865	30,081	33	543	1	127	
N.D.	*	7,667		544			235
Ohio	2,110	60,830	1,022	5,691	48	97	1,245
Oklahoma	2,220	2,220	11	767		2	
Ore.							
Pa.							
R.I.	(f)						
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.	*	149,098		11,264		14	6,398
Utah	23,711	23,735	480	425		325	1,247
Vt.	608	12,310	608	608			
Va.	*	6,629		400	174	69	
Wash.	872	3,813		122	6	19	
W. Va.							
Wisc.	8,837	43,046		1,261	1	25	4,199
Wyo.							
P.R.	*	8,730	194	190		517	
V.I.	74	402		74			207

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	EXAMINATIONS FOR:						
	Cadmium	Calcium	Carbon Dioxide	Chlorides	Chlorine (Residual)	Chlorine Demand	Chromium-Hexavalent
Ala.					28,075		
Alaska							
Ariz.		609		620	420		582
Ark.							
Cal.	*	*	*	*	*	*	*
Colo.	302	404		683			307
Conn.		1		2,344	8	1	15
Del.							
D.C.	*	*	*	*	*	*	*
Fla.		975		1,495			
Ga.							
Hawaii		166		170	12		
Ida.	*	*	*	*	*	*	*
Ill.		29		1,745			
Ind.	284	910		3,923	1	1	328
Ia.	1	697		633	260		66
Kans.							
Ky.	5	517		556			
La.		255	156	483	2	6	
Me.							
Md.		10		89	487	7	
Mass.							
Mich.	*	*	*	*	*	*	*
Minn.	48	175		427			
Miss.		248	248	248	10	10	
Mo.	234	408		434			233
Mont.	*	*	*	*	*	*	*
Nebr.		566		1,146			125
Nev.							
N.H.							
N.J.	40	36		1,068		6	56
N.M.		702		736			15
N.Y.	*	*	*	*	*	*	*
N.C.	126			18,720			130
N.D.		213		258	7	31	
Ohio	4	2,153		3,128	560		12
Okla.		3		483			
Ore.							
Pa.							
R.I.							
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.	3	4,866	11,264	11,264		6,398	10
Utah	325	417		418	665		
Vt.		608		608	608		
Va.	78	323	2	345			164
Wash.		172	103	170	9		
W. Va.							
Wisc.	6	514		1,306	148		196
Wyo.							
P.R.	474			182	474		474
V.I.		63		72			

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	EXAMINATIONS FOR:						
	Chromium- Total	Cobalt	Color	Conductance	Copper	Cyanide	Detergents (Surfactants)
Ala.							
Alaska							
Ariz.							
Ark.							
Cal.	*	*	*	*	*	*	*
Colo.	307		338	396	412		808
Conn.	23		4,851		60	61	338
Del.							
D. C.	*	*	*	*	*	*	*
Fla.			975				975
Ga.							
Hawaii			166		166		
Ida.	*	*	*	*	*	*	124
Ill.							1,665
Ind.	328		2,434	1,961	285	513	187
Iowa	87			714	85	14	158
Kans.							
Ky.	40		503		31		13
La.			200			12	7
Me.							
Md.	3		1		38		215
Mass.							
Mich.	*	*	*	*	*	*	*
Minn.	27		252	7	51	8	1,082
Miss.	1		200		4		
Mo.					225	223	30
Mont.	*	*	*	*	*	*	*
Nebr.				360	146		144
Nev.							
N. H.							
N. J.	120		2,092		124	92	1,684
N. M.			657	668	433	452	676
N. Y.	*	*	*	*	*	*	*
N. C.			487		177		13
N. D.				590			
Ohio	175		2,596	1,091	190	1,396	641
Okla.					1		3
Ore.							
Pa.							
R. I.							
S. C.							
S. D.	*	*	*	*	*	*	*
Tenn.							
Tex.	5			11,264	14	5	15
Utah	417			441	470		316
Vt.			608		608		
Va.	133		24		284	38	162
Wash.			143	131	11		44
W. Va.							
Wisc.	43		216	76	80	14	1,073
Wyo.							
P. R.			247				
V. I.							

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	EXAMINATIONS FOR:							
	Fluoride	Grease	Hardness	Iron-Soluble	Iron-Total	Lead	Magnesium	Manganese
Ala.	475							
Alaska								
Ariz.	795		674	12	652		463	
Ark.								
Cal.	*	*	*	*	*	*	*	*
Colo.	788		404	404		401	404	408
Conn.	902	6	2,066		2,104	4		475
Del.								
D. C.	*	*	*	*	*	*	*	*
Fla.	1,340		975		975		975	
Ga.								
Hawaii	166		166		166	166	166	166
Ida.	638	*	2	*	*	*	*	*
Ill.			5,960		5,493			
Ind.	3,246	415	2,781		1,392	118	876	1,270
Iowa	3,013	99	1,779	189	2,440	55	473	440
Kans.								
Ky.	1,769		515		550	5	549	549
La.	312	3	508		176	1	255	161
Me.								
Md.	2,626	6	17		83	28	5	54
Mass.								
Mich.	*	*	*	*	*	*	*	*
Minn.	264	2	413		252		175	192
Miss.	424		248		248	4	200	20
Mo.	1,634		583		638	223	410	262
Mont.	*	*	*	*	*	*	*	*
Nebr.	992	41	1,101		1,002	5	506	969
Nev.								
N. H.								
N. J.	560	336	656	8	1,440	68	28	600
N. M.	1,511	147	697		687	73	671	608
N. Y.	*	*	*	*	*	*	*	*
N. C.	3,218		538		614	136		537
N. D.	584		549		373		212	178
Ohio	2,188	110	2,147	564	2,868	32	2,153	2,133
Oklahoma	162		367		14	1		
Ore.								
Pa.								
R. I.								
S. C.								
S. D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.	4,866	2	4,866	4,866		4	4,866	4,866
Utah	417		419	422	415	417	418	407
Vt.	100		608			50	608	608
Va.	687	4	420	57	438	1	349	445
Wash.	484		219		203	26	171	128
W. Va.								
Wisc.	2,045	55	1,542		1,158	11	94	444
Wyo.								
P. R.	204				517	474		474
V. I.			64				64	

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	EXAMINATIONS FOR:							
	Nickel	Nitrogen-Ammonia	Nitrogen-Nitrate	Nitrogen-Nitrite	Odor	Oxygen, Dissolved	pH	Phenol
Ala.								
Alaska								
Ariz.			571		634			
Ark.								
Cal.	*	*	*	*	*	*	*	*
Colo.		400	664				404	
Conn.	24	2,342	2,338	2,339	4,579		5,711	30
Del.								
D. C.	*	*	*	*	*	*	*	*
Fla.							975	
Ga.								
Hawaii			267	199	166	55	3,915	166
Ida.	*	*	*	*	*	*	*	*
Ill.			14,053				21,697	445
Ind.	284	588	2,898	79	1,996		4,334	203
Iowa		632	7,807	604	71	1,201	1,116	7
Kans.								
Ky.			503	20	503		507	16
La.		3	36	6	156	42	488	1
Me.								
Md.		100	71	71	12	126	1,556	2
Mass.								
Mich.	*	*	*	*	*	*	*	*
Minn.	50	443	1,400	243			310	10
Miss.		5	5	5	200	52	320	
Mo.			874				559	19
Mont.	*	*	*	*	*	*	*	*
Nebr.		72	1,336	13		275	899	
Nev.								
N. H.								
N. J.		1,812	2,156	196	2,232	4,112	3,352	160
N. M.			693	24	636		1,006	
N. Y.	*	*	*	*	*	*	*	*
N. C.			4	15			3,578	1
N. D.			524			46	556	
Ohio	98	424	3,584	1,375	2	4,657	6,925	68
Okla.		2	367				7	
Ore.								
Pa.								
R. I.								
S. C.								
S. D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.		3,391	11,264	3,391	5	6,398	11,264	6
Utah			259			5,779	1,740	
Vt.		608	608	608	608		608	
Va.			334				442	36
Wash.			515	141			167	
W. Va.								
Wisc.	6	742	1,645	642		10,050	2,098	4
Wyo.								
P. R.		474		517	517	247	355	194
V. I.								

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	EXAMINATIONS FOR:						
	Phosphate	Potassium	Sand Analysis	Silicate	Sodium	Solids	Sulfate
Ala.							
Alaska							
Ariz.					618	724	671
Ark.							
Cal.	*	*	*	*	*	*	*
Colo.							399
Conn.	9		129		568	555	81
Del.							
D.C.	*	*	*	*	*	*	*
Fla.			4				975
Ga.							
Hawaii	73				166	190	166
Ida.	*	*	*	*	*	*	*
Ill.			26				
Ind.	2,203	1,036	8	19	1,148	3,033	1,418
Ia.	1,173	330		428	633	7,267	1,276
Kans.						2,952	873
Ky.	8				5	997	513
La.	53	188	5	3	194	211	53
Me.							
Md.	48	8		1	324	13	4
Mass.							
Mich.	*	*	*	*	*	*	*
Minn.	127	5			47	2,587	172
Miss.	52	150		150	150	124	124
Mo.	30	399		323	408	323	418
Mont.	*	*	*	*	*	*	*
Nebr.	316	1,239			1,261	1,448	1,002
Nev.							
N.H.							
N.J.	260		12		380	2,880	520
N.M.		607			666	712	798
N.Y.	*	*	*	*	*	*	*
N.C.			22	2	10	357	3
N.D.			6		527	783	339
Ohio	712		116	19	2,170	2,875	754
Oklahoma	2				4	3	17
Ore.							
Pa.							
R.I.							
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.	37	4		2,014	4,866	8,065	11,264
Utah	465	326		425	328	1,765	422
Vt.	608	608			608		
Va.	160			311	4	286	308
Wash.	112	113		121	114		118
W. Va.							
Wisc.	1,540	125		7	758	9,789	233
Wyo.							
P.R.						517	
V.I.						65	517

TABLE 3-50. SANITARY CHEMISTRY: WATER
(Continued)

	Sulfide	Turbidity	Zinc	EXAMINATIONS FOR: Other
Ala.				
Alaska				
Ariz.		619		214
Ark.				
Cal.	*	*	*	*
Colo.		462	384	
Conn.		4,858	59	2,841 (h)
Del.				
D.C.	*	*	*	*
Fla.				
Ga.				
Hawaii		166	166	332
Ida.	*	*	*	*
Ill.		2,446		20,718
Ind.	1	2,767	284	555
Ia.	42	2	2	3,789 (i)
Kans.				
Ky.		503	5	
La.	1	490		8
Me.				
Md.	7	3		
Mass.				
Mich.	*	*	*	*
Minn.		420	52	314 (j)
Miss.		150		
Mo.		323	223	
Mont.	*	*	*	*
Nebr.		318		
Nev.				
N.H.				
N.J.	40	2,168	72	468 (k)
N.M.		734	428	
N.Y.	*	*	*	*
N.C.		465	129	95
N.D.		48		1,064 (l)
Ohio	2	2,125	106	2,574 (m)
Okla.	3		1	
Ore.				
Pa.				
R.I.				
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.	6		3	
Utah		424	416	2,525 (n)
Vt.	608		608	
Va.		13	138	
Wash.	25	149		77
W. Va.				
Wisc.	5	24	29	842 (o)
Wyo.				
P.R.		247	517	
V.I.				

FOOTNOTES FOR TABLE 3-50

- (a) The Chemistry laboratory is still closed and no testing was done in Fiscal Year 1966. There are plans to establish a joint chemistry laboratory with U. S. Geological Survey in a new facility at Juneau, July 1, 1967. Sanitary chemistry and radioactivity testing will then be provided.
- (b) Detailed breakdown not available.
- (c) Done by Water Pollution Commission Laboratory.
- (d) Handled by Sanitary Engineering Laboratory, Environmental Health Services.
- (e) Tests done in Sanitary Engineering Laboratory.
- (f) Not performed by Division of Laboratories.
- (g) Examinations on water and stream pollution samples.
- (h) Represents: hydrocarbon, 61; hydrogen sulfide, 4; animal toxicity, 1; chlorine and OT interference, 3; dissolved oxygen, 5; dye, 3; fluorescein, 1; lingo cellulose, 1; N-albuminoid, 2,057; N-organic, 276; screening test, 2; tannin, 1; thallium, 80; selenium, 1; pesticides, 19; physical appearance, 291; microscopic, 4; permanganate, 1; physical examination, 1; picuric acid, 1; spectrographic, 1.
- (i) Represents the following examinations: 198 pesticides; 150 actinomycetes; 231 COD; 230 temperature; 570 nitrogen, organic; 494 organic analysis; 15 acid, volatile; 250 bicarbonate; 21 specific gravity; 60 polyphosphate; 633 potassium; 40 infrared spectograms; 41 emission spectographs; 60 gas chromatographs; 253 carbonate; 62 fluoride, distilled; 21 hydroflurosilicic acid and 460 other exams.
- (j) Boron, 7; nitrogen, organic, 307.
- (k) Includes COD, fluorescent dye, SE, and other miscellaneous exams.
- (l) Carbonate, 516; bicarbonate, 516; hydroxide, 1; chemical oxygen demand, 28; other, 3.
- (m) Fish assay, 151; miscellaneous metals, 63; COD, 58; corrosion index, 2,110; tannin and lignin, 192.
- (n) Represents the following examinations: Barium, 325; Boron, 416; Selenium, 324; temperature, 1,260; research, 93; and seed calculations, 107. Water includes sewage and industrial wastes.
- (o) Lignin, organic nitrogen, etc.

TABLE 3-51. SANITARY CHEMISTRY: MILK AND CREAM

	Total Specimens	Total Examinations	Butterfat	Solids
Ala.	*	24,594	5,070	3,393
Alaska	664	1,386	664	355
Ariz.	2,565	4,778	1,770	1,056
Ark.				
Cal.	(a)	1,482	492	324
Colo.	*	4,813	1,655	
Conn.	12,776	19,504	5,121	181
Del.	1,123 (b)	1,123	*	
D.C.	*	*	*	*
Fla.	25,472	60,496	25,472	25,472
Ga.	(a)	48,702	9,695	
Hawaii	2,645 (c)	6,861	1,936	1,915
Ida.	*	5,228	1,904	798
Ill.	*	11,706	1,573	
Ind.	4,067	8,058	3,755	
Ia.	663	898	235	
Kans.	*	11,703	1,600	20
Ky.	16,575	8,531	1,596	1,414
La.	*	8,510	2,380	1,390
Me.				
Md.	21,471	*	*	*
Mass.				
Mich.	*	*	*	*
Minn.				
Miss.	(a)	74,908	55,527	16,698
Mo.	373	812	373	104
Mont.	*	*	*	*
Nebr.	*	615		
Nev.	(d)			
N.H.				
N.J.	*	2,998	961	961
N.M.	*	4,862		
N.Y.	*	4,502		
N.C.				
N.D.				
Ohio				
Oklahoma	6,182	9,690	2,442	1,066
Ore.				
Pa.				
R.I.	(d)			
S.C.	*	5,167	1,406	1,298
S.D.	*	*	*	*
Tenn.	4,160	8,049	2,030	11
Tex.	*	3,385	1,080	1,080
Utah				
Vt.				
Va.	*	6,841	1,322	4
Wash.				
W. Va.				
Wisc.				
Wyo.	*	512	60	
P.R.				
V.I.	365	401	36	23

TABLE 3-51. SANITARY CHEMISTRY: MILK AND CREAM
(Continued)

	Phosphatase	Cryoscope	Sediment	Other
Ala.	14,542	1,589		
Alaska	367			
Ariz.	1,952			
Ark.				
Cal.	666			
Colo.	1,871	1,287		
Conn.	4,385	7,961	10	1,846 (e)
Del.	1,123			
D.C.	*	*	*	*
Fla.	6,368	3,184		
Ga.	11,996	14,153		
Hawaii	1,176		6,940	5,918 (f)
Ida.	2,293	233	1,834	
Ill.	10,133			
Ind.	3,750	553		
Ia.	663			
Kans.	10,064	19		
Ky.	4,895	626		
La.	2,392	295		2,053
Me.				
Md.	*	*	*	*
Mass.				
Mich.	*	*	*	*
Minn.				
Miss.		2,683		
Mo.		335		
Mont.	*	*	*	*
Nebr.				
Nev.				615 (g)
N.H.				
N.J.	1,068	8		
N.M.	4,862			
N.Y.	4,502			
N.C.				
N.D.				
Ohio				
Okla.	6,182			
Ore.				
Pa.				
R.I.				
S.C.	1,479	984		
S.D.	*	*		*
Tenn.	1,848			
Tex.	1,080	4,160		
Utah		145		
Vt.				
Va.	5,515			
Wash.				
W. Va.				
Wisc.				
Wyo.				
P.R.	149	257		
V.I.	365		23	

FOOTNOTES FOR TABLE 3-51

- (a) Specimens entered under "Sanitary Bacteriology."
- (b) Tests other than phosphatase test done by Water Pollution Commission.
- (c) Hawaii reported the following other sanitary chemistry: frozen desserts, 797 specimens, 797 butterfat examinations; food, 1,140 specimens, and 2,584 various examinations.
- (d) Not performed by Division of Laboratories.
- (e) Connecticut also reported the following sanitary chemistry examinations not shown in further breakdown: sewage, sludge, industrial wastes, 245 specimens, 3,547 exams of various types; thermometers, clinical, 21,617 specimens, 151,329 determinations; miscellaneous sanitary chemical, 173 specimens, 608 determinations; calibration of milk pipettes, 1,976 specimens, 7,536 exams; milk and milk products, 1,086 specimens, 2,609 exams; frozen desserts and frozen dessert mixes, 810 specimens, 1,559 exams.
- (f) Includes 5,003 examinations for specific gravity; 858 Q. A. C. examinations, 26 acidity examinations, and 31 laboratory pasteurized.
- (g) Represents the following examinations; protein, 230; chemical oxygen demand, 195; Kjeldahl nitrogen, 14; total nitrogen, 2; iron bacteria, 6; Boron, 168.

TABLE 3-52. AIR POLLUTION

	Total Specimens	Total Exams	Aldehydes	Benzyne Soluble	Carbon Monoxide	Coefficient of Haze
Ala.						
Alaska						
Ariz.	9	57		57		
Ark.						
Cal.	3,768	16,101 (a)	*	*	*	*
Colo.						
Conn.	1,267	2,034		91	95	
Del.						
D. C.	*	*	*	*	*	*
Fla.	(b)					
Ga.						
Hawaii						
Ida.						
Ill.	*	31	12			
Ind.	(c)					
Iowa						
Kans.	(d)					
Ky.	122	148				
La.						
Me.	10	33				
Md.	3,220	37,908				
Mass.						
Mich.	*	*	*	*	*	*
Minn.	*	3,017				3,017
Miss.						
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.	(e)					
N. H.						
N. J.	*	(f)	(f)		(f)	(f)
N. M.	282	577		177		
N. Y.	3,603	*	*	*	*	*
N. C.	(g)	806				
N. D.	*	400				40
Ohio	716	1,676		480		
Oklahoma						
Ore.						
Pa.						
R. I.	(e)					
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.	*	2,042		1,099		
Utah	*	974	2			
Vt.	(h)					
Va.						
Wash.	(i)					
W. Va.						
Wisc.	237	237	29		21	
Wyo.						
P. R.						
V. I.						

