

1958-1959
Rabies Survey
Summer of 1958

ANNUAL REPORT OF THE WASSERMANN LABORATORY
FOR THE FISCAL YEAR ENDING JUNE 30, 1959

GENEVIEVE C. STUART

ASSISTANT DIRECTOR
(1954 has been end of fiscal year)

During the calendar year 1958 the Wassermann Laboratory performed 468,605 tests. A total of 50,404 specimens were tested for premarital purposes and 38,793 for prenatal purposes. Out-of-State premarital certificates were issued to 1166 applicants.

This year, one-hundred and thirty laboratories participated in the Evaluation of Serologic Tests for Syphilis. Sixty of these laboratories were approved to perform standard tests, and sixty-two were approved for rapid tests for blood donor purposes only. Only eight laboratories were unable to meet the required standards.

The Wassermann Laboratory participated again this year in the National Evaluation of Serologic Tests conducted by the U. S. Public Health Service and performed qualitative and quantitative Hinton tests on two-hundred matched samples of serum. The results showed that both the sensitivity and specificity ratings of the Hinton test were satisfactory, and compared very favorably with tests performed in other State laboratories.

The laboratory served as control for the Hinton test in the intrastate evaluation conducted by the Texas State Health Department. One-hundred and seventy-eight tests were performed in this evaluation.

The comparative study in cooperation with the Division of Venereal Diseases on specimens from patients who present diagnostic

problems was continued using the Reiter Protein Complement Fixation test. Both the Reiter Protein Complement Fixation tests and Quantitative Hinton tests were performed on 849 specimens in this study.

Conferences, demonstrations, and practical work in the serology of syphilis were given to resident-pathologists from Boston hospitals, students from the Harvard School of Public Health, and hospital technologists.

Milk samples submitted by the Massachusetts Medical Milk Commission have been tested monthly for Brucella Abortus Agglutinins.

Material submitted from all parts of the State for rabies diagnosis consisted of heads from domestic and wild animals. Altogether two-hundred and twenty-nine specimens were received, and examinations proved all to be nonrabid.

The laboratory also cooperated in the study of Equine Encephalitis and rabies in bats. Two-hundred and seventeen bats were examined and found to be negative for both diseases.

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SUMMARY

During the year 1958, the work in the Wassermann Laboratory continued at about the same rate: 468,605 tests were performed. Two-hundred and twenty-nine specimens were received for rabies diagnosis, and all proved to be nonrabid.

At times the diagnosis of rabies is most difficult due to the presence of material in the brain which somewhat resembles Negri bodies, or when no Negri bodies can be found in the initial examination. Recent studies have shown that the fluorescent antibody technique has overcome these difficulties, and is a rapid, accurate method of rabies diagnosis.

Since the anti-rabies fluorescein conjugate is available commercially, it is recommended that equipment for this test be purchased as soon as possible.

The work on the use of the Reiter Protein Complement Fixation Test as an adjunct to the routine testing procedures in this laboratory has been continued.

WASSERMANN LABORATORY

1958-1959

Tests and Examinations

TABLE I.

Kind of Specimen		1954	1955	1956	1957	1958
		-	-	-	-	-
		1955	1956	1957	1958	1959
Blood	Number of Specimens	530,229	512,403	492,586	463,099	453,053
	Tests					
	Hinton	473,048	481,056	468,420	440,394	434,302
	Quantitative Hinton	10,075	10,498	8,772	9,130	9,356
	Davies-Hinton Micro Flocculation	11,554	7,719	5,206	4,067	4,887
	*Brucella Abortus Agglutination	35,539	13,121	10,177	9,505	4,505
	Glanders Complement Fixation	13	9	11	3	3
Spinal Fluid	Number of Specimens	9,369	8,872	8,807	8,692	9,175
	Tests					
	Davies-Hinton	9,369	8,872	8,807	8,692	9,175
	Globulin	4,675	3,728	3,486	2,732	2,979
	Total Protein	4,284	3,410	3,136	2,592	2,753
Rabies Diagnosis*	Number of Specimens	216	176	198	207	229
	Tests					
	Impressions	216	176	198	207	229
	Sections	199	158	177	185	194
	Animal Inoculations	212	166	189	202	222
Total Tests		549,134	528,913	508,579	477,759	468,605
Total Specimens		539,814	521,451	501,591	471,998	462,457

*Diagnostic Examinations for Division of Livestock Disease Control