

The percent of positive Wasserman cases is slightly less than those observed in a Tennessee College group. See Table No. 2

TABLE NO. 1

Results of tests for Syphilis at Booker Washington High School

Total number of Wasserman tests run	410
" " with negative reaction	392 or 95.60%
" " " positive reaction	16 or 3.90%
" " " anti-complementary	2 or .48%
Total number of male students examined	171
" " with negative reaction	163 or 95.32%
" " " positive reaction	8 or 4.61%
Total number of female students examined	239
" " with negative reactions	229 or 95.81%
" " " positive "	8 or 3.35%
" " " anti-complementary	2 or .83%

TABLE NO. 2

Results of tests for Syphilis of Meharry Medical College and Fisk Univ.

Total number of Wasserman Tests run	711
" " with negative reaction	667 or 93.81%
" " " positive reaction	44 or 6.18%
Total number of male students examined	290
" " with negative reaction	274 or 94.45%
" " " positive reaction	16 or 5.55 %
Total number of female students examined	421
" " with negative reaction	395 or 94.35%
" " " positive reaction	28 or 6.65 %



TUBERCULIN TESTING

5 - Regardless of the final conclusions to be reached in regard to the tuberculin test as a diagnostic aid, the procedure stands approved as an indicator of the incidence of tuberculous infection.

It is a money saving procedure, in the respect that it screens out tuberculin sensitive subjects. It is recommended that an x-ray examination be made of all positive cases. If there are active cases of pulmonary tuberculosis in a large homogeneous group these will be pointed out through the use of these methods. This is the modern way of diagnosing tuberculous disease instead of waiting for symptoms to arise and the patient finds his way to the doctor.

Pupils supplied the following information to a nurse or other assistant who filled out the following form card.

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1. Name Class
 2. Place (School)
 3. Color
 4. Sex
 5. Age
 6. Birthplace
 7. Birthplace of Mother
Father
 8. Contact or non-contact with tuberculosis
 9. If contact (a) specify through whom.
(b) Whether past or present.
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The positive reactions were classified as approved by the National Tuberculosis Association

One plus reaction consisted of an area of swelling measuring 5-10 mm. in diameter.

Two plus reaction consisted of an area of swelling measuring 10-20 mm. in diameter.

Three plus reaction consisted of an area of swelling exceeding 20 mm. in diameter.

Four plus reaction consisted of an area of swelling presenting definite necrosis.

A doubtful reaction was characterized by a trace of swelling 5 mm. or less in diameter.

A negative reaction was one in which the injection site showed no redness or swelling. Very slight redness with no swelling was read as negative.

The injections were made intracutaneously, under aseptic conditions, on the flexor surface of the forearm. The test was given in two doses, the second being given only when the first was negative.

The first injection was .00002 mg. of P. P. D. in buffered diluent, while the second dose was 250 times as large; 005 mg P. P. D.

Forty-eight hours after each injection the sites were read.

Approximate number of students in 12th grade class - 465

Approximate number of students in 11th grade class - 400

Total number of students - 865 in both classes. Total number examined 525 or 60 per cent of the available students in these classes.

Of the 525 examined 358 were females and 167 were males. The average ratio of students attendance in these classes is about three girls to every one boy.

The ages of the respective sexes examined were from 14 to 28, with the largest number between the ages of fifteen and twenty. Males ranged from 14 to 37 with the largest number between fifteen and twenty. Since the majority were between fifteen and twenty it was decided to study them in only one age group.

For comparison of detailed report see table.

RESULTS OF TUBERCULIN SKIN TESTS AT WASHINGTON HIGH

Total number of boys and girls tested	-----	525
" " positive	-----	216 or 41 %
" " negative	-----	309 or 59 %
Total number of girls tested	-----	358
" " positive	-----	146 or 41 %
" " negative	-----	309 or 57 %
Total number of boys tested	-----	167
" " positive	-----	70 or 42 %
" " negative	-----	97 or 58 %

12 or 6 % had a 4 plus skin test. Of those having low blood pressure 10 or 55 % also had a positive tuberculin test.

Of the 216 positive reactors to tuberculin only 10 or 4 % had a positive Wasserman test.

A history of family contact was admitted in 15 or 2.85 %. Three are in present contact.

Roentgenograms were obtained upon 53 students to date out of 216 needing them.

Number negative 31 or 59 %

Number childhood type 21 or 39 %

Number of adult type (Moderately advanced) 1 or 1 %

8 cases or 14 % heart enlargement were observed on the x-ray pictures.

