

Fiscal Year  
1964-1965

## DIAGNOSTIC LABORATORIES

ANNUAL REPORT OF THE MASSACHUSETTS LABORATORY  
FOR THE FISCAL YEAR ENDING JUNE 30, 1965.

Kenneth F. Girard, Ph.D., Assistant Director

During the calendar year 1964, the Massachusetts Laboratory performed 446,812 tests while processing 446,215 specimens, an increase of 11,887 over the previous year. A total of 50,042 specimens were tested to comply with the prenatal law, and 40,040 to comply with the prenatal law. Out-of-State prenatal certificates were issued to 1333 applicants.

The intrastate evaluation of serologic tests for syphilis was conducted for one hundred and forty-eight laboratories. One hundred and sixteen of these laboratories applied for approval to perform tests for blood donor purposes, and ninety eight for approval to perform standard tests. Two laboratories failed to meet the required standards of performance.

Conferences, demonstrations, and practical work in the serology of syphilis were given throughout the year to many laboratory technologists from various parts of the State.

The Massachusetts Laboratory participated again this year in the National Evaluation of Serologic tests for syphilis conducted by the U. S. Public Health Service, and fifteen tests were performed on two hundred serum samples. In this Federal Program the laboratory received an excellent rating for sensitivity, specificity, and reproducibility.

of results of tests.

One thousand and eleven tests were performed on four hundred and fourteen specimens that were examined for rabies. One case of confirmed rabies in a bat was established during calendar year 1964. This bat (*Spoussione fuscus*) was brought to the laboratory by a Littleton, Massachusetts man who had been bitten on the back of the hand while delivering fuel oil in the town of Westford during July, 1964. Fluorescent antibody examination of brain and salivary gland tissues of the bat was completed five hours later and post-exposure immunization of the bite victim was begun immediately. This represented the twelfth rabies positive bat detected by the laboratories since the presence of rabies in local bats was first recognized here in September, 1961.



DIAGNOSTIC LABORATORIES  
WASHINGTON LABORATORY  
TABLE I. - TESTS AND SPECIMENS

Kind of Specimens		1960	1961	1962	1963	1964
		-	-	-	-	-
		1961	1962	1963	1964	1965
Blood	Number of Specimens	463,301	471,112	474,749	425,686	436,034
	Tests					436,034
	Wintre	449,312	454,682	457,082	417,888	418,472
	Quantitative Wintre	9,941	14,027	10,243	9,733	11,147
	Wintre-Wintre Micro Flocculation	4,599	6,404	6,034	6,040	4,758 -4798
	Wintre Complement Fixation	12	5	11	3	12
	RPGP - Qualitative	-	-	901	1,140	1,461 1,461
	RPGP - Quantitative	-	-	730	802	144 144
Spinal Fluid	Number of Specimens	9,217	8,974	9,150	9,370	9,787 -9767
	Tests					
	Davis o-Wintre	9,217	8,974	9,150	9,370	9,787
	Albumin	2,598	2,600	1,801	-	-
Nebins	Total Protein	3,463	3,571	2,538	-	-
	Number of Specimens	299	299	378	372	414
	Tests					
	Impressions	299	299	378	372	414 -414
Magnetics Tests	Sections	189	215	207	194	304 -204
	Animal Inoculations	295	291	370	398	399 -393
						446,812
Total Tests		471,577	487,068	479,193	435,460	446,812
Total Specimens		472,777	480,391	484,277	435,128	446,215
						446,215

DIAGNOSTIC LABORATORIES  
TABLE XVII - SPECIMENS  
January 1, 1964 - December 31, 1964

WASSERMANN LABORATORY

<u>REACTS:</u>	<u>Reactive Results</u>	<u>Total Specimens</u>
Hinton	5,806	
Quantitative Hinton	"	
Davies-Hinton Micro Precipitation	26	
Clelland's Coagula post Fixation	0	436,034
RPHF - Qualitative	677	
RPHF - Quantitative	"	

SERIAL TITER:

Davies-Hinton	66	9,767
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BABIES:

Impressions	0	
Sections	0	414
Animal Inoculations	1 (bnt)	

Total Wassermann Laboratory Specimens:	446,215
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We do not tabulate the results of Quantitative Hinton tests or  
RPHF Quantitative tests.

Please discard the present  
Table I in the 1964 Annual  
Report you have recently re-  
ceived, and replace it with  
this corrected copy.



# DIAGNOSTIC LABORATORIES

TABLE I NUMBER AND KIND OF SPECIMENS

	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
Agglutination	5,484	5,333	4,244	4,194	4,907
Blood typing specimens					
- Prenatal	6,742	6,902	4,576	-	-
Civil Defense	63	95	40	-	194
Enteric Pathogens	8,419	9,058	7,148	10,987	12,353
Gonorrhea	2,948	2,892	2,869	3,032	3,461
Malaria	-	2	5	3	2
Mycology	301	222	282	279	256
Throat Cultures	11,022	11,480	14,016	21,332	21,991
Tuberculosis	4,783	4,707	4,152	3,809	4,098
Vincent's Gingivitis	101	39	41	43	38
Misc. Bacteriological Specimens	621	478	361	450	525
PKU Program	-	-	30,775	175,895	200,467
Virus Isolation Specimens	264	301	121	216	317
Polio, myelitis, Coxsackie )					
Echo, Viruses, Encephalitis, )					
Psittacosis, Influenza group )					
Viral Serological Specimens	777	815	1,062	991	760
Special Encephalitis	4,047	5,586	4,618	4,327	4,626
Investigation					
Wassermann Specimens	<u>472,977</u>	<u>480,391</u>	<u>484,277</u>	<u>435,128</u>	<u>446,215</u>
Total Specimens	518,549	528,301	558,587	660,686	700,210

AUG 11 1965

MEMORANDUM

SUBJECT: Annual Report

TO: Dr. MacGraw

FROM: Dr. Edsall

DATE: August 9, 1965

I think that this year's Annual Report of the Diagnostic Laboratories Division is the most interesting and informative one that has come out since I have been reading them. This of course, is due in part, to the fact that the past year may well have been the most interesting in the history of the Division.