TABLE 3-52. AIR POLLUTION
(Continued)

	Lead	Oxidants	Oxides of Nitrogen	Particulates	Sulphur Dioxide	Other
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.	*	*	*	*	*	*
Colo.						
Conn.		148	250	539	169	742 (j)
Del.						
D. C.	*	*	*	*	*	*
Fla.						
Ga.						
Hawaii						
Ida.						
Ill.	19					
Ind.						
Iowa						
Kans.						
Ky.		6	26	89	26	1
La.				6	6	21 (k)
Me.						
Md.		288				37,620 (l)
Mass.						
Mich.	*	*	*	*	*	*
Minn.						
Miss.						
Mo.						
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N. H.						
N. J.			(m)	(m)	20	(m)
N. M.	13				387	
N. Y.	*	*	*		*	*
N. C.					806	
N. D.		40	80	200	40	
Ohio	30	5		480		681 (n)
Oklahoma						
Ore.						
Pa.						
R. I.						
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.	80			859	4	
Utah			13			959 (o)
Vt.						
Va.						
Wash.						
W. Va.						
Wisc.	20		3	164		
Wyo.						
P. R.						
V. I.						

FOOTNOTES. TABLE 3-52.

- (a) Total exams only. No other breakdown available.
- (b) Performed by Bureau of Sanitary Engineering and city or county air pollution control agencies.
- (c) Performed in Bureau of Environmental Sanitation.
- (d) Handled by Sanitary Engineering Laboratory Environmental Health Services.
- (e) Not performed by Division of Laboratories.
- (f) These determinations have been made on a continuous basis 24 hours per day since August 1965 in a mobile laboratory. One-half hour averages are computed and placed into data processing equipment. Downtime during this period averages about 10 percent. Approximately 5,703 determinations per contaminant are made.
- (g) Counted with radioactivity specimens.
- (h) Performed at the State Industrial Hygiene Laboratory, Barre, Vermont.
- (i) Performed by Division of Environmental Health, Air Quality and Radiation Control.
- (j) Particulate, suspended, 673; pollen, 61; miscellaneous, 8.
- (k) Ammonia, 9; phosphates, 6; nitrates, 6.
- (l) Total duct, 963; organics, 664; others, 35,993.
- (m) Continuous monitoring. Other determinations include hydrocarbons, carbon dioxides, and meteorological data (wind direction, wind speed, temperature relative humidity).
- (n) Dust, 116; ozone, 40; network, 480; fallout jars, 32; xenia, 13.
- (o) Beryllium, 911 and selenium, 48.

TABLE 3-53. INDUSTRIAL CHEMISTRY

	Total Specimens	Total Examinations	Arsenic	Carbon Monoxide	Gases	Lead
Ala.						
Alaska						
Ariz.	4,141	4,141				
Ark.						
Cal.	2,022	2,909 (a)	*	*	*	*
Colo.	*	87	4			14
Conn.	2,207	2,549	42			1,650 (b)
Del.						
D. C.	*	*	*	*	*	*
Fla.	(c)					
Ga.						
Hawaii						
Ida.						
Ill.	*	36	14			22
Ind.	(d)					
Iowa	93	93		7	4	
Kans.	(e)					
Ky.	491	643			120	45
La.						
Me.	20	34		12		4
Md.	3,073	3,339				2,731
Mass.						
Mich.	*	*	*	*	*	*
Minn.	*	243				185
Miss.						
Mo.	300	300				300
Mont.	*	*	*	*	*	*
Nebr.						
Nev.	(f)					
N. H.						
N. J.	*	5,700			688	1,491
N. M.						
N. Y.						
N. C.	994	1,005			24	11
N. D.						
Ohio	1,180	1,310	8			232
Oklahoma						
Ore.						
Pa.						
R. I.	(f)					
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.	*	367	325			22
Utah	*	263	49	2		136
Vt.	(g)					
Va.						
Wash.	(h)					
W. Va.						
Wisc.	713	713	117		85	55
Wyo.						
P. R.						
V. I.						

TABLE 3-53. INDUSTRIAL CHEMISTRY
(Continued)

	<u>Mercury</u>	<u>Organic Chemical Analysis</u>	<u>Other</u>
Ala.			
Alaska			
Ariz.		2	4,139 (i)
Ark.			
Cal.	*	*	*
Colo.		69	
Conn.	86	462	309 (j)
Del.			
D. C.	*	*	*
Fla.			
Ga.			
Hawaii			
Ida.			
Ill.			
Ind.			
Iowa			82 (k)
Kans.			
Ky.		152	326 (l)
La.		4	14 (m)
Me.			
Md.			608
Mass.			
Mich.	*	*	*
Minn.		23	35
Miss.			
Mo.			
Mont.	*	*	*
Nebr.			
Nev.			
N. H.			
N. J.			3,521 (n)
N. M.			
N. Y.			
N. C.			970 (o)
N. D.			
Ohio	3		1,067 (p)
Oklahoma			
Ore.			
Pa.			
R. I.			
S. C.			
S. D.	*	*	*
Tenn.			
Tex.			
Utah	12	20	64 (q)
Vt.			
Va.			
Wash.			
W. Va.			
Wisc.	18	278	160 (r)
Wyo.			
P. R.			
V. I.			

FOOTNOTES. TABLE 3-53.

- (a) Total examinations only. No further breakdown available.
- (b) Includes investigations associated with lead poisoning in children.
- (c) Performed by the Division of Radiological and Occupational Health.
- (d) Performed in Bureau of Environmental Sanitation.
- (e) Handled by Sanitary Engineering Laboratory, Environmental Health Services.
- (f) Not performed by Division of Laboratories.
- (g) Performed at the Industrial Hygiene Laboratory of the Vermont State Health Department.
- (h) Performed by Division of Environmental Health, Air Quality and Radiation Control.
- (i) Pesticides.
- (j) Includes 43 silica examinations, 35 microscopic exams; 46 Cadmium exams; 55 Thallium exams, in addition to various other types.
- (k) Represents: Isophorone, 9; Toluene, 9; Toluene Diisocyanate, 9; Oxygen, 9; Chlorinated Hydrocarbons, 11; Dust counts, 7; Physical measurements, 10.
- (l) Represents the following examinations: metals in air, 87; SiO₂, 152; fluorides, 22; and 65 miscellaneous examinations not broken down further by type.
- (m) Represents the following: dust counts, 6; copper, 4; zinc, 4.
- (n) Physical determination, 2,988; routine, 473; diagnostic, 60.
- (o) Includes silica, dust, zinc, and miscellaneous.
- (p) Copper, 57; Miscellaneous chemicals, 8; zinc, 116; zinc stearate, 73; wildlife, organics, 24; water, organics, 366; milk, organics, 61; waste water, vegetables, organics, 5; air samples, miscellaneous tests, 140; hemoglobins, 89; and miscellaneous, 128.
- (q) Represents the following examinations: Selenium, 47; Cadmium, 4; Thallium, 4; ozone, 3, and carboxy-hemoglobin, 6.
- (r) Iron, 101; fluoride, 16; Cadmium, 16; miscellaneous, 27.

TABLE 3-54. RADIOACTIVITY

	Total Specimens	Total Examinations	Air: Examinations		
			Specimens	Gross Beta	Other
Ala.					
Alaska					
Ariz.	276	276			
Ark.					
Cal.	7,139	17,450	3,716	5,403	1,208 (a)
Colo.	*	142	*	105	37 (b)
Conn.	904	1,801	365	365	
Del.					
D. C.	*	*	*	*	*
Fla.	3,225	12,593	1,093	1,093	
Ga.					
Hawaii					
Ida.	*	527	*	196	
Ill.	*	8,300	*	8,300	
Ind.	(c)				
Iowa	2,602	4,313	540	540	111 (d)
Kans.	(e)				
Ky.	6	6			
La.	*	1,009	*		
Me.	616	688	20		20 (f)
Md.	1,267	1,904	783	256	527 (g)
Mass.					
Mich.	*	*	*	*	*
Minn.	*	1,725	*	49	1
Miss.					
Mo.	840	840			
Mont.	*	*	*	*	*
Nebr.					
Nev.	(h)				
N. H.					
N. J.	*	11,588	*	374	
N. M.					
N. Y.	2,698	*	773	*	*
N. C.	1,149	1,352	502	502	139
N. D.	1,073	2,421	362	362	
Ohio	139	276	2		2 (i)
Oklahoma					
Ore.					
Pa.					
R. I.	(h)				
S. C.					
S. D.	*	*	*	*	*
Tenn.					
Tex.	*	1,188	*	756	
Utah					
Vt.	(j)				
Va.					
Wash.	(k)				
W. Va.					
Wisc.	1,573	1,573	493	469	24 (l)
Wyo.					
P. R.					
V. I.					

TABLE 3-54. RADIOACTIVITY
(Continued)

		Milk: Examinations			
	Specimens	Cesium	Iodine	Strontium 90	Miscellaneous
Ala.					
Alaska					
Ariz.					
Ark.					
Cal.	200	195	195		
Colo.					
Conn.	42	42	42	29	408 (m)
Del.					
D. C.	*	*	*	*	*
Fla.	564	564	564	564	1,128 (n)
Ga.					
Hawaii					
Ida.	*		87 (o)	(o)	21
Ill.					
Ind.					
Iowa	173	121	121	49	121 (p)
Kans.					
Ky.	6			6	
La.	*			121	242 (q)
Me.	24	24	24	24	24 (r)
Md.	77	37	58	138	62 (s)
Mass.					
Mich.	*	*	*	*	*
Minn.	*	127	127	100	
Miss.					
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N. H.					
N. J.	*		952	952	1,938 (t)
N. M.					
N. Y.	774	*	*	*	*
N. C.	13	13	13	13	39
N. D.	639	639	639	639	
Ohio	15	15	15		
Oklahoma					
Ore.					
Pa.					
R. I.					
S. C.					
S. D.	*	*	*	*	*
Tenn.					
Tex.	*	144	144	144	
Utah					
Vt.					
Va.					
Wash.					
W. Va.					
Wisc.	696	312	312	72	
Wyo.					
P. R.					
V. I.					

TABLE 3-54. RADIOACTIVITY
(Continued)

	Rainfall: Examinations				
	Specimens	Cesium	Strontium 90	Gross Alpha and Beta	Miscellaneous
Ala.					
Alaska					
Ariz.					
Ark.					
Cal.	222	271	279		
Colo.					
Conn.					
Del.					
D. C.	*	*	*	*	*
Fla.	531			1,062	
Ga.					
Hawaii					
Ida.	*			147	
Ill.					
Ind.					
Iowa	205	19		15	186 (u)
Kans.					
Ky.					
La.	*			646	
Me.	139			139	
Md.					
Mass.					
Mich.	*	*	*	*	*
Minn.	*			74	
Miss.					
Mo.					
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N. H.					
N. J.	*			128	1,150 (v)
N. M.					
N. Y.	305	*	*		*
N. C.	193	193 (w)	*	*	*
N. D.	70	70	70		
Ohio					
Okla.					
Ore.					
Pa.					
R. I.					
S. C.					
S. D.	*	*	*	*	*
Tenn.					
Tex.					
Utah					
Vt.					
Va.					
Wash.					
W. Va.					
Wisc.	156			156	
Wyo.					
P. R.					
V. I.					

TABLE 3-54. RADIOACTIVITY
(Continued)

Specimens	Water: Examinations				Miscellaneous Radioactivity	
	Gross		Cesium	Miscellaneous	Specimens	Examinations
	Alpha and Beta					
Ala.						
Alaska						
Ariz.						
Ark.						
Cal.	541	600	52	46 (b)	2,460	9,201
Colo.						
Conn.	401	486		429 (x)	96 (y)	253
Del.						
D. C.	*	*	*	*	*	*
Fla.	421	842			616 (z)	6,776 (z)
Ga.						
Hawaii						
Ida.	*	76				
Ill.						
Ind.						
Iowa	1,684	3,030 (aa)				
Kans.						
Ky.						
La.						
Me.	138 (bb)	132		6 (cc)	295	295 (dd)
Md.	407	826				
Mass.						
Mich.	*	*	*	*	*	*
Minn.	*	1,131	26	74 (ee)	*	16 (ff)
Miss.						
Mo.	840	840				
Mont.	*	*	*	*	*	*
Nebr.						
Nev.						
N. H.						
N. J.	*	2,944			*	3,150 (gg)
N. M.						
N. Y.	846		*	*	*	
N. C.	340		340 (w)		101	100
N. D.	2		2			
Ohio	122	244				
Oklahoma						
Ore.						
Pa.						
R. I.						
S. C.						
S. D.	*	*	*	*	*	*
Tenn.						
Tex.						
Utah						
Vt.						
Va.						
Wash.						
W. Va.						
Wisc.	228	220 (hh)	8			
Wyo.						
P. R.						
V. I.						

FOOTNOTES. TABLE 3-54.

- (a) Gamma scan.
- (b) Strontium 90.
- (c) Performed in Bureau of Environmental Sanitation.
- (d) Gross Alpha.
- (e) Handled by Sanitary Engineering Lab, Environmental Health Services.
- (f) Wipes of radioactive sources.
- (g) Long-lived daughter products.
- (h) Not performed by Division of Laboratories.
- (i) Gamma nucleides.
- (j) Performed at the State Industrial Hygiene Laboratory.
- (k) Performed by Division of Environmental Health, Air Quality and Radiation Control.
- (l) Specific isotopes.
- (m) Barium, lanthanum 140, 42; Strontium 89, 29; Potassium, 42; Gamma scan, 42; Miscellaneous, 253.
- (n) Barium 140, 546; Potassium 40, 564.
- (o) Includes both Iodine and Strontium 90.
- (p) Potassium.
- (q) Gross Alpha and Beta.
- (r) Strontium 89.
- (s) Calcium, 45; Barium 140, 17.
- (t) Strontium 89, 952 tests; Leak test and smears, 986.
- (u) Gross Beta-Gamma.
- (v) Marine-Gamma scans.
- (w) Represents total tests, not broken down by type.
- (x) Gamma scan, 20; Strontium 89 and 90, 10; Gross radium, 14; miscellaneous chemical, 385.
- (y) Includes sewage, industrial wastes, aquatic life, silts, diets, and wipe samples.
- (z) Vegetation, biota, soil: Gross Alpha and Beta plus 9 radionuclides.
- (aa) This includes 1,346 Gross Beta-Gamma examinations.
- (bb) Samples include surface water, 76 and sea water, 56.
- (cc) Ground water, radon.
- (dd) Gross Beta. Seaweed, 165; shellfish, 41; sediment, 56; plankton, 33.
- (ee) Chromium, 3; Cobalt 58, 24; Cobalt 60, 26; Iodine 131, 10; Manganese 54, 8; Cesium 134, 3.
- (ff) Vegetation - Strontium 90.
- (gg) Gross Alpha and Beta on soil, 584; on silt, 1,888; and on vegetation, 628; ore, gamma scans, 50.
- (hh) Surface water, 204; well water, 16.

TABLE 3-55. TOXICOLOGY

	Total Specimens	Total Exams	Drug Exams	Food, Water and Milk Examinations	Examinations of Tissues and Body Fluids For:		
					Barbiturates	Bromide	Alcohol
Ala.							
Alaska							
Ariz.							
Ark.							
Cal.	3,896	17,409	2,966	14,428			
Colo.							
Conn.	8,799	14,718	3,299		1,491	7	3,484
Del.							
D.C.	*	*	*	*	*	*	*
Fla.	4,862	6,136	10	37	475		729
Ga.							
Hawaii	250	590	295		14		15
Ida.	*	331	8				308
Ill.	*	7,984			395	36	1,016
Ind.	(a)						
Ia.	4	19					
Kans.	1,895	2,534	213	183	113	1	1,624
Ky.	457	1,362 (b)	389	973			
La.	*	34,362	57	34,244		4	4
Me.	461	668	77	111		59	239
Md.							
Mass.							
Mich.	*	22,774 (c)	4,115				8,198
Minn.	*	1,452			2		7
Miss.							
Mo.	9	9			1		
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.	(d)						
N.H.							
N.J.	(d)						
N.M.	*	128					
N.Y.							
N.C.	11	19					
N.D.							
Ohio	20	227		20			
Oklahoma	2,076	2,076	424	494	183		415
Ore.							
Pa.							
R.I.	*	4,222			259	2	1,868
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.							
Utah							
Vt.	981	1,001	10	10	(e)		728
Va.							
Wash.							
W. Va.							
Wisc.	109	109				7	5
Wyo.							
P.R.	*	951					951
V.I.							

TABLE 3-55. TOXICOLOGY
(Continued)

	Examinations of Tissues and Body Fluids For:						
Psychotropic Agents	Drug Levels, Miscellaneous	Transaminase	Lead	Arsenic	Mercury	Other Metals	
Ala.							
Alaska							
Ariz.							
Ark.							
Cal.							
Colo.							
Conn.	1,373	105		40	103		
Del.	*	*	*	*	*	*	*
D.C.							
Fla.	30	47			54	15	15
Ga.							
Hawaii		96		14	10	2	5
Ida.							
Ill.	26	1,037	8	144	109	19	55
Ind.							
Ia.					1		
Kans.	11	45		86	77	28	33
Ky.							
La.				12	6	6	
Me.	7	35		17	12		13
Md.							
Mass.							
Mich.							
Minn.		3		872	242	207	43
Miss.							
Mo.							
Mont.	*	*	*	*	*	*	*
Nebr.							
Nev.							
N.H.							
N.J.							
N.M.				15	13		11
N.Y.							
N.C.				8	11		
N.D.							
Ohio						14	96
Okla.				64	59	11	62
Ore.							
Pa.							
R.I.	62	1,543			3	2	2
S.C.							
S.D.	*	*	*	*	*	*	*
Tenn.							
Tex.							
Utah							
Vt.		144		10 (f)	(f)	(f)	(f)
Va.							
Wash.							
W. Va.							
Wisc.		5		43	15	5	8
Wyo.							
P.R.							
V.I.							