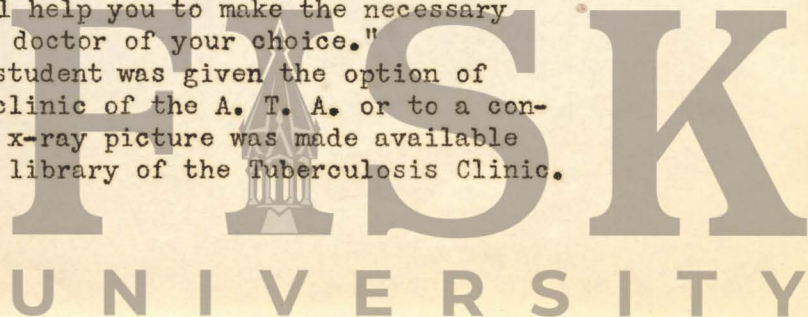
Serious underweight (over 15 %) was observed to accompany 3 or 37 % of these heart cases.

The x-ray pictures were interpreted by a technician and each case considered individually by staff physicians at a special teaching clinic, held one hour weekly at the clinic of the Atlanta Tuberculosis Association.

Eighteen students who had evidence of childhood type were advised to carefully refrain from future contact with open cases. Three cases with suspicious lung findings were advised to have temperature and aputum checked and to have a re-x-ray in three months. One case of moderately advanced pulmonary tuberculosis was advised bed rest at home under the care of a physician or to enter a Sanatorium to take the cure. The negative x-ray cases as well as the childhood type were advised to have periodic re-x-ray examinations.

Following the taking of the x-ray picture, mimeographed notices were sent to the homes of the students by mail. A sample report read as follows: "The findings in your chest seem to show that you have been living with someone who has tuberculosis or in some way closely associated with it. This is not real disease but since you have these shadows in your lungs, it would be wise for you to have a complete examination. If you will consult with the nurse she will help you to make the necessary arrangements, to take your x-ray to the doctor of your choice."

The suspicious or positive x-rayed student was given the option of going either to the family physician, clinic of the A. T. A. or to a consultant physician for a check-up. The x-ray picture was made available to the physician and then filed in the library of the Tuberculosis Clinic.



ANALYSIS OF POSITIVE CASES

1 Plus -----	95 or 44 %
2 Plus -----	41 or 19 %
3 Plus -----	68 or 31 %
4 Plus -----	12 or 6 %

Comparing results of skin testing at Washington High with five other Negro groups, it was found that the rate of positives for tuberculin testing in Tennessee groups were higher.

See table below for comparison with other groups.

Belleview and Washington Jr. High School, Nashville, Tennessee	
399 students tested -----	49.87 % positive
David T. Howard Jr. High School, Atlanta, Georgia	37
618 students -----	27 % positive
Morris Brown University, Atlanta, Georgia	
209 students -----	27 % positive
Paine College, Augusta, Georgia	
400 students -----	53 % positive
Fulton County Reformatory (colored boys)	
217 students -----	36 % positive

CONCLUSIONS

No definite conclusions are attempted because of the small number used in the series. Tentative implications are made concerning the following facts:

(1) That slightly less than one-half of the Negro adolescent children in the public schools of Atlanta have been infected with tuberculosis.

(2) The history of a source of contact within the family is a negligible quantity.

(3) Syphilis as indicated by a positive Wasserman test is not an unusually large coincidence with latent tuberculosis, as indicated by a positive tuberculin test.

(4) Only a small number with a positive tuberculin test, when x-rayed, are found to have progressed to the adult type of tuberculosis.

RECOMMENDATIONS

That work of this type be continued in the Public Schools of Atlanta, with the approval of and with financial help from the Board of Education and the Public Health Department, or some responsible agency.

That skin tests and blood Wasserman examinations be done in Negro Schools throughout the state.

The State Board of Health, through its traveling unit, I believe, would gladly cooperate with the doctors in smaller towns in skin testing and x-raying students.

Blood Wasserman examinations can be arranged for by the State Board of Health, where the doctor or nurse collects the specimens of blood.

Visiting nurses should be supplied to those homes from which sources of contact cannot be removed.

Efforts should be made to locate the sources of obscure contacts. In this respect it is recommended that skin tests and x-ray pictures be made upon other members of the family where a child has a positive tuberculin test. Every student in the school should be examined, also the teachers and other school employees, in whom there is a possibility of a contact.

Recommendations for individual students have been made as indicated. Generally speaking, it must be remembered that the inability to take needed rest, too long hours of work, particularly in poorly ventilated rooms; great mental anxiety, lack of sufficient food, respiratory infections, dusty occupations and exposure to an open case of tuberculosis may change a quiescent infection into active pulmonary disease.

Careful avoidance of these conditions may contribute substantially to the prevention of such high sickness and death rates from tuberculosis among Negroes.