I have a few comments, however, that I think are important, and some that are less urgent but useful for future planning, viz

1. "TABLE I, NUMBER AND KIND OF SPECIMENS" of the "DIAGNOSTIC LABORATORY" should be replaced, as soon as possible for the following 3 reasons:

a) There is no such entity as the "Diagnostic Laboratory". I think the proper heading should be "Diagnostic Laboratories".

b) To fit this heading one needs to add, apparently, only the "Wassermann Laboratory's" corresponding data, since every other activity in the Division is represented in the Table. Further more, the present setup is objectionable since it perpetuates the idea that there are 2 entities in the Diagnostic Laboratories - the Wassermann and the "others". I would like as a specific objective, this year, to see this idea eliminated from all written material, at least, that emanates from the Division.

c) The PKU figures for 1964 are incorrect in that they apparently represent tests whereas the heading is "Specimens". I judge the correct PKU figure to be 200,467 and the correct 1964 total to be 253,995.


I think a corrected table should be prepared as soon as possible, and should include the Wassermann totals, and be distributed to replace the present table.

2. Nowhere in the report is there a list of publications. This is an unfortunate omission, since publications represent a significant and lasting index of the activity of a laboratory, as illustrated in Jim McComb's Annual Reports. I would like to see such a list prepared and distributed as an addition to the current Annual Report, whenever this is practical.

3. There continues to be confusion regarding the names for subsidiary units of the Division. One finds "Bacteriological Section", "Virus Diagnostic Section", "Wassermann Laboratory Section". It seems to me that each unit in a "Division of Diagnostic Laboratories" would naturally be a laboratory. Also "Laboratory" dignifies a unit whereas "Section" rather belittles it. Therefore unless there is a really good reason to do otherwise, I would prefer to see the term laboratory used in the future.



4. In future reports, I think the Tables for the whole report could be planned in advance, and numbered in sequence. The present system is - to an outsider - hard to follow to put it mildly. The endless "Table XVII" for example (I don't find 16 preceding tables!) really breaks up into numerous separate tables (I made 9 tables out of it) etc. etc.



CE:cf



*Spivard*

Please attach to the Memorandum from Dr. MacCready  
to Dr. Edsall dated August 12, 1965

Dr. Girard

MEMORANDUM

TO: Dr. Edsall

SUBJECT: Annual Report

FROM: Dr. MacCready

Reply to your Memorandum of August 9, 1965

DATE: August 11, 1965

Your Heading Number 1. I agree that the time is right for revision of the titles, form, and details of the various Tables which were almost all inherited from Dr. Feemster's time, and the others that have been added from time to time without necessarily being integrated into the whole report. I propose that this be one of the early activities of the head administrative assistant whom I hope to secure through the federal grant on paper chromatography. It will require a considerable amount of painstaking effort with the four laboratories that now compose the Diagnostic Laboratories, and needs a capable person with the time to spend on it. We were unable this year to do any revising because of time limitations, and we barely finished the report two to three days late, but I certainly agree that the whole form can be improved.

We had already noted that there was a misunderstanding in PKU figures in that tests rather than specimens appeared in the total, and revised sheet has been in the making and is now completed. To fit your suggestions, the new Table is headed, 'Diagnostic Laboratories,' thus including the Wassermann totals.

Your Heading Number 2. The list of publications is as follows:  
Dr. MacCready:

Supplement, Procedures Used In Massachusetts Screening Program, in Phenylketonuria Detection In The Newborn Infant As A Routine Hospital Procedure, by Robert Guthrie and Stewart Whitney. Children's Bureau Publication No. 419, 64-73, 1964.

Diagnosis of Phenylketonuria, Letter to the Editor: N.E.J. Med. 270, 324, August 6, 1964.

Newborn Phenylketonuria (PKU) Program in Massachusetts.-A Progress Report. J.A.P.H.A. 54, 12, December, 1964.

Some Observations On The Presence of Rabies in Bats in Southern New England. N.E.J. Med. 272, 2, January 14, 1965. (co-author of paper)

Phenylketonuric Families. J.A.M.A. 191, 5, February 1, 1965.

PKU Testing-Letter to the Editor. Massachusetts Physician, 23, 10, 227, June-July, 1965.



MEMORANDUM

TO: Dr. Edsall

SUBJECT: Annual Report  
Reply to your Memorandum of August 9, 1965

FROM: Dr. MacCready

DATE: August 11, 1965

Publications (continued)  
Dr. Girard:

Some Observations On The Presence of Rabies In Bats In Southern New England.  
N.E.J. Med. 272, 2, January 14, 1965.

K.S. Anderson :

Operation Recovery at Duxbury Beach. Massachusetts Audubon Magazine,  
Summer, 1965.

Your Heading Number 3.

We shall gladly use the term, laboratory; i.e., Bacteriology Laboratory, PKU and Other Metabolic Disorders Laboratory, Wassermann Laboratory, Virology Laboratory, and Laboratory Approval.

Your Heading Number 4.

Again, Table 17 has simply been carried over the years since Dr. Feemster's days, and it should certainly be brought up to date in its form and composition. Again, I think this is one of the early tasks to give the new head administrative assistant.

RAMacC/mps

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cc: Dr. Girard ✓  
Dr. Tonn  
Mrs. Daniels  
Mrs. Holmes  
Mrs. Beatty