TABLE 3-55. TOXICOLOGY
(Continued)

	Examinations of Tissues and Body Fluids For:				
	Carbon Monoxide	Poisons	Narcotics	Methemoglobin	Other
Ala.					15 (g)
Alaska					
Ariz.					
Ark.					
Cal.					
Colo.					
Conn.	196	91	218	6	1,656 (h)
Del.	*	*	*	*	*
D.C.					
Fla.	94	98	988	24	3,519 (i)
Ga.					
Hawaii		18	92		29
Ida.		15			
Ill.	764	179	62	15	4,119
Ind.					
Ia.					18 (j)
Kans.	67	43	10		
Ky.					
La.		15	1		13
Me.	41	55	2		
Md.					
Mass.					
Mich.	544	668			940
Minn.	2			74	
Miss.					
Mo.		8			
Mont.	*	*	*	*	*
Nebr.					
Nev.					
N.H.					
N.J.					
N.M.		39			50 (k)
N.Y.					
N.C.					
N.D.					
Ohio		4			
Oklahoma	38	163	163		82 (l)
Ore.					
Pa.					
R.I.	45	31	91		314
S.C.					
S.D.	*	*	*	*	*
Tenn.					
Tex.					
Utah					
Vt.	65				34
Va.					
Wash.					
W. Va.					
Wisc.	8			13	
Wyo.					
P.R.					
V.I.					

FOOTNOTES FOR TABLE 3-55

- (a) Performed in Laboratories at Indiana University School of Medicine.
- (b) These examinations are in support of Investigation and Narcotic Control Program and Food and Drug Program.
- (c) Includes 8,309 miscellaneous exams not broken down further by type.
- (d) Not done in this laboratory.
- (e) Included in "drug levels."
- (f) Includes arsenic, mercury and other metals.
- (g) Pesticides.
- (h) In addition, Connecticut reported the following other toxicology not shown in the body of the table: blood and blood stains, 582 specimens, 1,232 exams; fibers and hairs, 97 specimens, 105 exams; seminal stains, 277 specimens, 678 exams; and miscellaneous, 332 specimens, 634 exams.
- (i) Pesticides, 3,455; other, 64.
- (j) Strychnine, 4; naphthalene, 10; P-dichlorobenzene, 4.
- (k) Sodium fluoride.
- (l) Represents 38 hemoglobin exams and 44 sedimentation rates.

SECTION IV

PRODUCTION OF BIOLOGICS

TABLE 4-1. PRODUCTION OF BIOLOGICS FOR HUMAN USE

Amounts Produced (in mls)			
Conn.	Silver Nitrate, 76,310	Mich.	Immune Serum Globulin, 207,378 Fibrinogen, 770 Diphtheria-Tetanus-Pertussis-Polio, 216,765 Rabies, 15,932 Tetanus Immune Globulin, 1 Normal Rabbit Serum, 1,000 Typhoid-Paratyphoid Vaccine, 102,120 Diphtheria Antitoxin, 137 H. Influenza B Antiserum, 10 Normal Serum Albumin, 25,974 Antihemophilic Globulin, 745 Diphtheria-Tetanus-Polio, 84,650 Diphtheria Toxin (Schick), 58,720 Normal Horse Serum, 8,040
Ga.	Silver Nitrate, 24,000 Old Tuberculin, 103,000 (a) Typhoid Vaccine, 165,000		
Ill.	Silver Nitrate, 55,320 Old Tuberculin, 49,830 Typhoid Vaccine, 164,110 Diphtheria-Tetanus Toxoid, 74,025 Diphtheria-Tetanus-Pertussis, 151,223 Pertussis Vaccine, 14,064 Fluoride, 58,800 Diphtheria Toxoid, 21,710 Schick Test Materials, 8,064 P.P.D., 103,740 Rabies Vaccine, 36,316 Diphtheria-Toxoid-Pertussis, 7,060	Minn.	Old Tuberculin, 138,000
Kans.	Fluoride, 5,800 Ferric Chloride, 1,200	Miss.	Silver Nitrate, 19,962 (ampules)
Mass.	Silver Nitrate, 131,340 Old Tuberculin, 30,817 Typhoid Vaccine, 66,140 Diphtheria-Tetanus Toxoid, 111,107 Diphtheria-Tetanus-Pertussis, 315,065 Tetanus Toxoid, 266,010 Pertussis Vaccine, 1,065 Smallpox Vaccine, 407,231 caps. Sensitivity Outfits, 2,652 Tetanus and Diphtheria Toxoids for Adults, 80,145 Tetanus Antitoxin, 10,905,000 units Immune Serum Globulin, 17,452 Sterile Vaccination Needles, 246,250 Schick Outfits, 9,750 Tetanus and Diphtheria Toxoids for Boosters, 93,215 Diphtheria Antitoxin, 5,001,000 units Normal Serum Albumin, 30,030 Defibrinated Horse Blood, 791,170 Normal Horse Serum, 244,150 Whole Horse Blood, 231,200 Produced and distributed for American National Red Cross: Normal Serum Albumin, 852,900 Polio Immune Globulin, 150,052	Tenn.	Silver Nitrate, 20,324 Old Tuberculin, 29,630 Typhoid Vaccine, 32,140 Tetanus Toxoid, 73,990 TAB Vaccine, 131,370
		Tex.	Silver Nitrate, 14,922 (ampules) Old Tuberculin, 16,615 Typhoid Vaccine, 210,000 Diphtheria-Tetanus Toxoid, 188,725 Diphtheria-Tetanus-Pertussis, 237,100 Tetanus Toxoid, 62,810 Pertussis Vaccine, 2,880 Smallpox Vaccine, 386,880 Diphtheria Toxoid, 4,140 Rabies Vaccine, 943 (14 day courses)
Mich.	Silver Nitrate, 234,560 Old Tuberculin, 1,552,180 Typhoid Vaccine, 31,446 Diphtheria-Tetanus Toxoid, 494,040 Diphtheria-Tetanus-Pertussis, 505,954 Tetanus Toxoid, 715,308 Pertussis Vaccine, 13,035 Smallpox Vaccine, 921,965 Fluoride, 169,800 Histoplasmin, 48,815 Tetanus Antitoxin, 15,432	Va.	Old Tuberculin, 56,000
		Wisc.	Silver Nitrate, 43,320

(a) Commercial product diluted and dispensed.

TABLE 4-2. PRODUCTION OF DIAGNOSTIC REAGENTS: ANTISERA

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Alabama		
Streptococcal Group A	1030	169
Streptococcal Group C	53	
Staphylocal	21	
Tagged Group A Antiserum	93	11
California		
Brucella Abortus	33	
S. Paratyphi A	17	
S. Paratyphi B	22	
S. Typhi "O"	22	
S. Typhi "H"	10	
Pasteurella Tularensis	24	
Anti-sheep Hemolysin	1138	
Antisera		
Shigella A 6	200	
Shigella A 8	173	
Shigella A 9	263	
Shigella A 10	306	
Shigella Group A	425	
Shigella Group C	355	
Shigella Serotype (2000-53)	190	
Shigella Serotype (3873)	173	
Shigella Serotype (2044-54)	230	
Absorbed Sera		
Shigella B Type III	30	
Shigella B Type V	30	
Shigella B Type VI	20	
Antisera		
Salmonella manhattan "O"	65	
Salmonella Group D	200	
Salmonella Group E	100	
Salmonella illinois "O"	200	
Salmonella uccle "O"	200	
Vi (Bethesda Ballerup) (globulin)	43	
Salmonella "H" Spicer:		
Polyval. Pool 1	225	
Polyval. Pool 2	300	
Polyval. Pool 3	220	
Polyval. Pool 4	235	
Salmonella cholerae-suis 1.5	230	
Salmonella rutgers 1z40	175	
Absorbed		
Salmonella single "H" n (factor)	32	
Salmonella single "H" s (factor)	15	
Salmonella single "H" v (factor)	15	
Salmonella single "H" w (factor)	30	
Salmonella single "H" z 15 (z17) (factor)	25	
Salmonella single "H" 2 (factor)	50	
Salmonella single "H" 6 (factor)	30	

TABLE 4-2. PRODUCTION OF DIAGNOSTIC REAGENTS: ANTISERA
(Continued)

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Antisera		
Neisseria Meningitidis Type A	80	
Neisseria Meningitidis Type B	85	
Neisseria Meningitidis Type C	75	
Neisseria Meningitidis (Lactose positive variant)	105	
Treponema zuelzerae	275	
Treponema Kazan 4	208	
Treponema reiteri	138	
Treponema microdentium	224	
Bacterial sonicates		
T. zuelzerae	30	
T. Kazan 4	150	
T. reiteri	80	
T. microdentium	200	
Bacterial extracts (soluble)		
T. zuelzerae	900	
T. Kazan 4	900	
T. reiteri	4,500	
T. microdentium	1,500	
Fluorescein-tagged immune globulins		
Direct Treponemal Test (FADF) (Hyper-Immune Syphilitic Globulin)	30	
Negative Control (Normal non syphilitic Globulin)	25	
Normal Rabbit Globulin	20	
Pasteurella Tularensis	8	
Pasteurella Pestis	7	
N. Meningitidis Type A	15	
N. Meningitidis Type B	15	
N. Meningitidis Type C	15	
N. Meningitidis (Lactose + variant)	15	
Connecticut		
Listeria monocytogenes	137	
Neisseria meningitidis	74	
Salmonella	1,941	
Shigella	725	
Streptococcus	223	25.5
Brucella		1
Haemophilus influenzae		1
Georgia		
Rabies conj.	30	
G. P. complement	110	
Normal mouse brain	370	
Rabid mouse brain	295	
Illinois		
Escherichia coli	180	
Shigella	308	

TABLE 4-2. PRODUCTION OF DIAGNOSTIC REAGENTS: ANTISERA
(Continued)

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Indiana		
Antihistoplasmin	60	
Antiblastomycin	40	
Michigan		
Friedlander's	88.5	
Haemophilus Influenzae	114.5	
Pneumococcus	186.5	
Brucella Abortus	49	
Pasteurella Tularensis	36	
Meningococcus 3 types and polyvalent	120	
S. Typhi	64	
S. Paratyphi A	39	
S. Paratyphi B	52	
Shigella adsorbed, 11 types	2,427	
Polyvalent Salmonella "H"	303	
Polyvalent Salmonella "O" AB	575	
Polyvalent Salmonella "O" CD	590	
H. Pertussis	25	
Minnesota		
Salmonella (all groups)	325	
Shigella (all groups)	325	
New Jersey		
California	250	
Flanders	250	
Cache	250	
EE	260	
WE	275	
STL	250	
New York		
Antipneumococcus serum Pool 1,2,3	120	
Antipneumococcus serum Pool 4,5,6	146	
E. coli diag. serum OB Pool 1	64	
E. coli diag. serum OB Pool 2	62	
Brucella Abortus diag. serum	229	85
Salmonella typhosa diag. serum	515	97.5
Pasteurella Tularensis diag. serum	175	37.5
Proteus OX 19 diag. serum	360	47.5
Normal horse diag. serum	17.5	
Normal rabbit diag. serum	32.5	
Multivalent salmonella diag. serum	94	
Multivalent shigella diag. serum	115	
Shigella sonnei diag. serum	55	
Alkalescens dispar diag. serum Group 01	25	
Multivalent N. Meningitidis diag. serum	50	
Wisconsin		
Cox. A ₁	150	15
Cox. A ₂₂	150	15
Cox. A ₂₄	150	15
Wyoming		
Syphilitic	380	180

TABLE 4-3. PRODUCTION OF DIAGNOSTIC REAGENTS: ANTIGENS

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Alabama		
Rabies	61	
California		
<i>Brucella abortus</i>	1,520	1,389
<i>Pasteurella tularensis</i>	883	
<i>S. typhi "O"</i>	2,310	
<i>S. typhi "H"</i>	2,600	2,175
<i>S. paratyphi A</i>	3,105	1,500
<i>S. paratyphi B</i>	1,585	
Connecticut		
VDRL	6,869	6,302
VDRL diluent	66,050	60,600
Control serums	1,271	1,271
Georgia		
Influenza A	300	
Influenza B	200	
Rubella	430	
Hawaii		
Mumps - Soluble	20	
Mumps - Viral	20	
Influenza, A2/Jap	40	
Influenza B	40	
Coxsackie	40	
ECHO	40	
Adenovirus CF type 4	20	
Illinois		
Guinea Pig (kidney desiccated)	1,520	
Indiana		
<i>Histo. yeast phase</i>	450	
<i>Histo. mycelial phase</i>	250	
<i>Blastomycetes</i>	50	
<i>Gonococcal</i>	85	
Louisiana		
Hemolysin	500	200
Michigan		
<i>Pasteurella tularensis</i>	2,700	
<i>S. typhi "O"</i>	8,800	
<i>S. typhi "H"</i>	7,750	
<i>S. paratyphi "A"</i>	4,600	
<i>S. paratyphi "B"</i>	7,200	
<i>Brucella abortus</i>	8,900	
New Jersey		
Mumps - Soluble	150	
Mumps - Viral	250	
Influenza	100	
Coxsackie	350	
SLE	200	
WEE	150	
California	350	
EE	200	
Cache	50	

TABLE 4-3. PRODUCTION OF DIAGNOSTIC REAGENTS: ANTIGENS
(Continued)

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
New York		
Antisheep amboceptor		185
Cardiolipin antigen for complement-fixation test for syphilis	1,155	1,020
Cardiolipin antigen for slide flocculation test for syphilis		1,400
VDRL diluent	29,000	6,600
Brucella abortus antigen		250
Salmonella typhosa alcohol-treated suspension		860
Salmonella typhosa formalin-treated suspension		850
Pasteurella tularensis formalin-treated suspension		185
Proteus OX-19 alcohol-treated suspension	360	
Ohio		
Mumps - Soluble	100	
Influenza A ₂	200	
Influenza Lee B	200	
Tennessee		
Brucella abortus	1,230	
Pasteurella tularensis	1,230	
S. typhi "O"	1,230	
Proteus OX-19	1,230	
Texas		
Pasteurella tularensis	330	
S. typhi "O"	555	
VDRL		3,406
Undulant fever		445
Typhus		410
Utah		
Brucella abortus	15,000	
Pasteurella tularensis	1,000	
Viral	6,000	
Proteus oxig	1,000	
Wisconsin		
Influenza B-Singapore	150	
Influenza B-Maryland	300	
Influenza B-GL1/739/54	150	
Influenza A-Taiwan	150	
Parainfluenza I	160	
Parainfluenza III	160	
For neutralization tests: Coxsackie A ₉	40	
ECHO ₉	40	
ECHO ₁₁	40	
Mumps (Enders)	20	
R. S.	20	
Herpes Simplex (MacIntyre)	20	
Adenovirus Type 3	20	
Adenovirus Type 5	20	
Rubella Gilchrist	130	
Rubella magaldi	24	
Rubella RK 13	24	
Measles (Philadelphia)	40	2
Wyoming		
Brucella abortus	30	
Pasteurella Tularensis	45	
S. typhi "O"	30	
S. typhi "H"	30	

TABLE 4-4. PRODUCTION OF DIAGNOSTIC REAGENTS: SOLUTIONS

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Alabama		
CVS	145	
NMB	174	
Arizona		
Media and Stains	1,682,678	
Control Sera	3,000	
Premarital Evaluation Specimens	44,250	
Georgia		
Sellers Stain	3,000	1,000
Miscellaneous	924,000	
Dyes, Indicators, and Reagents	40,000	
Indiana		
Colloidal gold	20,000	
Physiological saline	300,000	
0.9% saline	15,000	
Veronal buffer	18,000	
Louisiana		
Normal saline	25,000	14,800
Distilled water	300,000	288,200
Ferric chloride	500 btls	381 btls
Copper sulphate	1,000 btls	528 btls
Phenol-red	35,000 btls	34,460 btls
New York		
Colloidal gold solution	495,000	4,000
Buffer pH 7.4	104,000	
Buffer pH 5.5	5,000	
Protein standard for spinal fluid test	600	60
Colloidal gold test fluid	1,300	
Lyophilized reactive control serum for syphilis serology		40
South Carolina		
Drabkins, furnished to county health departments	*	*
Tennessee		
Ferric chloride 10%	14,440	10,000
VDRL Saline	83,000	50,000
Buffered P.S.S.	79,500	65,000
P.S.S.	298,250	150,000
Texas		
Ortho tolidine Solution (4 oz)	849	
Ortho tolidine color standards	412 sets	
VDRL Buffered Saline	28,970	
Syphilis reactive control serum	2,450	
Citrated sheep blood	43,000	
Complement	253	
Wisconsin		
Water Chemistry Control Programs:		
Phosphate buffer	5,000	
Ferric chloride	5,000	
Magnesium sulfate	5,000	

TABLE 4-4. PRODUCTION OF DIAGNOSTIC REAGENTS: SOLUTIONS
(Continued)

	Amount Produced (mls)	Amount Distributed to other Laboratories (mls)
Wisconsin (Continued)		
Calcium chloride		5,000
N/40 Potassium dichromate		4,300
Potassium iodide crystals		600 gms
D. O. Reagents		
N/40 Sodium thiosulfate		30,000
Manganous sulfate		30,000
Alkaline KI plus Azide		30,000
Sulfuric acid		30,000
Starch solution		30,000
Distilled water		90,000

SECTION V

PERSONNEL

TABLE 5-1. LABORATORY STAFFING

	Total Budgeted Positions	Professional and Technical Positions (a)	Support Services Positions (b)	Administrative and Clerical Positions	Maintenance Positions (c)
Ala.	128	73	31	23	1
Alaska	22	10	3	9	
Ariz.	37	23	6	7	1
Ark.	*	*	*	*	*
Cal.	238 (d)	126	54	58	
Colo.	38	28	5	5	
Conn.	150	87	31	32	
Del.	19	12	3	4	
D. C.	*	*	*	*	*
Fla.	175	98	38	39	
Ga.	136	64 (e)	33	38	1
Hawaii	33	19	8	6	
Ida.	31 (f)	23	2	5	1
Ill.	*	*	*	*	*
Ind.	71	44	11	16	
Ia.	70	46	10	14	
Kans.	50	29	9	11	1
Ky.	65	37	15	12	1
La.	160	77	35	48	
Me.	15	8	3	4	
Md.	215	140	40	32	3
Mass.	187	127	11	34	15
Mich.	356	205	100	33	18
Minn.	75	43	15	17	
Miss.	44	24	12	8	
Mo.	39	23	8	8	
Mont.	*	*	*	*	*
Nebr.	25	15	4	6	
Nev.	15	10	2	3	
N. H.	19	12	2	5	
N. J.	135	89	29	17	
N. M.	36	17	9	10	
N. Y.	565	306	148	91	20
N. C.	102	65	19	17	1
N. D.	29	19	4	4	2
Ohio	93	58	20	11	4
Okla.	44	29	9	6	
Ore.	33	22	3	8	
Pa.	*	*	*	*	*
R. I.	41	26	8	7	
S. C.	67 (g)	44	11	12	
S. D.	*	*	*	*	*
Tenn.	125	83	27	15	
Tex.	*	*	*	*	*
Utah	35	20	8	7	
Vt.	24	15	4	5	
Va.	79	46	15	18	
Wash.	38	21	7	9	
W. Va.	38	22	5	9	2
Wisc.	119	72	22	25	
Wyo.	5	2	1	2	
P. R.	103	69	16	16	2
V. I.	8	5	1	2	

TABLE 5-2. PERSONNEL DISTRIBUTION

	PERCENT OF TOTAL			
	Professional and Technical Positions	Support Services Positions	Administrative and Clerical Positions	Maintenance Positions
Ala.	57.0	24.2	18.0	0.8
Alaska	45.5	13.6	40.9	
Ariz.	62.2	16.2	18.9	2.7
Ark.	*	*	*	*
Cal.	52.9	22.7	24.4	
Colo.	73.6	13.2	13.2	
Conn.	58.0	20.7	21.3	
Del.	63.2	15.8	21.0	
D. C.	*	*	*	*
Fla.	56.0	21.7	22.3	
Ga.	47.1	24.3	27.9	0.7
Hawaii	57.6	24.2	18.2	
Ida.	74.2	6.5	16.1	3.2
Ill.	*	*	*	*
Ind.	62.0	15.5	22.5	
Ia.	<u>65.7</u>	<u>14.3</u>	<u>20.0</u>	
Kans.	58.0	18.0	22.0	2.0
Ky.	56.9	23.1	18.5	1.5
La.	48.1	21.9	30.0	
Me.	53.3	20.0	26.7	
Md.	65.1	18.6	14.9	1.4
Mass.	67.9	5.9	18.2	8.0
Mich.	57.6	28.1	9.3	5.0
Minn.	57.3	20.0	22.7	
Miss.	54.5	27.3	18.2	
Mo.	59.0	20.5	20.5	
Mont.	*	*	*	*
Nebr.	60.0	16.0	24.0	
Nev.	66.7	13.3	20.0	
N. H.	63.2	10.5	26.3	
N. J.	65.9	21.5	12.6	
N. M.	47.2	25.0	27.8	
N. Y.	54.2	26.2	16.1	3.5
N. C.	63.7	18.6	16.7	1.0
N. D.	65.5	13.8	13.8	6.9
Ohio	62.4	21.5	11.8	4.3
Okla.	65.9	20.5	13.6	
Ore.	66.7	9.1	24.2	
Pa.	*	*	*	*
R. I.	63.4	19.5	17.1	
S. C.	65.7	16.4	17.9	
S. D.	*	*	*	*
Tenn.	66.4	21.6	12.0	
Tex.	*	*	*	*
Utah	57.1	22.9	20.0	
Vt.	62.5	16.7	20.8	
Va.	58.2	19.0	22.8	
Wash.	55.3	18.4	23.7	2.6
W. Va.	57.9	13.1	23.7	5.3
Wisc.	60.5	18.5	21.0	
Wyo.	40.0	20.0	40.0	
P. R.	67.0	15.5	15.5	2.0
V. I.	62.5	12.5	25.0	

TABLE 5-3. EMPLOYMENT AND TURNOVER IN ALL POSITIONS

	Positions Budgeted	Positions Filled	Turnover		Employees Hired	Percent Turnover (h)
			Resignations	Separations		
Ala.	128	126	28		29	21.9
Aleska	22	22	2		2	9.1
Ariz.	37	37	8	1	13	24.3
Ark.	*	*	*	*	*	*
Cal.	238	*	*	*	*	*
Colo.	38	38	5		5	13.2
Conn.	150	144	15	1	17	10.7
Del.	19	18	5	1	6	31.6
D. C.	*	*	*	*	*	*
Fla.	175	169	22	1	27	13.1
Ga.	136 (e)	130	10	3	24	9.6
Hawaii	33	32	3		4	9.1
Ida.	31 (f)	31	3		3	9.7
Ill.	*	186	21	4	*	13.4
Ind.	71	67	9		8	12.7
Ia.	70	70	6		9	8.6
Kans.	50	48	11		14	22.0
Ky.	65	57	11		10	16.9
La.	160	155	35		36	21.9
Me.	15	15	1		1	6.7
Md.	215	202	43	1	32	20.5
Mass.	187	176	15	2	18	9.1
Mich.	356	*	*	*	*	*
Minn.	75	68	*	*	*	*
Miss.	44	44	5		5	11.4
Mo.	39	34	6	1	8	17.9
Mont.	*	*	*	*	*	*
Nebr.	25	24	7	1	8	32.0
Nev.	15	15	5	2	8	46.7
N. H.	19	18	1			5.3
N. J.	135	125	11	1	11	8.9
N. M.	36	34	13		14	36.1
N. Y.	565	521	63	18	101	14.3
N. C.	102	102	20	1	19	20.6
N. D.	29	29	11	3	20	48.3
Ohio	93	92	24	4	30	30.1
Okla.	44	42	11	2	11	29.5
Ore.	33	33	14		14	42.4
Pa.	*	*	*	*	*	*
R. I.	41	37	2		2	4.9
S. C.	67 (g)	67 (g)	16	1	18	25.4
S. D.	*	*	*	*	*	*
Tenn.	125	125	6		6	4.8
Tex.	*	*	*	*	*	*
Utah	35	35	4		5	11.4
Vt.	24	24	2		2	8.3
Va.	79	74	*	*	*	*
Wash.	38	38	3	1	4	10.5
W. Va.	38	37	5	4	7	23.7
Wisc.	119	117	20	7	18	22.7
Wyo.	5	4				
P. R.	103	90	9	1		9.7
V. I.	8	8			1	

TABLE 5-4. EMPLOYMENT AND TURNOVER IN PROFESSIONAL AND TECHNICAL POSITIONS

	Professional and Technical Positions Budgeted	Positions Filled	Turnover		Employees Hired	Percent Turnover (h)
			Resignations	Separations		
Ala.	73	71	24		24	32.9
Alaska	10	10	1		1	10.0
Ariz.	23	23	2		5	8.7
Ark.	*	*	*	*	*	*
Cal.	126	*	*	*	*	*
Colo.	28	28	2		2	7.1
Conn.	87	82	6	1	13	8.0
Del.	12	11	5	1	6	50.0
D. C.	*	*	*	*	*	*
Fla.	98	93	18	1	18	19.4
Ga.	64	61	9		15	14.1
Hawaii	19	18	2		2	10.5
Ida.	23	23	2		2	8.7
Ill.	*	99	9	1	*	10.1
Ind.	44	44	4		3	9.1
Ia.	46	46	2		4	4.3
Kans.	29	28	3		3	10.3
Ky.	37	30	6		6	16.2
La.	77	73	14		16	18.2
Me.	8	8	1		1	12.5
Md.	140	128	22	1	16	16.4
Mass.	127	120	9	2	12	8.7
Mich.	205	*	*	*	*	*
Minn.	43	40				
Miss.	24	24	2		3	8.3
Mo.	23	19	4	1	5	21.7
Mont.	*	*	*	*	*	*
Nebr.	15	14	5		5	33.3
Nev.	10	10	2	2	4	40.0
N. H.	12	11	1			8.3
N. J.	89	81	9		10	10.1
N. M.	17	15	8		9	47.1
N. Y.	306	271	33	10	67	14.1
N. C.	65	65	12		12	18.5
N. D.	19	19	3	2	11	26.3
Ohio	58	58	9	3	16	20.7
Okla.	29	27	9	1	5	34.5
Ore.	22	22	3		3	13.6
Pa.	*	*	*	*	*	*
R. I.	26	22	2		2	7.7
S. C.	44	44	14	1	16	34.1
S. D.	*	*	*	*	*	*
Tenn.	83	83	3		3	3.6
Tex.	*	*	*	*	*	*
Utah	20	20	1		1	5.0
Vt.	15	15	1		1	6.7
Va.	46	44	*	*	*	*
Wash.	21	21	2		2	9.5
W. Va.	22	21	1	1	1	9.1
Wisc.	72	70	13	4	9	23.6
Wyo.	2	1				
P. R.	69	61	5	1		8.7
V. I.	5	5			1	

SECTION V. FOOTNOTES

- (a) Includes Laboratory Assistants and Laboratory Helpers who contribute directly to the performance of laboratory tests.
- (b) Includes personnel assigned to cleaning and sterilizing glassware, taking care of animals, and janitorial and messenger duties.
- (c) Includes those who perform installation, repair, and preventive maintenance on equipment.
- (d) In addition, California reported 87 positions for projects under Federal grants broken down as follows: Professional and Technical, 47; Supportive, 30; and Administrative, 10.
- (e) Includes 2 part-time employees.
- (f) Includes 5 part-time employees.
- (g) May include some medical college and pre-medical students employed for summer months.
- (h) Based on budgeted positions, except for Illinois where filled positions figure was used.

SECTION VI

TRAINING AND STAFF DEVELOPMENT

TABLE 6-1. FORMAL COURSES AND WORKSHOPS SPONSORED OR CONDUCTED BY STATE LABORATORY FOR OTHER THAN STATE LABORATORY PERSONNEL

Total No. of Courses	Diagnostic Microbiology		Clinical Chemistry		Sanitary Bacteriology and Chemistry		Laboratory Techniques and Procedures	
	No. of Students	Student- days Training	No. of Students	Student- days Training	No. of Students	Student- days Training	No. of Students	Student- days Training
Ala.					1	10		
Alaska								
Ariz.	3	85	110					
Ark.	*	*	*	*	*	*	*	*
Cal.	11	26	120		44	88	14	26
Colo.	1	19	95					
Conn.	*	*	*	*	*	*	*	*
Del.	1	2	2					
D.C.	*	*	*	*	*	*	*	*
Fla.	6	98	265	20	80	31	155	
Ga.	5	23	69				6	12
Hawaii								
Ida.	2	18	90				19	95
Ill.	3	35	35		146	584	8	72
Ind.	3	13	39				48	48
Ia.	2	12	60		55	165		
Kans.	4	30	90				45	135
Ky.								
La.	3	73	437					
Me.	1	65	65					
Md.	*	*	*	*	*	*	*	*
Mass.								
Mich.	*	*	*	*	*	*	*	*
Minn.	1	12	1,296					
Miss.	2	22	66		8	32		
Mo.	3	34	146					
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.								
N.H.	*	*	*	*	*	*	*	*
N.J.								
N.M.	1	39	195					
N.Y.	3	5	5				38	102
N.C.	3	163	326					
N.D.	1	2	6					
Ohio	2	14	70				121 (a)	121
Oklahoma	4	80	80					
Ore.	1	23	69					
Pa.	*	*	*	*	*	*	*	*
R.I.								
S.C.	1	5	100					
S.D.	*	*	*	*	*	*	*	*
Tenn.								
Tex.	28	233	877				61	225
Utah								
Vt.								
Va.								
Wash.	6	43	162				92	483
W. Va.	8	104	289				8	16
Wisc.	4	40	100		20	40	20	40
Wyo.	2	25	38					
P.R.	1	*	*					
V.I.	1	8	24					

TABLE 6-2. BENCH TRAINING PROVIDED BY STATE LABORATORY FOR OTHER THAN STATE LABORATORY PERSONNEL

Total No. of Courses	Diagnostic Microbiology		Clinical Chemistry		Sanitary Bacteriology and Chemistry		Laboratory Techniques and Procedures	
	No. of Students	Student- days Training	No. of Students	Student- days Training	No. of Students	Student- days Training	No. of Students	Student- days Training
Ala.								
Alaska	1	14	70					
Ariz.	4	6	10					
Ark.	*	*	*	*	*	*	*	*
Cal.	27	45	757		27	31	16	28
Colo.	3	21	105		3	15	4	40
Conn.	*	*	*	*	*	*	*	*
Del.								
D.C.	*	*	*	*	*	*	*	*
Fla.	6	15	75		35	185	8	32
Ga.	4	12	100				1	6
Hawaii	3	7	1,085				8	64
Ida.								
Ill.	8				29	53	66	129
Ind.	4						10	25
Ia.	2	6	6					
Kans.	7	7	5				3	2
Ky.	1	23	529					
La.	3	18	120					
Me.	1						1	3
Md.	*	*	*	*	*	*	*	*
Mass.	3	49	125					
Mich.	*	*	*	*	*	*	*	*
Minn.								
Miss.	3	13	25		2	6		
Mo.	5	23	42		12	42	6	10
Mont.	*	*	*	*	*	*	*	*
Nebr.								
Nev.	1	2	20					
N.H.	*	*	*	*	*	*	*	*
N.J.	6				3	25	7	14
N.M.								
N.Y.	5 (b)	24	73	6	18			
N.C.	2 (c)	178	2,492				4	80
N.D.	1	6	180					
Ohio	6	6	8		38	38	1	1
Okla.	1						4	8
Ore.	3	6	6				5	5
Pa.	*	*	*	*	*	*	*	*
R.I.	3	5	13	3	3			
S.C.	6						7	29
S.D.	*	*	*	*	*	*	*	*
Tenn.	3	20	400		10	150		
Tex.	*	*	*	*	*	*	*	*
Utah	8	39	91				2	7
Vt.	2	8	15					
Va.								
Wash.	1	5	5					
W. Va.	6	1	5				8	27
Wisc.	*	12	(d)				25	500
Wyo.								
P.R.	3			1	2	1	1	3
V.I.								

TABLE 6-3. TRAINING OF STATE PROFESSIONAL AND TECHNICAL STAFF IN
FORMAL COURSES AND SEMINARS

	Number of Professional and Technical Employees	Number Attending a Formal Course or Seminar	Total Man- Days of Attendance	Average Man-Days of Attendance per Employee
Ala.	71	12	84	1.18
Alaska	10	2	5	0.50
Ariz.	23	4	24	1.04
Ark.	*	*	*	*
Cal.	126 (e)	262	606	4.81
Colo.	28			
Conn.	82	15	57	0.70
Del.	11	5 (f)	9	0.82
D.C.	*	*	*	*
Fla.	93	14	158	1.70
Ga.	61			
Hawaii	18	57 (g)	235	3.85
Ida.	23	6	89	4.94
Ill.	99	14	73	3.17
Ind.	44	21 (f)	37	0.37
Ia.	46	2	13	0.30
Kans.	28	18	138	3.0
Ky.	30	10 (h)	49	1.75
Ia.	73	10	73	2.43
Me.	8	29	*	*
Md.	128	2	10	1.25
Mass.	120	20	90	0.70
Mich.	205	21	103	0.86
Minn.	40	*	*	*
Miss.	24	*	*	*
Mo.	19	5	62	2.58
Mont.	*	4	16	0.84
Nebr.	14	*	*	*
Nev.	10	1 (i)	3	0.21
N.H.	11	3	11	1.10
N.J.	81	1	5	0.45
N.M.	15	12	107	1.32
N.Y.	271	1 (j)	5	0.33
N.C.	65	37	255	0.94
N.D.	19	33	238	3.66
Ohio	58	3	24	1.26
Oklahoma	27	17	156	2.69
Ore.	22	3	20	0.74
Pa.	*	54	405	18.41
R.I.	22	*	*	*
S.C.	22	4	30	1.36
S.D.	44	13	96	2.18
Tenn.	*	*	*	*
Tex.	83	8	73	0.88
Utah	*	82	240	
Vt.	20	8 (f)	24	1.20
Va.	15			
Wash.	44	13	99	2.25
W. Va.	21	6	66	3.14
Wisc.	21	5	35	1.67
Wyo.	70	11	118	1.69
P.R.	1		*	*
V.I.	61	5	21	4.20
	5	5		

TABLE 6-4. BENCH TRAINING RECEIVED BY STATE PROFESSIONAL
AND TECHNICAL STAFF

	<u>Number of Professional and Technical Employees</u>	<u>Number Receiving Bench Training</u>	<u>Total Man-days of Training</u>	<u>Average Man-days of Training per Employee</u>
Ala.	71			
Alaska	10	7	35	3.50
Ariz.	23	4	18	0.78
Ark.	*	*	*	*
Calif.	126	32	1,136	9.02
Colo.	28			
Conn.	82	6	25	0.30
Del.	11	8	16	1.45
D.C.	*	*	*	*
Fla.	93	4	15	0.16
Ga.	61	10	64	1.05
Hawaii	18			
Ida.	23			
Ill.	99	1	5	0.05
Ind.	44	5	38	0.86
Ia.	46	1	14	0.30
Kans.	28	5	25	0.89
Ky.	30			
La.	73	3	*	*
Me.	8			
Md.	128			
Mass.	120	6	41	0.34
Mich.	205	*	*	*
Minn.	40	*	*	*
Miss.	24	1	6	0.25
Mo.	19	7	50	2.63
Mont.	*	*	*	*
Nebr.	14	4	25	1.79
Nev.	10			
N.H.	11	*	*	*
N.J.	81	1	7	0.09
N.M.	15			
N.Y.	271			
N.C.	65	3	40	0.62
N.D.	19	1	5	0.26
Ohio	58	1	5	0.09
Oklahoma	27			
Ore.	22			
Pa.	*	*	*	*
R.I.	22			
S.C.	44	6	34	0.77
S.D.	*	*	*	*
Tenn.	83	2	15	0.18
Tex.	*	1	10	*
Utah	20	2	20	1.00
Vt.	15	1	10	0.67
Va.	44			
Wash.	21	1	15	0.71
W. Va.	21			
Wisc.	70			
Wyo.	1	1	7	7.00
P.R.	61	1	5	0.08
V.I.	5	3	6	1.20

TABLE 6-5. ACADEMIC TRAINING OF STATE LABORATORY STAFFS DURING YEAR REPORTED

	Number of Staff Members Receiving Training	Number Receiving a Degree	Source of Financial Support		
			Personal	State	Federal
Ala.	1		*	*	*
Alaska					
Ariz.					
Ark.	*	*	*	*	*
Cal.	4		2	2	
Colo.					
Conn.	4		4		
Del.					
D.C.	*	*	*	*	*
Fla.					
Ga.					
Hawaii					
Ida.					
Ill.					
Ind.	1	1	1		
Ia.	1		1		
Kans.					
Ky.					
La.	2			2	
Me.					
Md.					
Mass.					
Mich.	*	*	*	*	*
Minn.	*	*	*	*	*
Miss.					
Mo.					
Mont.	*	*	*	*	*
Nebr.	3	1	3		
Nev.					
N.H.	*	*	*	*	*
N.J.	9		8	1	
N.M.	4			3	1
N.Y.	61			61	
N.C.	5		4	1	
N.D.					
Ohio	1				1
Oklahoma					
Ore.					
Pa.	*	*	*	*	*
R.I.	5		5		
S.C.	1	1	1		
S.D.	*	*	*	*	*
Tenn.	1				1
Tex.	*	*	*	*	*
Utah	8		4	3	1
Vt.	1		1		
Va.					
Wash.	1	1			1
W. Va.	1	1	1		
Wisc.					
Wyo.					
P.R.					
V.I.					

TABLE 6-6. STAFF ATTENDANCE AT SCIENTIFIC MEETINGS AND ORAL PRESENTATIONS
AT SCHEDULED MEETINGS

No. of Meeting Attendances	Source of Meeting Expenses				Oral Presentations On:			Not Indicated
	Personal	State	Federal	Other	Diagnostic or Lab. Procedures	Public Health Lab. Services		
Ala.								
Alaska	3		3					
Ariz.	3		2	1				
Ark.	*	*	*	*	*	*	*	*
Cal.	194	32	123	39		82	16	
Colo.	14		14				1	
Conn.	31	4	22	3	2	*	*	*
Del.	2			2				
D.C.	*	*	*	*	*	*	*	*
Fla.	32		23	8	1	2	2	
Ga.	31		30	1				
Hawaii	8	5	3			2	1	
Ida.	3				3		2	
Ill.	40	12	28			4	2	
Ind.	5		5			4		
Ia.	20				20	(k)		
Kans.	29	10	18	1		1		
Ky.	5		3	2				
La.	31				31	2	2	
Me.	3		3			3	2	
Md.	20		19	1		*	*	*
Mass.	4	1	3			2		
Mich.	*	*	*	*	*	*	*	*
Minn.	*					3		
Miss.	1		1				2	
Mo.	20		18	2		5		
Mont.	*	*	*	*	*	*	*	*
Nebr.	*						1	
Nev.	1		1				1	
N.H.	*	*	*	*	*	*	*	*
N.J.	40		30	8	2	4	1	
N.M.	5		3	2		3		
N.Y.	59 (1)	1	52		6	84		
N.C.	6				6	2	7	
N.D.	2	1	1			1 (m)	1	
Ohio	17	7	3	7		11	2	
Okla.						2		
Ore.	5		1	4				10
Pa.	*	*	*	*	*	*	*	*
R.I.	17	12	5			1	1	
S.C.	16		16			4		
S.D.	*	*	*	*	*	*	*	*
Tenn.	15		15					
Tex.	*	*	*	*	*	*	*	*
Utah	14	14					3	
Vt.	7		6	1			1	
Va.	1		1					
Wash.	23	8	14	1		4		
W. Va.	20		17	3		2	1	
Wisc.	2		2			9 (n)		
Wyo.								
P.R.	1		1			1		
V.I.								

SECTION VI. FOOTNOTES

- (a) This topic was "Medical Diagnostic Laboratory Planning and Design."
- (b) In addition, the Division of Laboratories and Research has a School of Cytotechnology with two students enrolled. Five undergraduate students were given a ten-week's training course in research during the summer under a grant from the Brown-Hazen Fund. One physician-in-training was assigned varying lengths of time in each diagnostic unit.
- (c) Laboratory also trained several students in bacteriology but kept no records.
- (d) Includes several courses of 2 - 5 days' length.
- (e) Budgeted positions - actual number of employees not available.
- (f) In addition, three students took parasitology correspondence course of one year's duration presented by the National Communicable Disease Center. This is not included in "Total Man-Days of Attendance" column.
- (g) In addition, 23 students took four correspondence courses.
- (h) In addition, three bacteriologists completed the National Communicable Disease Center correspondence course in Parasitology, Part I; and two bacteriologists began Part II of the correspondence course.
- (i) Two students took the National Communicable Disease Center parasitology correspondence course.
- (j) Five took National Communicable Disease Center correspondence course in parasitology.
- (k) State Laboratory presented the following courses at the University of Iowa, College of Medicine: Preventive Medicine (two quarters), Instrumental Analysis, Dental Public Health, Industrial Hygiene, Organic Chemistry for Engineers.
- (l) No record is available of in-state meetings attended by staff and information on meetings attended at own expense or on grant monies is incomplete.
- (m) In addition, a two-semester course in microbiology was presented at Mary College, Bismarck, North Dakota.
- (n) In addition, the following courses were presented: a one-semester course to 55 nursing students, a one-year course at cytotechnology school (8 students), a one-semester course in public health microbiology (15 students), one year of graduate student training (1 student), and 1 - 3 months' training for pathology residents (4 students).

SECTION VII

FINANCES

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TABLE 7-1. LABORATORY EXPENDITURES

	Estimated Population (a)	Laboratory Expenditures (b)	Laboratory Expenditures per Capita	Health Department Expenditures	Lab Expenditures As % of Health Dept. Expenditures
Ala.	3,463,000	\$ 775,000 (c)	0.224	\$ 5,250,000	14.8
Alaska	253,000	240,154	0.949	2,801,100	8.6
Ariz.	1,609,000	278,535	0.173	2,091,383	13.3
Ark.	1,960,000	*	*	*	*
Cal.	18,605,000	*	*	*	*
Colo.	1,969,000	417,682	0.212	6,550,000	6.4
Conn.	2,833,000	1,088,649	0.384	8,297,317	13.1
Del.	505,000	109,550	0.217	2,513,472	4.4
D.C.	803,000	*	*	*	*
Fla.	5,805,000	1,071,500	0.185	33,880,000	3.2
Ga.	4,358,000	922,884	0.212	9,971,780	9.3
Hawaii	711,000	279,685	0.393	23,895,311	1.2
Ida.	692,000	258,632	0.374	2,061,199	12.5
Ill.	10,646,000	1,604,066	0.151	12,387,399	12.9
Ind.	4,886,000	416,192 (d)	0.085	4,152,775	10.0
Ia.	2,760,000	799,785	0.290	*	*
Kans.	2,234,000	374,967	0.168	2,849,950	13.2
Ky.	3,179,000	443,135	0.139	5,721,995	7.7
La.	3,534,000	955,281	0.270	5,976,289	16.0
Me.	993,000	141,418	0.142	3,942,000	3.6
Md.	3,521,000	*	*	*	*
Mass.	5,349,000	1,445,198	0.270	34,233,854	4.2
Mich.	8,220,000	*	*	*	*
Minn.	3,555,000	*	*	*	*
Miss.	2,322,000	232,423	0.100	2,698,477	8.6
Mo.	4,498,000	246,506	0.055	4,069,386	6.1
Mont.	706,000	*	*	*	*
Nebr.	1,477,000	92,899	0.063	1,007,241	9.2
Nev.	440,000	114,827	0.261	*	*
N.H.	669,000	*	*	*	*
N.J.	6,775,000	1,086,611	0.160	10,267,993	10.6
N.M.	1,029,000	227,634	0.221	2,353,791	9.7
N.Y.	18,075,000	5,424,451 (e)	0.300	73,312,704	7.4
N.C.	4,914,000	823,757	0.168	8,761,179	9.4
N.D.	652,000	145,364	0.223	1,151,548	12.6
Ohio	10,247,000	566,095	0.055	*	*
Okla.	2,483,000	249,403	0.100	2,486,842	10.0
Ore.	1,900,000	270,860	0.143	3,150,630	8.6
Pa.	11,522,000	632,915	0.055	45,997,642	1.4
R.I.	891,000	321,649	0.361	2,700,282	11.9
S.C.	2,543,000	359,997	0.142	*	*
S.D.	703,000	*	*	*	*
Tenn.	3,846,000	891,455	0.232	8,750,000	10.2
Tex.	10,552,000	*	*	*	*
Utah	990,000	232,900	0.235	3,149,501	7.4
Vt.	397,000	202,740	0.511	2,159,492	9.4
Va.	4,456,000	426,232	0.096	19,076,781	2.2
Wash.	2,990,000	408,859 (f)	0.137	12,355,368	3.3
W. Va.	1,812,000	307,462 (g)	0.170	2,528,596	12.2
Wisc.	4,145,000	*	*	*	*
Wyo.	340,000	40,818	0.120	1,041,432	3.9
P.R.	2,633,000	467,064	0.177	*	*
V.I.	43,300	44,498	1.028	*	*

TABLE 7-2. LABORATORY EXPENDITURES BY MAJOR PURPOSE

	Total Expenditures	Expenditures For Salaries	% of Total Expenditures For Salaries	Expenditures For Supplies	% of Total Expenditures For Supplies
Ala.	\$ 775,000	\$ 558,000	72.0	\$ 105,700	13.6
Alaska	240,154	137,394	57.2	19,600	8.2
Ariz.	278,535	207,350	74.4	44,299	15.9
Ark.	*	*	*	*	*
Cal.	*	*	*	*	*
Colo.	417,682	215,000	51.5	84,000	20.1
Conn.	1,088,649	944,759	86.8	117,161	10.8
Del.	109,550	78,053	71.2	11,382	10.4
D.C.	*	*	*	*	*
Fla.	1,071,500	673,200	62.8	125,800	11.8
Ga.	922,884	663,019	71.9	115,521	12.5
Hawaii	279,685	229,460	82.0	30,941	11.1
Ida.	258,632	166,829	64.5	*	*
Ill.	1,604,066	1,168,900	72.9	97,200	6.1
Ind.	416,192 (d)	413,107	99.3 (d)	(d)	(d)
Ia.	799,785	362,119	45.3	108,737 (h)	13.5
Kans.	371,967	266,441	71.1	26,359	7.0
Ky.	443,135	319,239	72.0	82,914	18.7
La.	955,281	680,399	71.3	120,376	12.6
Me.	141,418	77,669	54.9	28,257	20.0
Md.	*	*	*	*	*
Mass.	1,445,196	1,117,778	77.3	155,296	10.8
Mich.	*	*	*	*	*
Minn.	*	*	*	*	*
Miss.	232,423	166,850	71.8	49,180	21.2
Mo.	246,506	166,195	67.5	35,722	14.5
Mont.	*	*	*	*	*
Nebr.	92,899	81,117	87.3	7,435	8.0
Nev.	114,827	80,716	70.3	18,200	15.8
N.H.	*	*	*	*	*
N.J.	1,086,611	660,997	60.8	122,286	11.3
N.M.	227,634	174,787	76.8	19,538	8.6
N.Y.	5,424,451	4,042,056	74.5	358,850	6.6
N.C.	823,757	554,561	67.4	179,195	21.8
N.D.	145,364	111,929	77.0	19,409	13.3
Ohio	566,095	431,312	76.2	57,587	10.2
Okla.	249,403	207,550	83.2	24,666 (i)	9.9
Ore.	270,860	193,968	71.6	46,820	17.3
Pa.	632,915	412,678	65.2	158,254	25.0
R.I.	321,649	222,243	69.1	18,679	5.8
S.C.	359,997	309,328	85.9	41,682	11.6
S.D.	*	*	*	*	*
Tenn.	891,455	660,938	74.1	90,767	10.2
Tex.	*	*	*	*	*
Utah	232,900	161,000	69.1	31,000	13.3
Vt.	202,740	136,639	67.4	46,878	23.1
Va.	426,232	343,369	80.6	42,554	10.0
Wash.	408,869	283,420	69.3	32,581	8.0
W. Va.	307,462	180,720	58.8	88,542	28.8
Wisc.	*	*	*	*	*
Wyo.	40,818	23,653	58.0	1,592	3.9
P.R.	467,064	345,405	74.0	45,000	9.6
V.I.	44,498	32,941	74.0	5,600	12.6

TABLE 7-2. LABORATORY EXPENDITURES BY MAJOR PURPOSE
(Continued)

	Expenditures for Equipment	% of Total Expenditures For Equipment	Expenditures For Travel	% of Total Expenditures For Travel
Ala.	\$ 30,000	3.9	\$ 11,000	1.4
Alaska	7,280	3.0	1,000	0.4
Ariz.	18,490	6.6	2,400	0.9
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.			6,000	1.4
Conn.	8,410	0.8	2,328	0.2
Del.	1,970	1.8	200	0.2
D.C.	*	*	*	*
Fla.	3,500	0.3	14,000	1.3
Ga.	31,545	3.4	5,442	0.6
Hawaii	18,571	6.6	713	0.3
Ida.	24,945	9.6	5,087	2.0
Ill.	27,600	1.7	59,900	3.7
Ind.	(a)	(a)	3,085	0.7
Ia.	38,802	4.9	9,494	1.2
Kans.	25,633	6.8	2,833	0.8
Ky.	9,137	2.1	3,136	0.7
La.	21,121	2.2	8,974	0.9
Me.	24,045	17.0	2,121	1.5
Md.	*	*	*	*
Mass.	25,119	1.7	11,080	0.8
Mich.	*	*	*	*
Minn.	*	*	*	*
Miss.	3,199	1.4	2,495	1.0
Mo.	38,536	15.6	4,502	1.8
Mont.	*	*	*	*
Nebr.	950	1.0	537	0.6
Nev.	200	0.2	1,300	1.1
N.H.	*	*	*	*
N.J.	1,748	0.2	11,979	1.1
N.M.	2,255	1.0	2,637	1.1
N.Y.	103,000	1.9	40,650	0.7
N.C.	18,271	2.2	4,500	0.5
N.D.	1,831	1.3	1,853	1.3
Ohio	49,201	8.6	1,478	0.3
Oklahoma.	(i)	(i)	2,243	0.9
Ore.	29,172	10.8	900	0.3
Pa.	58,029	9.2	3,954	0.6
R.I.	34,017	10.6	1,463	0.4
S.C.			7,000	1.9
S.D.	*	*	*	*
Tenn.	15,104	1.7	7,092	0.8
Tex.	*	*	*	*
Utah	12,000	5.2	1,200	0.5
Vt.	6,397	3.2	1,018	0.5
Va.	5,309	1.2	6,086	1.4
Wash.	8,000	2.0	6,000	1.4
W. Va.	36,200	11.7	2,000 (j)	0.7
Wisc.	*	*	*	*
Wyo.	13,392	32.8	525	1.3
P.R.	34,215	7.3	2,400	0.5
V.I.	1,000	2.2	1,150	2.6

TABLE 7-2. LABORATORY EXPENDITURES BY MAJOR PURPOSE
(Continued)

	Expenditures for Personnel Benefits	% of Total Expenditures for Personnel Benefits	Other Expenditures	% of Total For Other Expenses
Ala.			\$ 70,300	9.1
Alaska	\$ 11,980	5.0	62,900	26.2
Ariz.	*	*	5,996	2.2
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.			112,682	27.0
Conn.			15,991	1.4
Del.			17,945	16.4
D.C.	*	*	*	*
Fla.			255,000	23.8
Ga.	75,063	8.1	32,294	3.5
Hawaii				
Ida.	22,445	8.7	39,326	15.2
Ill.			250,466	15.6
Ind.			(d)	(d)
Ia.	39,216	4.9	241,417	30.2
Kans.			53,701	14.3
Ky.	28,667	6.5	42	
La.	62,950	6.6	61,461	6.4
Me.			9,326	6.6
Md.	*	*	*	*
Mass.	10,766	0.7	125,159	8.7
Mich.	*	*	*	*
Minn.	*	*	*	*
Miss.	10,699	4.6		
Mo.			1,551	0.6
Mont.	*	*	*	*
Nebr.	87	0.1	2,773	3.0
Nev.	6,656	5.8	7,755	6.8
N.H.	*	*	*	*
N.J.	66,973	6.1	222,628	20.5
N.M.	14,926	6.6	13,491	5.9
N.Y.			879,895	16.3
N.C.	16,775	2.0	50,455	6.1
N.D.			10,342	7.1
Ohio			26,517	4.7
Oklahoma.	14,944	6.0		
Ore.				
Pa.				
R.I.	26,089	8.1	19,158	6.0
S.C.			1,987	0.6
S.D.	*	*	*	*
Tenn.	41,863	4.7	75,691	8.5
Tex.	*	*	*	*
Utah	11,400	4.9	16,300	7.0
Vt.	5,401	2.6	6,407	3.2
Va.			28,914	6.8
Wash.	29,368	7.2	49,500	12.1
W. Va.				
Wisc.	*	*	*	*
Wyo.	1,357	3.3	299	0.7
P.R.			40,044	8.6
V.I.			3,807	8.6

TABLE 7-3. RANKING OF STATES BY EXPENDITURES AND BY EXPENDITURES PER CAPITA (k)

Rank	State	Expenditures	State	Per Capita Expenditures
1	N.Y.	\$ 5,424,451	V.I.	1.028
2	Ill.	1,604,066	Alaska	0.949
3	Mass.	1,445,198	Vt.	0.511
4	Conn.	1,088,649	Hawaii	0.393
5	N.J.	1,086,611	Conn.	0.384
6	Fla.	1,071,500	Ida.	0.374
7	Ia.	955,281	R.I.	0.361
8	Ga.	922,884	N.Y.	0.300
9	Tenn.	891,455	Ia.	0.290
10	N.C.	823,757	Ia.	0.270
11	Ia.	799,785	Mass.	0.270
12	Ala.	775,000	Nev.	0.261
13	Pa.	632,915	Utah	0.235
14	Ohio	566,095	Tenn.	0.232
15	P.R.	467,064	Ala.	0.224
16	Ky.	443,135	N.D.	0.223
17	Va.	426,232	N.M.	0.221
18	Colo.	417,682	Del.	0.217
19	Ind. (d)	416,192	Colo.	0.212
20	Wash.	408,869	Ga.	0.212
21	Kans.	374,967	Fla.	0.185
22	S.C.	359,997	P.R.	0.177
23	R.I.	321,649	Ariz.	0.173
24	W. Va.	307,462	W. Va.	0.170
25	Hawaii	279,685	Kans.	0.168
26	Ariz.	278,535	N.C.	0.168
27	Ore.	270,860	N.J.	0.160
28	Ida.	258,632	Ill.	0.151
29	Okla.	249,403	Ore.	0.143
30	Mo.	246,506	Me.	0.142
31	Alaska	240,154	S.C.	0.142
32	Utah	232,900	Ky.	0.139
33	Miss.	232,423	Wash.	0.137
34	N.M.	227,634	Wyo.	0.120
35	Vt.	202,740	Miss.	0.100
36	N.D.	145,364	Okla.	0.100
37	Me.	141,418	Va.	0.096
38	Nev.	114,827	Ind.	0.085 (d)
39	Del.	109,550	Nebr.	0.063
40	Nebr.	92,899	Mo.	0.055
41	V.I.	44,498	Pa.	0.055
42	Wyo.	40,818	Ohio	0.055

TABLE 7-4. SOURCES OF LABORATORY FUNDS

	Expenditures	State Contribution	Percent Contributed by State	Federal and Other Contributions (1)
Ala.	\$ 775,000	\$ 595,000	76.8	\$ 180,000
Alaska	240,154	204,454	85.1	35,700
Ariz.	278,535	257,569	92.5	20,966
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.	417,682	248,238	59.4	169,444
Conn.	1,088,649	951,643	87.4	137,006
Del.	109,550	76,802	70.1	32,748
D.C.	*	*	*	*
Fla.	1,071,500	800,300	74.7	271,200
Ga.	922,884	*	*	*
Hawaii	279,685	244,785	87.5	34,900
Ida.	258,632	187,194	72.4	71,438
Ill.	1,604,066	1,380,366	86.1	223,700
Ind.	416,192	360,041	86.5	56,151
Ia.	799,785	598,569	74.8	201,216
Kans.	374,967	255,535	68.1	119,432
Ky.	443,135	360,455	81.3	82,680
La.	955,281	896,853	93.9	58,428
Me.	141,418	119,285	84.3	22,133
Md.	*	*	*	*
Mass.	1,445,198	1,075,211	74.4	369,987
Mich.	*	*	*	*
Minn.	*	*	*	*
Miss.	232,423	174,094	74.9	58,329
Mo.	246,506	177,856	72.2	68,650
Mont.	*	*	*	*
Nebr.	92,899	62,783	67.6	30,116
Nev.	114,827	94,549	82.3	20,278
N.H.	*	*	*	*
N.J.	1,086,611	612,735	56.4	473,876
N.M.	227,634	190,234	83.6	37,400
N.Y.	5,424,451	4,462,456	82.3	961,995
N.C.	823,757	659,296	80.0	164,461
N.D.	145,364	79,791	54.9	65,573
Ohio	566,095	308,489	54.5	257,606
Okla.	249,403	178,256	71.5	71,147
Ore.	270,860	203,374	75.1	67,486
Pa.	632,915	*	*	*
R.I.	321,649	291,991	90.8	29,658
S.C.	359,997	215,358	59.8	144,639
S.D.	*	*	*	*
Tenn.	891,455	749,093	84.0	142,362
Tex.	*	*	*	*
Utah	232,900	182,000	78.1	50,900
Vt.	202,740	197,798	97.6	4,942
Va.	426,232	423,283	99.3	2,949
Wash.	408,869	367,579	89.9	41,290
W. Va.	307,462	239,125	77.8	68,337
Wisc.	*	*	*	*
Wyo.	40,818	20,628	50.5	20,190
P.R.	467,064	427,020	91.4	40,044
V.I.	44,498	44,498	100.0	

TABLE 7-5. FEDERAL CONTRIBUTIONS TO LABORATORY FUNDS BY PRINCIPAL PURPOSE

	General Health	Tuberculosis	Cancer	Heart	Chronic Diseases	Radiological Monitoring
Ala.	\$ 64,500	\$ 18,600		\$ 38,100	\$ 9,500	
Alaska						
Ariz.		13,950				
Ark.	*	*	*	*	*	*
Cal.	*	*	*	*	*	*
Colo.				52,000		
Conn.	7,370	8,292		50,055	10,277	6,380
Del.			19,409	4,787	6,622	
D.C.	*	*	*	*	*	*
Fla.	49,400			33,500		
Ga.	*	*	*	*	*	*
Hawaii	28,122			6,778		
Ida.	16,987	4,536		29,115		
Ill.	173,100	37,600		13,000		
Ind.	27,375	13,505				
Ia.		8,800			40,894	23,440
Kans.	104,284			14,422		
Ky.	33,636	17,377				
La.		6,200	23,726	3,778		11,112
Me.	3,375	4,476		9,726		
Md.	*	*	*	*	*	*
Mass.				14,513	85,318	
Mich.	*	*	*	*	*	*
Minn.	*	*	*	*	*	*
Miss.	10,975	23,271		13,919	10,164	
Mo.	43,329			17,627		
Mont.	*	*	*	*	*	*
Nebr.	22,310			1,448		
Nev.	7,008	6,770		1,000		
N.H.	*	*	*	*	*	*
N.J.	43,952	21,312	22,236	8,360		
N.M.						6,000
N.Y.	96,875		58,216	112,750	5,000	157,043
N.C.	63,184	13,824	7,229	12,067	9,744	21,179
N.D.	12,712	5,400		30,709		8,242
Ohio	79,914	25,862	12,388	59,850	18,150	
Okla.	60,248			10,899		
Ore.	19,140			25,450		
Pa.	*	*	*	*	*	*
R.I.	2,504		6,673	9,664	1,317	
S.C.	82,816			48,100		
S.D.	*	*	*	*	*	*
Tenn.	30,000	28,000		15,908		
Tex.	*	*	*	*	*	*
Utah		7,000		27,500	7,400	
Vt.	4,942					
Va.						
Wash.	8,000					
W. Va.	29,587	14,570		11,640		
Wisc.	*	*	*	*	*	*
Wyo.		3,125		17,065		
P.R.				32,484		
V.I.						

TABLE 7-5. FEDERAL CONTRIBUTIONS TO LABORATORY FUNDS BY PRINCIPAL PURPOSE
(Continued)

	Water Pollution	Maternal and Child Health	Air Pollution	Other Federal Grants	Non-Federal, Non-State, Sources
Ala.	\$	\$ 48,600	\$	\$ 14,200	\$ 700
Alaska					21,500 (m)
Ariz.	7,016	*	*	*	*
Ark.	*	*	*	*	*
Cal.	*	*	*	*	*
Colo.	3,444			114,000 (n)	
Conn.		17,249	12,816	24,567	
Del.		1,930			
D.C.	*	*	*	*	*
Fla.		17,800			170,500
Ga.	*	*	*	*	*
Hawaii					
Ida.				20,800	
Ill.					
Ind.	15,271				
Ia.				51,300	76,782 (o)
Kans.		31,667			726 (p)
Ky.					
La.					13,612 (q)
Me.		4,556			
Md.	*	*	*	*	*
Mass.		69,107		201,049 (r)	
Mich.	*	*	*	*	*
Minn.	*	*	*	*	*
Miss.					
Mo.		7,694			
Mont.	*	*	*	*	*
Nebr.	6,358				
Nev.		2,500		1,000 (s)	2,000 (t)
N.H.	*	*	*	*	*
N.J.	26,158	47,406		104,598	199,854
N.M.	31,400				
N.Y.	26,000	108,397		22,220 (t)	375,494 (u)
N.C.		11,663			25,571 (v)
N.D.	1,931	6,579			
Ohio	16,485	21,957			23,000 (w)
Okla.					
Ore.		745			22,151 (x)
Pa.	*	*	*	*	*
R.I.		9,500			
S.C.		12,202			1,521 (y)
S.D.	*	*	*	*	*
Tenn.		25,000			43,454
Tex.	*	*	*	*	*
Utah	9,000				
Vt.					
Va.					
Wash.		16,000			2,949 (z)
W. Va.		12,540			17,290 (y)
Wisc.	*	*	*	*	*
Wyo.					
P.R.		7,560			
V.I.					

SECTION VII. FOOTNOTES

- (a) Estimated population as of July 1, 1965. Taken from Statistical Abstract of the United States: 1966. U. S. Bureau of the Census. (87th edition). p. 11.
- (b) Figures represent the latest complete fiscal year, July 1, 1965 - June 30, 1966, unless otherwise noted.
- (c) Covers fiscal year, January 1966 - December 1966.
- (d) Includes only salaries and travel. Other operating expenses are not broken down by programs and are not available.
- (e) April 1, 1966 - March 31, 1967.
- (f) July 1966 - July 1967.
- (g) Of this total, \$243,462 was budgeted and an additional \$64,000 was provided in supportive funds (\$34,000 for supplies and \$30,000 for equipment).
- (h) Reported as General Expense.
- (i) Supplies and equipment are shown as one sum.
- (j) About 50 percent of this amount is used for refresher training courses.
- (k) States not included in Table: Arkansas, California, D. C., Maryland, Michigan, Minnesota, Montana, New Hampshire, South Dakota, Texas, and Wisconsin.
- (l) Obtained by deducting state contribution from total expenditures.
- (m) ANHS Contract, \$13,500; Program Receipts-Local, \$8,000.
- (n) Pesticides.
- (o) Fees.
- (p) Antigen fee.
- (q) Community study on pesticides.
- (r) MRCI and Army.
- (s) Indian Service.
- (t) Crippled Children.
- (u) Research Grants.
- (v) T. B. Control Project.
- (w) Research - Salmonella in eggs.
- (x) Mental Retardation.
- (y) HIB.
- (z) Local.

SECTION VIII

FACILITIES

TABLE 8-1. SUMMARY OF NET SPACE ASSIGNMENTS

	Professional and Technical (Sq. Ft.)	Laboratory Support Services (Sq. Ft.)	Administrative and Clerical (Sq. Ft.)	Total Net Space (Sq. Ft.)
Ala. (a)	16,434	12,067	5,213	33,714
Alaska (a)	6,412	1,650	960	9,022
Ariz. (a)	4,345	3,920	1,646	9,911
Ark.	*	*	*	*
Cal.	*	*	*	*
Colo.	8,700	3,120	1,000	12,820
Conn.	18,890	7,865	5,400	32,155
Del.	1,680	1,208	607	3,495
D.C.	*	*	*	*
Fla. (a)	18,280	12,635	5,185	36,100
Ga. (a)	13,928	9,231	5,689	28,848
Hawaii (a)	7,440	3,805	1,225	12,470
Ida. (a)	5,251	3,979	2,559	11,789
Ill. (a)	21,394	24,221	9,418	55,033
Ind.	9,389	3,030	2,065	14,484
Ia. (a)	9,050	4,822	2,087	15,959
Kans.	(b)			
Ky. (a)	19,967	11,687	5,178	36,832
La. (a)	22,879	21,432	9,166	53,477
Me.	1,295	1,766	834	3,895
Md.	*	*	*	*
Mass.	6,503	25,514	11,786	43,803 (c)
Mich.	*	*	*	*
Minn.	6,845	12,662	*	19,507
Miss.	*	*	*	*
Mo.	3,264	1,308	1,273	5,845
Mont.	*	*	*	*
Nebr. (a)	1,365	1,275	850	3,490
Nev. (a)	2,139	1,745	378	4,262
N.H.	*	*	*	*
N.J. (a)	5,018	1,590	1,895	8,503
N.M. (a)	4,700	4,902	1,510	11,112
N.Y.	*	*	*	*
N.C.	9,539	5,199	5,203	19,941
N.D. (a)	5,720	3,158	1,312	10,190
Ohio (a)	7,832	2,763	3,138	13,733
Okla. (a)	10,151	3,678	783	14,612
Ore.	3,848	1,510	700	6,058
Pa.	5,100	4,700	3,200	13,000
R.I.	3,140	2,130	570	5,840
S.C.	10,120	5,881	3,832	19,833 (d)
S.D.	*	*	*	*
Tenn. (a)	30,176	17,946	5,121	53,243
Tex.	15,449	10,026	7,239	32,714 (e)
Utah	3,289	1,374	419	5,082
Vt.	3,920	1,556	1,250	6,726
Va.	*	*	*	*
Wash.	7,111	3,667	3,096	13,874
W. Va.	6,766	10,640	4,080	21,486
Wisc.	17,352	9,717	7,615	34,684
Wyo.	1,360	384	247	1,991
P.R.	6,602	5,895	1,982	14,479
V.I.	107	361	226	694

TABLE 8-2. NET SPACE ASSIGNED TO LABORATORIES

	Microbiology (f) (Sq. Ft.)	Serology (Sq. Ft.)	Virology (Sq. Ft.)	Chemistry (g) (Sq. Ft.)	Other Labs (h) (Sq. Ft.)	Total Space - Professional and Technical (Sq. Ft.)
Ala. (a)	11,498	1,759	780	1,135	1,262	16,434
Alaska (a)	3,800	2,100	100	212	200	6,412
Ariz. (a)	2,108	552	230	1,455	*	4,345
Ark.	*	*	*	*	*	*
Cal.	*	*	*	*	*	*
Colo.	4,100	1,200	1,200	1,600	600	8,700
Conn.	3,640	1,800	4,000	7,860	1,590	18,890
Del.	703	458	*	*	519	1,680
D.C.	*	*	*	*	*	*
Fla. (a)	8,005	2,495	1,795	1,940	4,045	18,280
Ga. (a)	7,836	2,964	1,474	*	1,654	13,928
Hawaii (a)	4,581	276	579	1,428	576	7,440
Ida. (a)	1,733	498	525	1,072	1,423	5,251
Ill. (a)	9,488	3,895	850	4,300	2,860	21,394
Ind.	3,456	1,300	1,123	3,510	*	9,389
Ia. (a)	816	1,176	1,250	4,289	1,519	9,050
Kans.	*	*	*	*	*	*
Ky. (a)	4,880	1,833	1,880	5,187	6,187	19,967
La. (a)	12,814	2,844	1,503	4,608	1,110	22,879
Me.	950	345	*	*	*	1,295
Md.	*	*	*	*	*	*
Mass.	1,939	1,548	1,200	*	1,816 (i)	6,503
Mich.	*	*	*	*	*	*
Minn.	2,628	1,446	2,131	*	640	6,845
Miss.	*	*	*	*	*	*
Mo.	1,445	663	289	867	*	3,264
Mont.	*	*	*	*	*	*
Nebr. (a)	385	385	*	595	*	1,365
Nev. (a)	975	366	*	*	793	2,139
N.H.	*	*	*	*	*	*
N.J. (a)	2,710	364	*	1,000	944	5,018
N.M. (a)	2,009	972	372	1,347	*	4,700
N.Y.	*	*	*	*	*	*
N.C.	3,000	1,364	2,031	2,063 (j)	1,081	9,539
N.D. (a)	1,666	741	450	643	2,220	5,720
Ohio (a)	2,887	972	349	2,078	1,546	7,832
Okla. (a)	2,321	1,699	921	1,610	3,600	10,151
Ore.	2,348	400	700	*	400	3,848
Pa.	2,300	800	1,000	*	1,000	5,100
R.I.	700	400	*	800	1,240	3,140
S.C.	2,526	1,562	1,320	2,090	2,622	10,120
S.D.	*	*	*	*	*	*
Tenn. (a)	17,611	5,800	755	*	6,010	30,176
Tex.	5,142	3,497	4,500	2,310	*	15,449
Utah	407	401	400	1,512	569	3,289
Vt.	1,030	660	740	810	680	3,920
Va.	*	*	*	*	*	*
Wash.	2,528	391	872	376	2,944	7,111
W. Va.	3,916	1,600	750	*	500	6,766
Wisc.	3,791	1,209	2,079	3,148	7,125	17,352
Wyo.	364	296	*	532	168	1,360
P.R.	2,240	540	370	911	2,541	6,602
V.I.	107 (k)	(k)	(k)	(k)	(k)	107

TABLE 8-3. NET SPACE ASSIGNED TO LABORATORY SUPPORT SERVICES

	Glassware and Media Preparation (Sq. Ft.)	Container Preparation (1) (Sq. Ft.)	Animal Facilities (Sq. Ft.)	Mail Room and Specimen Receiving (Sq. Ft.)	Bulk Storage and Other Space (Sq. Ft.)	Total Central Lab. Services (Sq. Ft.)
Ala. (a)	4,591	5,265	1,511	(m)	700	12,067
Alaska (a)	850	300		500		1,650
Ariz. (a)	1,631		406	350	1,533	3,920
Ark.	*	*	*	*	*	*
Cal.	*	*	*	*	*	*
Colo.	900	300	200	220	1,500	3,120
Conn.	3,020	2,800	1,065	780	200	7,865
Del.	396	344	226	152	90	1,208
D.C.	*	*	*	*	*	*
Fla. (a)	5,070	2,540	1,065	995 (n)	2,965	12,635
Ga. (a)	3,084	3,649	1,454	432	612	9,231
Hawaii (a)	1,490	595	247		1,473	3,805
Ida. (a)	687	933	588	196	1,575	3,979
Ill. (a)	6,166	3,105	3,400	1,050	10,500	24,221
Ind.	2,290	640		100		3,030
Ia. (a)	1,092	1,011	1,070	210	1,439	4,822
Kans.						
Ky. (a)	2,008	2,665	1,248	576 (o)	5,190	11,687
La. (a)	5,111	11,428		624	4,269	21,432
Me.	500	266			1,000	1,766
Md.	*	*	*	*	*	*
Mass.	4,434	2,730	1,924	567	15,859 (p)	25,514
Mich.	*	*	*	*	*	*
Minn.	2,425		2,412		7,825 (q)	12,662
Miss.	*	*	*	*	*	*
Mo.	636	352	320			1,308
Mont.	*	*	*	*	*	*
Nebr. (a)	400	225		150	500	1,275
Nev. (a)	975	270		100	400	1,745
N.H.	*	*	*	*	*	*
N.J. (a)	392	432	413	353		1,590
N.M. (a)	1,214	1,590	1,450	462	186	4,902
N.Y.	*	*	*	*	*	*
N.C.	1,600	1,397	800	1,012	390	5,199 (r)
N.D. (a)	839	444	100	275	1,500	3,158
Ohio (a)	1,512	754	497	(m)		2,763
Oklahoma	1,832	422			1,424	3,678
Ore.	500	1,010				1,510
Pa.	1,100	1,500	600		1,500	4,700
R.I.	600	500	630		400	2,130
S.C.	2,452	1,068	1,015	1,346		5,881
S.D.	*	*	*	*	*	*
Tenn. (a)	5,412	11,247	1,122	165	(m)	17,946
Tex.	2,112	1,100 (n)	2,926	888 (n)	3,000 (n)	10,026
Utah	644		730			1,374
Vt.	500	636	220		200	1,556
Va.	*	*	*	*	*	*
Wash.	1,233	772	465	186	1,011	3,667
W. Va.	6,100		1,200	700	2,640	10,640
Wisc.	2,102	3,496	2,073	350	1,696	9,717
Wyo.	186	(s)		(s)	198	384
P.R.	2,005	160	1,660	80	1,990	5,895
V.I.	279	82				361

TABLE 8-4. NET SPACE ASSIGNED TO ADMINISTRATIVE AND CLERICAL USES

	Clerical Offices (Sq. Ft.)	Other Administrative Purposes (Sq. Ft.)	Total Clerical and Administrative (Sq. Ft.)
Ala. (a)	4,230	983	5,213
Alaska (a)	960		960
Ariz. (a)	1,195	451	1,646
Ark.	*	*	*
Cal.	*	*	*
Colo.	1,000		1,000
Conn.	5,250	150	5,400
Del.	607		607
D.C.	*	*	*
Fla. (a)	3,930	1,255	5,185
Ga. (a)	5,044	645	5,689
Hawaii (a)	1,225		1,225
Ida. (a)	1,591	968	2,559
Ill. (a)	8,218	1,200	9,418
Ind.	2,065		2,065
Ia. (a)	2,087		2,087
Kans.			
Ky. (a)	648	4,530 (n)	5,178
La. (a)	8,015	1,151	9,166
Me.	384	450 (n)	834
Md.	*	*	*
Mass.	7,811	3,975	11,786
Mich.	*	*	*
Minn.	*	*	*
Miss.	*	*	*
Mo.	1,036	237	1,273
Mont.	*	*	*
Nebr. (a)	850		850
Nev. (a)	378		378
N.H.	*	*	*
N.J. (a)	1,140	755	1,895
N.M. (a)	1,320	190	1,510
N.Y.	*	*	*
N.C.	1,684	3,519	5,203
N.D. (a)	1,312		1,312
Ohio (a)	1,488	1,650	3,138
Okla.	244	539	783
Ore.	700		700
Pa.	3,200		3,200
R.I.	570		570
S.C.	1,960	1,872	3,832
S.D.	*	*	*
Tenn. (a)	4,650	471	5,121
Tex. (a)	2,940	4,299 (t)	7,239
Utah	180	239	419
Vt.	540	710	1,250
Va.	*	*	*
Wash.	2,307	789	3,096
W. Va.	3,400	680	4,080
Wisc.	6,047	1,568	7,615
Wyo.	247		247
P.R.	1,091	891	1,982
V.I.	226		226

SECTION VIII. FOOTNOTES

- (a) Includes branch laboratory space.
- (b) Facilities destroyed by tornado on June 8, 1966.
- (c) In addition, Massachusetts has 6,500 square feet of stables.
- (d) Branch laboratory space not included.
- (e) Includes branch laboratory office space only.
- (f) Includes Diagnostic Bacteriology, Sanitary Bacteriology, Mycology, and Parasitology.
- (g) Includes Sanitary Chemistry, Industrial Chemistry, and Toxicology.
- (h) Includes Hematology, Pathology, Clinical Chemistry, Research, and Other.
- (i) Figure for Research space not available.
- (j) Includes Shellfish Laboratory.
- (k) This figure represents total technical space.
- (l) Includes Supply Room and Container Storage.
- (m) Included in Container Preparation.
- (n) Space shared with entire Health Department.
- (o) Services available to entire State Health Department.
- (p) Includes Biologic Production space, 12,570 square feet.
- (q) This figure includes all other space not broken down.
- (r) In addition, North Carolina has a laboratory farm of 387 acres.
- (s) Included with Glassware Preparation.
- (t) 1,300 square feet of this is Health Department library used by entire Health Department including laboratory personnel.

SECTION IX

LABORATORY EVALUATION PROGRAMS

TABLE 9-1. INTRASTATE EVALUATION OF LABORATORIES: SEROLOGY

	Participation Voluntary or Required	Prenatal	No. of Labs. Participating:				No. of Labs. Approved				No. of Specimens Shipped to each Lab. During Year	
			Indep.	Hosp.	Public Health	Coml.	Indep.	Hosp.	Public Health	Coml.	Labs.	During Year
Ala.	V		10	32	8	2	10	32	8	2	120	
Alaska	V	V			3					3	100	
Ariz.	V		86	38	14		81	38	14		100	
Ark.	*	*	*	*	*	*	*	*	*	*	*	
Cal.	R	R	278	336	39 (a)		278	336	39		5 (b)	
Colo.	V	V	32	40	8		32	40	8		100	
Conn.	R	R	49	40 (c)	4		49	40	4		20	
Del.	R		1	7	1		1	7	1		100	
D.C.	*	*	*	*	*	*	*	*	*	*	*	
Fla.	V	V	176	140	8		159	129	8		40	
Ga.	R		26	70	11	10	26	70	11	10	200	
Hawaii	R	R	15	13	6 (d)		15	13	6 (d)		10/tech.	
Ida.	V	V	16	33	6		16	33	6		45	
Ill.	R	R	25	240	12	238	20	237	12	233	12-24	
Ind.	V, R	V, R	38	90	4		31	82			96	
Ia.	R	R	14	52	2		14	52	2		100	
Kans.	R	R	33	74	1		33	71	1		90	
Ky.	R	R	92	101	5		92	101	5		100	
La.	V	V			7						200	
Me.	R				16						100	
Md.												
Mass.	V	V			107						60	
Mich.	*	*	*	*	*	*	*	*	*	*	*	
Minn.	V	V	9	35							144	
Miss.	R	V	46	81	2		46	81	2		50	
Mo.	V	V	72	108	8	1	66	106	8		100	
Mont.	*	*	*	*	*	*	*	*	*	*	*	
Nebr.	R	R	23	17	7	1	23	17	7	1	*	
Nev.												
N.H.	*	*	*	*	*	*	*	*	*	*	*	
N.J.	R	R	68	98	15		68	98	15		110	
N.M.	V	V	40	41	1		39	39	1		100	
N.Y.	R	R	220 (e)				220 (e)				10-30 (f)	
N.C.	R	R	52	126	17 (g)	7	52	126	17	7	100	
N.D.												
Ohio	R	R	117	166	7		116	164	7		50	
Okla.	R	R	40	98	6	44	36	88	6	41	60	
Ore.	R	R	31	26	1						60	
Pa.												
R.I.	R	R	23	17	1		23	17	1		20	
S.C.	V	V	1	35							100	
S.D.	*	*	*	*	*	*	*	*	*	*	*	
Tenn.	V		56	79	6		56	79	6		100	
Tex.	R	R	809	518	24		804	518	24		20 (h)	
Utah	R	R	8	18	3 (i)		7	18	3		50	
Vt.	V	V		5				4			500	
Va.	R	R	20	81	12	28	20	81	12	28	75	
Wash.	R	R	41	78	10		38	70	10		60	
W. Va.	R	R	40	75	2		40	75	2		100	
Wisc.	R	R	18	76	2	2	14	69	2	1	100	
Wyo.	R (j)	R	12	26	1		12	26	1			
P.R.												
V.I.												

TABLE 9-2. INTRASTATE EVALUATION OF LABORATORIES: PHENYLKETONURIA

	Participation Voluntary or Required	No. of Labs. Participating:			No. of Labs. Approved:			No. of Specimens Shipped to Each Lab. During Year		
		Indep.	Hosp.	Health Coml.	Indep.	Hosp.	Health Coml.	*	*	*
Ala.	*	*	*	*	*	*	*	*	*	*
Alaska										
Ariz.										
Ark.	*	*	*	*	*	*	*	*	*	*
Cal.	R	245 (k)				53	128	2		45
Colo.										
Conn.										
Del.										
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.										
Ga.										
Hawaii										
Ida.	R		2							
Ill.	V	2	68	4	9	1	66	4	9	12
Ind.										8
Ia.	R (1)	4	20			4	19			
Kans.										
Ky.										
La.										
Me.										
Md.										
Mass.										
Mich.	*	*	*	*	*	*	*	*	*	*
Minn.										
Miss.										
Mo.	*	*	*	*	*	*	*	*	*	*
Mont.	*	*	*	*	*	*	*	*	*	*
Nebr.										
Nev.										
N.H.	*	*	*	*	*	*	*	*	*	*
N.J.	R		7				7			310
N.M.										
N.Y.										
N.C.										
N.D.										
Ohio										
Okla.										
Ore.										
Pa.	R		54	1			54			1,560
R.I.										
S.C.										
S.D.	*	*	*	*	*	*	*	*	*	*
Tenn.										
Tex.										
Utah										
Vt.										
Va.										
Wash.										
W. Va.										
Wisc.	V, R (m)	2	67	1	3	4	73	1	3	36-72
Wyo.										
P.R.										
V.I.										

TABLE 9-3. INTRASTATE EVALUATION OF LABORATORIES: WATER BACTERIOLOGY

Participation Voluntary or Required	No. of Labs. Participating:				No. of Labs Approved:				No. of Specimens Shipped to Each Public Health Coml. Lab. During Year	
	Indep.	Hosp.	Health	Coml.	Indep.	Hosp.	Health	Coml.		
Ala.	V				12				12	
Alaska	V				1				1	
Ariz.										
Ark.	*	*	*	*	*	*	*	*	*	*
Cal.	R (n)	27	6		34	27	6		34	3
Colo.	V				6				6	10
Conn.	R				3				3	9
Del.										
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.	V				15	13			15	13 (o)
Ga.										
Hawaii										
Ida.	R									
Ill.	V	7	6		20	11	7	6	20	(p) 9
Ind.	V, R	10	2		8	32	10	2	8	32
Ia.	R	*	*		*	*	*	*	*	*
Kans.										
Ky.	R				7	16				
La.										
Me.										
Md.	V, R				10	7			10	*
Mass.	V	*	*		*	*	*	*	*	*
Mich.	*	*	*		*	*	*	*	*	*
Minn.										
Miss.										
Mo.										
Mont.	*	*	*		*	*	*	*	*	*
Nebr.	R				5				5	
Nev.										
N.H.	*	*	*		*	*	*	*	*	*
N.J.										
N.M.										
N.Y.	R				5 (q)				5 (q)	
N.C.	V (r)					12			12	8
N.D.										
Ohio	(p)									
Okl.										
Ore.	R	7			4	1				140
Pa.										
R.I.	R	5					5			2
S.C.										
S.D.	*	*	*		*	*	*	*	*	*
Tenn.										
Tex.	R				24				24	
Utah	R (s)		7 (s)							(p)
Vt.										
Va.	R (t)				16				16	
Wash.	*								4 (u)	
W. Va.	V (v)				5	4			5	
Wisc.	V	41	1		20	8	41	1	19	4
Wyo.										
P.R.										
V.I.										

TABLE 9-4. INTRASTATE EVALUATION OF LABORATORIES: MILK BACTERIOLOGY

	Participation Voluntary or Required	No. of Labs. Participating:			No. of Labs. Approved:			No. of Specimens Shipped to Each Lab. During Year		
		Indep.	Hosp.	Health Coml.	Indep.	Hosp.	Health Coml.			
Ala.	V			8				8		
Alaska										
Ariz.	V (w)									
Ark.	*	*	*	*	*	*	*	*	*	*
Cal.										
Colo.	V			9	3			9	3	30
Conn.	R			4	9			4	9	24
Del.										
D.C.	*	*	*	*	*	*	*	*	*	*
Fla.	V			10	20			10	20	*
Ga.	R (w)			8				8		44, 22 (x)
Hawaii										
Ida.	R			5	2			5	2	24
Ill.	V	30	13	22	11	30	13	22	11	16
Ind.	V, R	6	2	7	16	6	2	7	16	20
Ia.										
Kans.	R			3				3		36
Ky.	R			7	6					365
La.	R			8						26
Me.										
Md.	R			9	12			9	12	28
Mass.	V	*	*	*	*	*	*	*	*	*
Mich.	*	*	*	*	*	*	*	*	*	*
Minn.										
Miss.	R			5				5		26
Mo.	V			11	1			11	1	30
Mont.	*	*	*	*	*	*	*	*	*	*
Nebr.										
Nev.										
N.H.	*	*	*	*	*	*	*	*	*	*
N.J.	V			6	15			6	15	20
N.M.										
N.Y.	R	159 (q)				159 (q)				
N.C.	V (w)				26	15			26	12
N.D.	V				6				6	26
Ohio	R		1	15	22		1	20	28	24
Oklas.										
Ore.										
Pa.										
R.I.	R	2				2				20
S.C.										
S.D.	*	*	*	*	*	*	*	*	*	*
Tenn.	V			6	18			6	18	24
Tex.	R (y)			24				24		29
Utah	R (z)									
Vt.										
Va.	R			18				18		20
Wash.	R			17				17		48
W. Va.	R (w)			8	3			8	3	
Wisc.	V	50		21	6	50		21	6	22
Wyo.										
P.R.										
V.I.										

TABLE 9-5. INTRASTATE EVALUATION OF LABORATORIES: CLINICAL CHEMISTRY

Participation Voluntary or Required	No. of Labs. Participating:			No. of Labs. Approved:			No. of Specimens Shipped to Each Lab. During Year		
	Indep.	Hosp.	Public Health Coml.	Indep.	Hosp.	Public Health Coml.			
Ala.	*	*	*	*	*	*	*	*	*
Alaska									
Ariz.									
Ark.	*	*	*	*	*	*	*	*	*
Cal.									
Colo.									
Conn.	R	62				62			15
Del.									
D.C.	*	*	*	*	*	*	*	*	*
Fla.	R	60				(aa)			2
Ga.									
Hawaii									
Ida.									
Ill.									
Ind.									
Ia.									
Kans.									
Ky.									
La.									
Me.									
Md.									
Mass.									
Mich.	*	*	*	*	*	*	*	*	*
Minn.	V	9	135						18
Miss.	V			1					120
Mo.									
Mont.	*	*	*	*	*	*	*	*	*
Nebr.									
Nev.									
N.H.	*	*	*	*	*	*	*	*	*
N.J.	V	76	6	4	4				22
N.M.									
N.Y.	R					410 (e)			13 (bb)
N.C.									
N.D.									
Ohio									
Okla.									
Ore.									
Pa.	R	145	12			145			875
R.I.	R	25				25			5
S.C.									
S.D.	*	*	*	*	*	*	*	*	*
Tenn.									
Tex.									
Utah									
Vt.									
Va.									
Wash.									
W. Va.									
Wisc.	V	5	80	4	2				96
Wyo.									
P.R.									
V.I.									

TABLE 9-6. INTRASTATE EVALUATION OF LABORATORIES: DIAGNOSTIC MICROBIOLOGY

Participation Voluntary or Required	No. of Labs. Participating:			No. of Labs Approved:			No. of Specimens Shipped to Each		
	Indep.	Hosp.	Health Coml.	Indep.	Hosp.	Health Coml.	Lab.	During Year	
Ala.	*	*	*	*	*	*	*	*	*
Alaska									
Ariz.									
Ark.	*	*	*	*	*	*	*	*	*
Cal.									
Colo.									
Conn.	R	*				*			*
Del.									
D.C.	*	*	*	*	*	*	*	*	*
Fla.									
Ga.									
Hawaii									
Ida.									
Ill.	V (cc)	19	203	13	167	19	199	13	164
	V (cc)	10	108	5	11	6	39	3	5
Ind.	V	6	31	1					
Ia.									
Kans.									
Ky.									
La.									
Me.									
Md.									
Mass.	V	25	161	8	4 (dd)	24	160	8	4 (dd)
Mich.	*	*	*	*	*	*	*	*	*
Minn.									
Miss.									
Mo.									
Mont.	*	*	*	*	*	*	*	*	*
Nebr.									
Nev.									
N.H.	*	*	*	*	*	*	*	*	*
N.J.	V	18	52	6		18	52	6	
N.M.									
N.Y.	R					300 (e)			2-40
N.C.									
N.D.									
Ohio									
Okl.a.									
Ore.									
Pa.	R	60	4	1					1,143
R.I.	R	24				24			10
S.C.	(ff)								
S.D.	*	*	*	*	*	*	*	*	*
Tenn.									
Tex.	V	8	32	10					14
Utah									
Vt.									
Va.									
Wash.									
W. Va.									
Wisc.	(gg)								
Wyo.									
P.R.									
V.I.									

TABLE 9-7. INIRASTATE EVALUATION OF LABORATORIES: OTHER

Participation Voluntary or Required	No. of Labs. Participating:			No. of Labs. Approved:			No. of Specimens Shipped to Each Lab. During Year	
	Indep.	Hosp.	Health Coml.	Indep.	Hosp.	Health Coml.	Public	Public
<u>WATER CHEMISTRY</u>								
Cal.	R (hh)	5		1	37	5	37	2
Conn.	R				3		3	9
Ill.	V			6			6	
Mass.	V	*				*		*
<u>PARASITOLOGY</u>								
Ohio	V	24	91	1		3	14	5
Ore.	V	20	28					12
Tex.	V	11	107	8	30			25
Utah	V		12					9
<u>MYCOLOGY</u>								
N.Y.	R	75	(e)					15
Ore.	V	10		17	1			8
Tex.	V	3		25	6			8
<u>IMMUNOCHEMISTRY</u>								
N.Y.	R	242	(e)					45
<u>HEMATOLOGY</u>								
Conn.	R	*				*		*
N.Y.	R	390	(e)					4
Ohio	V	61		99		50	85	5
<u>IMMUNOHEMATOLOGY</u>								
N.J.	V, R (ii)	42	120	4	*	120	4	20
<u>(Blood Grouping and Rh)</u>								
Ill.	V	25	240	7	274	20	238	12
Mass.	V		161				156	20
<u>(Crossmatching)</u>								
Mass.	V		139			128		14
<u>(Blood Group, Antibody Identification)</u>								
Mass.	V		47			47		4
<u>VITAMIN ASSAY</u>								
Ill.				4			4	
<u>BABY FEEDING FORMULA</u>								
N.Y.	R	41	(e)				10-20	

TABLE 9-8. STATES PARTICIPATING IN NCDC EVALUATION PROGRAM:
DIAGNOSTIC MICROBIOLOGY

	Bacteriology (Enteric)	Parasitology	Mycology	Serology	Virology
Ala.	X	X		X	X
Alaska	X	X			
Ariz.	X	X	X	X	X
Ark.	X	X	X	X	X
Cal.	X	X	X	X	X
Colo.	X	X		X	X
Conn.	X	X	X	X	X
Del.	X	X	X	X	
D. C.	X		X	X	X
Fla.	X	X	X	X	X
Ga.	X	X	X	X	X
Hawaii	X	X		X	X
Ida.	X	X	X	X	X
Ill.	X	X	X	X	X
Ind.	X	X	X	X	
Iowa	X	X	X	X	X
Kans.	X	X		X	X
Ky.	X	X	X	X	X
La.	X	X	X	X	X
Me.	X	X	X	X	
Md.	X	X	X	X	X
Mass.	X		X	X	X
Mich.	X	X	X	X	X
Minn.	X	X	X	X	X
Miss.	X	X		X	
Mo.	X	X	X	X	X
Mont.	X			X	X
Nebr.	X			X	
Nev.	X			X	
N. H.	X	X	X		
N. J.	X	X	X	X	X
N. M.	X	X	X	X	X
N. Y.	X	X	X	X	X
N. C.	X	X	X	X	X
N. D.	X	X	X	X	X
Ohio	X	X	X	X	X
Oklahoma	X	X	X	X	X
Ore.	X	X	X	X	X
Pa.	X	X	X	X	X
R. I.	X	X	X	X	
S. C.	X	X	X	X	X
S. D.	X			X	
Tenn.	X	X	X	X	X
Tex.	X	X	X	X	X
Utah	X	X	X	X	X
Vt.	X	X	X	X	X
Va.	X	X	X	X	X
Wash.	X	X	X	X	X
W. Va.	X	X	X	X	X
Wisc.	X	X	X	X	X
Wyo.					
P. R.	X	X	X	X	
V. I.	X	X	X		

TABLE 9-9. STATES PARTICIPATING IN NCDC EVALUATION PROGRAM:
CLINICAL CHEMISTRY

	Electrolytes (Sodium, Potassium, Chlorides, CO ₂)				Blood Cell Differentials	PKU- Fluorometric Method	PKU- Guthrie Screening
	Glucose	Hemoglobin	Cytohematology				
Ala.						X	X
Alaska						X	
Ariz.						X	X
Ark.							
Cal.	X					X	X
Colo.	X						X
Conn.	X		X	X	X	X	X
Del.			X	X	X		
D. C.	X						
Fla.	X		X	X	X	X	X
Ga.	X	X	X	X		X	X
Hawaii						X	X
Ida.	X						X
Ill.							X
Ind.							
Iowa	X					X	X
Kans.						X	X
Ky.	X						X
La.						X	X
Me.	X						X
Md.	X		X	X	X		X
Mass.						X	X
Mich.	X						X
Minn.	X						X
Miss.	X		X				
Mo.	X						X
Mont.							X
Nebr.							
Nov.	X						X
N. H.	X		X	X	X		
N. J.	X	X				X	X
N. M.							X
N. Y.	X	X	X	X	X		X
N. C.	X						
N. D.						X	X
Ohio	X		X	X	X	X	X
Okla.	X						X
Ore.						X	X
Pa.	X	X	X	X	X	X	X
R. I.	X	X	X	X	X	X	X
S. C.							X
S. D.							
Tenn.	X						X
Tex.						X	X
Utah	X		X	X	X		
Vt.	X						X
Va.	X						X
Wash.	X						X
W. Va.	X						
Wisc.	X	X		X	X		X
Wyo.							
P. R.	X	X	X	X	X		
V. I.							

TABLE 9-10. NCDC SYPHILIS SEROLOGY EVALUATION PROGRAM: QUALITATIVE TESTS
PERFORMED BY PARTICIPATING STATES (jj)

	FTA-200 (T)	Hinton Flocc.	Kline Standard (CNL)	Kolmer Qual. (C)	One-Fifth Volume Kolmer (C)	One-Fifth Volume Kolmer (RP)	Mazzini Flocc. (C)	RPR (Teardrop) Card (C)	RPR (Circle) Card (C)	Unheated Serum Reagin (USR) (C)	VDRL Slide (C)	VDRL Tube (C)	FTA-ABS (T)	Other
Ala.	X										X		X	
Alaska											X			
Ariz.	X										X		X	
Ark.					X						X			
Cal.	X										X		X	
Colo.	X					X					X		X	
Conn.	X										X			
Del.						X					X			
D. C.	X										X			
Fla.	X					X	X			X	X		X	
Ga.	X			X	X					X	X		X	
Hawaii	X					X					X		X	
Ida.	X										X			
Ill.	X					X					X			
Ind.					X	X					X			
Iowa	X			X	X	X					X			
Kans.	X			X	X						X		X	
Ky.	X				X		X				X		X	
La.					X		X				X			
Me.	X				X						X			
Md.	X					X	X			X		X		X
Mass.		X												
Mich.	X						X					X		X
Minn.	X			X	X		X					X		
Miss.							X					X		X
Mo.	X				X					X		X		X
Mont.	X				X							X		
Nebr.											X			
Nev.											X			
N. H.	X	X			X							X		
N. J.	X						X					X		X
N. M.	X								X			X		
N. Y.														X (kk)
N. C.	X											X		X
N. D.											X			
Ohio	X			X			X		X		X		X	
Okla.	X				X		X				X		X	
Ore.	X			X	X		X				X		X	
Pa.					X		X				X			
R. I.					X		X				X			
S. C.	X								X		X		X	
S. D.					X						X			
Tenn.	X										X		X	
Tex.											X		X	
Utah	X			X				X			X			
Vt.	X					X					X			
Va.	X					X					X		X	
Wash.	X							X	X		X		X	
W. Va.	X						X		X		X		X	X (11)
Wis.	X										X		X	
Wyo.											X			
P. R.	X										X			
V. I.	X						X				X			

TABLE 9-11. NCDC SYPHILIS SEROLOGY EVALUATION PROGRAM: QUANTITATIVE TESTS
PERFORMED BY PARTICIPATING STATES

	Kolmer Quantitative (C)	RPR (circle) Card (C)	VDRL Slide- Method B (C)	VDRL Tube (C)	Hinton Flocculation (C)	Other
Ala.			X			
Alaska			X			
Ariz.			X			
Ark.			X			
Cal.			X			
Colo.			X			
Conn.			X			
Del.			X			
D. C.			X			
Fla.			X			
Ga.				X		
Hawaii				X		
Ida.				X		
Ill.				X		
Ind.						
Iowa	X					
Kans.			X			
Ky.			X		X	
La.			X			
Me.			X			
Md.		X		X		
Mass.						X
Mich.						
Minn.			X			
Miss.			X			
Mo.			X			
Mont.	X		X			
Nebr.			X			
Nev.			X			
N. H.			X			
N. J.			X			
N. M.			X			
N. Y.						X (mm)
N. C.			X			
N. D.			X			
Ohio			X			
Oklahoma			X			
Ore.			X			
Pa.			X			
R. I.						
S. C.			X			
S. D.			X			
Tenn.					X	
Tex.			X			
Utah			X			
Vt.			X			
Va.			X			
Wash.			X		X	
W. Va.	X		X			
Wisc.			X			
Wyo.						
P. R.			X			
V. I.			X			

FOOTNOTES. TABLES 9-1 THROUGH 9-11.

- (a) In addition, 18 hospital and non-hospital clinical laboratories under Federal and State of California jurisdiction participated and were approved. Twenty public health laboratories and 2 "other clinical" laboratories also participated in a voluntary evaluation program of the FTA-(ABS) examination. Each of these laboratories were sent 15 specimens during the year.
- (b) Public Health laboratories received 2 evaluation sets; and approximately two-thirds of the clinical laboratories received 1 set in 1966. The remaining one-third could not be evaluated because of data processing problems in converting to new computer.
- (c) Red Cross Blood Bank Laboratory is included in this group.
- (d) Includes 1 U. S. Government Clinic Laboratory.
- (e) Figures given are total number of laboratories participating or holding permits. Breakdown by type of laboratory not available. Total number of laboratories holding permits as of December 31, 1966 - 423. In the category of General Serology 164 laboratories hold permits.
- (f) One set of 10 specimens sent to each laboratory. In some cases, second and third sets were sent.
- (g) Includes 2 Red Cross Laboratories.
- (h) Additional specimens are sent if required because of personnel changes, change of location, etc.
- (i) Includes Army, Red Cross and State Laboratory.
- (j) No performance evaluation conducted since 1960, due to lack of personnel. Any laboratory placed on "approved" list upon request.
- (k) Original total of laboratories participating, not broken down by type.
- (l) Program just beginning.
- (m) Voluntary for pathologist-directed laboratories, mandatory for non-pathologist-directed laboratories.
- (n) In addition to totals shown, 50 non-commercial laboratories (public utility districts) out of a total of 74 approved took part in water bacteriology evaluations.
- (o) Inspection only.
- (p) Survey only.
- (q) Figure represents total laboratories not broken down by type. These laboratories are certified under the Interstate Milk Shippers Program.
- (r) PHS Interstate Carrier Program.
- (s) Approved upon conformance with standard methods as judged by inspection.
- (t) Water laboratories consist of public health and public utilities.
- (u) Municipal water departments.
- (v) Not strictly required but recommended.
- (w) To meet requirements of PHS Interstate Milk Shippers Program.
- (x) Forty-four specimens sent to each of 3 branch laboratories and 22 to each of 5 local health department laboratories.
- (y) Required for Branch Laboratories-not offered to other laboratories.
- (z) Handled by State Department of Agriculture.
- (aa) Specimens sent for evaluation purposes only. Florida also had a voluntary evaluation of cholesterol examinations in which 125 independent and 15 hospital laboratories participated.

FOOTNOTES. TABLES 9-1 THROUGH 9-11.
(Continued)

- (bb) Each laboratory has performed about 32 determinations on the 13 samples mailed.
- (cc) First line of information represents TB Smear; second line represents TB Cultures.
- (dd) Figure represents miscellaneous laboratories.
- (ee) Number per laboratory varies according to number of requests made on specified procedures.
- (ff) To begin in 1967.
- (gg) Program began July 1, 1966.
- (hh) Participation of local public health laboratory is on voluntary basis. In addition to totals shown, 64 non-commercial laboratories out of a total of 112 approved took part in water chemistry evaluations.
- (ii) Required for Blood Banks, voluntary for independent laboratories.
- (jj) Symbols: (C) - Cardiolipin Lecithin Antigen
 (CNL) - Cardiolipin Natural Lecithin Antigen
 (RP) - Reiter Protein Antigen
 (T) - Treponemal Antigen
- (kk) New York State RPCF (RP)and New York State RP Latex Agglutination (RP).
- (ll) FTA - 100 (T).
- (mm) New York State Cardiolipin Slide Flocculation (C).

SECTION X

LABORATORY DATA PROCESSING

TABLE 10-1. LABORATORY DATA PROCESSING METHODS

Laboratory Using Computer	Using Punch Card Equipment	Using Hand Methods	Using Combination Hand and Punch Card Methods
Ala.		X	
Alaska		X	
Ariz.		X	
Ark.	*	*	*
Cal.		X	
Colo.		X	
Conn.		X	
Del.		X	
D.C.	*	*	*
Fla.	X (a)	X	
Ga.		X	
Hawaii		X	
Ida.		X	
Ill.		X	
Ind.		X	
Ia.	*	*	*
Kans.			X (b)
Ky.		X	
La.		X	
Me.		X	
Md.		X	
Mass.		X	
Mich.	*	*	*
Minn.	X (c)	X	
Miss.		X	
Mo.		X	
Mont.	*	*	*
Nebr.		X	
Nev.		X	
N.H.	*	*	*
N.J.		X	
N.M.		X	
N.Y.	X (d)		
N.C.			X (e)
N.D.		X	
Ohio		X	
Oklahoma		X	
Ore.		X	
Pa.	*	*	*
R.I.		X	
S.C.		X	
S.D.	*	*	*
Tenn.			X (f)
Tex.		X	
Utah		X	
Vt.		X	
Va.		X	
Wash.		X	
W. Va.		X	
Wisc.	X		
Wyo.		X	
P.R.		X	
V.I.		X	

TABLE 10-2. AVAILABILITY, LOCATION, AND SIZE OF COMPUTER EQUIPMENT

	Computer Used by Health Department	Computer Physically Located in a Health Department Building	Health Department Lab. in Same Building as Computer	Size of High- Speed Core Storage Unit (g)
Ala.	X	X		8,000
Alaska	X			*
Ariz.	X	X		*
Ark.	*	*	*	*
Cal.	X	X		65,000
Colo.				
Conn.	X			136,000
Del.	X	X	X	9,999
D.C.	*	*	*	*
Fla.	X	X	X	4,000
Ga.	X	X	X	65,000
Hawaii	X			32,000
Ida.	X	X		*
Ill.	X	X		65,000
Ind.	X			*
Ia.	(h)			
Kans.				
Ky.	X	X	X	16,000
La.	X	X	X	*
Me.	X			16,000
Md.	X	X		*
Mass.	X	X		*
Mich.	*	*	*	*
Minn.				
Miss.				
Mo.				
Mont.	*	*	*	*
Nebr.				
Nev.	X			*
N.H.	*	*	*	*
N.J.	X	X	X	8,000
N.M.				
N.Y.	X	X		1,000
N.C.	X	X		32,000
N.D.				
Ohio	X			248,000
Oklahoma.				
Ore.				
Pa.	*	*	*	*
R.I.	X		X	
S.C.				
S.D.	*	*	*	*
Tenn.				
Tex.	X	X		4,000
Utah	X	X	X	*
Vt.				
Va.	X	X		*
Wash.	X	X		*
W. Va.				
Wisc.	X	X		256,000
Wyo.	X			*
P.R.	X	X		*
V.I.				

SECTION X. FOOTNOTES

- (a) Computer used for calculations of radiochemical analyses and on summarizing data accumulated in the radiological chemistry section.
- (b) Punch card equipment is used for the syphilis serology evaluation program only.
- (c) Electronic computer is used only for the chemistry evaluation study.
- (d) Accession records or needle cards (manual) were used for all categories except syphilis, tuberculosis and transfusion service; statistics on the three latter categories were computed electronically from mark sense cards.
- (e) PKU reports for filing are put on punch cards, the remainder of the reports are by hand and typewriter.
- (f) Punch card equipment is only used to record results of rabies examinations.
- (g) Number of alpha-numeric characters. For the few States having two or more computers, the combined capacity of the computers is shown.
- (h) University has computer center.

SECTION XI

MISCELLANEOUS INFORMATION

TABLE 11-1. INDEPENDENT AND HOSPITAL LABORATORIES (a)

	Estimated Population (b)	Number of Laboratories			Laboratories per 100,000 Population		
		Independent	Hospital	Total	Independent	Hospital	Total
Ala.	3,463,000	*	135	*	*	3.9	*
Alaska	253,000	4	12	16	1.6	4.7	6.3
Ariz.	1,609,000	*	*	*	*	*	*
Ark.	1,960,000	*	*	*	*	*	*
Cal.	18,605,000	935	535	1,470	5.0	2.9	7.9
Colo.	1,969,000	35	90	125	1.8	4.6	6.4
Conn.	2,833,000	62	53	115	2.2	1.9	4.1
Del.	505,000	6	10	16	1.2	2.0	3.2
D.C.	803,000	*	*	*	*	*	*
Fla.	5,805,000	125	225	350	2.2	3.9	6.1
Ga.	4,358,000	30	175	205	0.7	4.0	4.7
Hawaii	711,000	29	33	62	4.1	4.6	8.7
Ida.	692,000	31	33	64	4.5	4.8	9.3
Ill.	10,646,000	320	325	645	3.0	3.1	6.1
Ind.	4,886,000	87	122	209	1.8	2.5	4.3
Ia.	2,760,000	*	*	*	*	*	*
Kans.	2,234,000	45	169	214	2.0	7.6	9.6
Ky.	3,179,000	92	101	193	2.9	3.2	6.1
La.	3,534,000	28	195	223	0.8	5.5	6.3
Me.	993,000	2	72	74	0.2	7.3	7.5
Md.	3,521,000	*	*	*	*	*	*
Mass.	5,349,000	80	200	280	1.5	3.7	5.2
Mich.	8,220,000	*	*	*	*	*	*
Minn.	3,555,000	9	198	207	0.3	5.6	5.9
Miss.	2,322,000	15	128	143	0.6	5.5	6.1
Mo.	4,498,000	100	166	266	2.2	3.7	5.9
Mont.	706,000	*	*	*	*	*	*
Nebr.	1,477,000	*	*	*	*	*	*
Nev.	440,000	25	21	46	5.7	4.8	10.5
N.H.	669,000	*	*	*	*	*	*
N.J.	6,775,000	120	131	251	1.8	1.9	3.7
N.M.	1,029,000	25	60	85	2.4	5.8	8.2
N.Y.	18,075,000	*	*	423	*	*	2.3
N.C.	4,914,000	6	250	256	0.1	5.1	5.2
N.D.	652,000	*	*	*	*	*	*
Ohio	10,247,000	125	250	375	1.2	2.4	3.6
Okla.	2,483,000	30	210	240	1.2	8.5	9.7
Ore.	1,900,000	120	87	207	6.3	4.6	10.9
Pa.	11,522,000	145	305	450	1.3	2.6	3.9
R.I.	891,000	31	23	54	3.5	2.6	6.1
S.C.	2,543,000	*	40	*	*	1.6	*
S.D.	703,000	*	*	*	*	*	*
Tenn.	3,846,000	56	79	135	1.5	2.1	3.6
Tex.	10,552,000	1,000 (c)	600	1,600	9.5	5.7	15.2
Utah	990,000	12	40	52	1.2	4.0	5.2
Vt.	397,000	2	15	17	0.5	3.8	4.3
Va.	4,456,000	50	135	185	1.1	3.0	4.1
Wash.	2,990,000	156	128	284	5.2	4.3	9.5
W. Va.	1,812,000	50	80	130	2.8	4.4	7.2
Wisc.	4,145,000	20	241	261	0.5	5.8	6.3
Wyo.	340,000	12	26	38	3.5	7.6	11.1
P.R.	2,633,000	*	*	*	*	*	*
V.I.	43,300	2	3	5	4.7	6.9	11.6

	Iowa Rank	Total Reported	Upper %
Total Specimen	14	42	33
Total exam.	18	50	36
Diagnostic Bact.	19	50	38
Sanitary Bact.	12	48	25
Mycology	7	42	17
Parasitology	36	50	72
Virology	18	47	38
Syphilis serology	13	50	26
Other serology	4	50	8
Clinical Chemistry	—		
PkU	35	37	95
Sanitary chemistry	11	40	28
Lab. staff	19	46	41
Expenditure	11	42	26
" per capita	9	42	21
State contribution on exp.	25	40	63
Total Net space	16	41	39

By 1968 the older lab building is built in 1937 & another Iowa lab built in 1928
 By 1970 — — — — — — — — 1950

	Iowa Rank	Total Reported	Avg. %
Professional & Technical Personnel	17	46	37
Support Services	23	46	50
Administrative & Clerical	19	46	41
Per Cent of Positions			
Prof. & Technical	10	46	22
Support Services	35	46	76
Administrative & Clerical	23	46	50
Courses or workshops sponsored by S.H.L.	17	31	55
Bench training by S.H.L.	24	33	73
Training of Staff in Formal Course or seminars	11	46	24
Academic training	11*	19	
* The next eight jobs are the same rank as Iowa lab			
Total Employees	Professional & Technical	Support Service	Administrative Clerical
70	46	10	14
100%	65.7%	19.3%	20%

TABLE 11-2. REQUIREMENTS FOR REPORTING LABORATORY RESULTS INDICATING
COMMUNICABLE DISEASES (d)

	Requirement for Laboratory Results of Communicable Disease to be Reported to Health Department	Year Effective	Program Fully Implemented
Ala.	X	1919	
Alaska	X (e)	1959	X
Ariz.	X	1967	*
Ark.	*	*	*
Cal.	*	*	*
Colo.			
Conn.	X	1937	X
Del.	X	*	*
D.C.	*	*	*
Fla.			
Ga.	(f)		
Hawaii	X	1936 (Rev. 1963)	X
Ida.			
Ill.	X	1957 (Rev.)	X
Ind.	X (g)	1963	X
Ia.			
Kans.			
Ky.	X (e)	*	*
La.	*	*	*
Me.			
Md.			
Mass.	X	*	*
Mich.	*	*	*
Minn.	*	*	*
Miss.	X	1958	X
Mo.	X	1952 (Rev. 1962)	
Mont.	*	*	*
Nebr.	X	*	
Nev.	X	1911	X
N.H.	*	*	*
N.J.	X	1966 (Rev.)	X
N.M.	X	1957	X
N.Y.	X		
N.C.	X	1944	X
N.D.			
Ohio	X	1964	X
Okla.	X	1963	
Ore.	X	1966	*
Pa.	*	*	*
R.I.			
S.C.	X	*	*
S.D.	*	*	*
Tenn.			
Tex.	(h)		
Utah	X	1953	
Vt.	X	*	
Va.	*	*	*
Wash.	X	1943	
W. Va.	X (e)	1965	X
Wisc.	X	*	*
Wyo.			
P.R.	X	*	X
V.I.	X	1963 (Rev.)	

SECTION XI. FOOTNOTES

- (a) Laboratories operated by a private physician for his own patients are not included.
- (b) Estimated population as of July 1, 1965. Information taken from: Statistical Abstract of the United States: 1966. U. S. Bureau of the Census. (87th Edition). Washington, D. C., 1966, p.11.
- (c) Many of these by relaxed definition under Medicare would no longer be considered independent laboratories; and many apparently are hoping to continue operation under premarital law and have not applied under Medicare provisions.
- (d) The diseases to which these regulations refer vary substantially from one State to another.
- (e) Requirements cover serology only.
- (f) Rules and regulations are in process of being formulated to require reporting of all isolations related to reportable diseases in addition to positive venereal disease findings.
- (g) Requirements cover tuberculosis only.
- (h) Not required by law, but reporting is encouraged.