1933

A study of four problems of public school administration of health

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Boston University

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BOSTON UNIVERSITY
SCHOOL OF EDUCATION

Thesis

A STUDY OF
FOUR PROBLEMS OF PUBLIC SCHOOL ADMINISTRATION OF HEALTH

Submitted by

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(B. S. in Ed., Boston University, 1932)

In Partial Fulfillment of Requirements for the
Degree of Master of Education

1933
A Study of Four Problems in Public School Health Administration

Outline

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A Study of Four Problems of Public School Health Administration

Introduction
Introduction

Health education in the schools has developed in response to several influences. The medical examination of children, for years known as medical inspection, has become the direct corollary of the principle of compulsory education.

When the battle for free public schools was won in the United States, the boys and girls came trooping into the schools in great numbers. It was not long before school administrators recognized that compulsory features of public education caused certain problems and implied definite responsibilities. The grouping of large numbers in the classroom increased the danger of contagion tremendously, and the epidemics that swept through the schools in those early years cried out for an administrative control that had not been foreseen.

They soon recognized that health service includes several administrative procedures designed to determine the health status of the child, to inform parents of the defects that may be present and to help in every possible way in the prevention of disease and the correction of remediable defects.

Systems, plans and ideas on how the health education programs should be administered have found their proponents and opponents.

The problems have steadily increased until now when the economic and sociological conditions have caused leaders and tax-payers to introspect!

The writer of this thesis has no "axe-to-grind", but is merely

interested in the trends and tendencies in administration of public school health. The findings are as objective as possible and are divided into four chapters and a conclusion.

The Scope of the Study

This study will include the problems of administration; personnel; control of contagious diseases; and cooperation with State laws in enforcing child labor certification.

The Importance of the Problem

The total problem of the administration of health in the public schools has long been under attack. In 1932 in Boston University, Leslie Sims presented a thesis in which he proved statistically that there was no correlation between the amount of money spent by the schools in the State of Massachusetts for medical inspection (doctors and nurses) and the prevalence of disease. If in one state such can be true then there is need to study the entire problem of administration of health in the whole nation.

Procedure

To gather all the data from every state in the Union, and every settlement in those respective states, would be a tremendous task involving time and money. So the following steps were taken in gathering the data upon which this thesis was based.

(1) A questionnaire was sent to a group of cities in the nation divided up into population groupings of; less than fifty thousand inhabitants to a group of over a million. No attempt was made to choose the capital city of each state or to get even a city from each state, but rather to gather data from the cities which have diversified industries and people. The cities are as follows:

<table>
<thead>
<tr>
<th>Less than 50,000 population</th>
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<tr>
<td>Mansfield Massachusetts.</td>
<td>Pasadena California</td>
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<tr>
<td>Portsmouth New Hampshire.</td>
<td>Schenectady New York</td>
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<td>Burlington Vermont.</td>
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<td>Lincoln Nebraska</td>
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<td>Less than 75,000 population</td>
<td>Altoona Pennsylvania</td>
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<td>Charleston South Carolina.</td>
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<td>Cicero Illinois.</td>
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<td>East Orange New Jersey.</td>
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<td>Elmira New York</td>
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<td>Macon Georgia</td>
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<td>Montgomery Alabama</td>
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<td>Jackson Michigan</td>
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<td>Newton Mass.</td>
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<td>New Britain Conn.</td>
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<td>Kenosha Wisconsin</td>
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<td>Phoenix Arizona</td>
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<td>Portland Maine</td>
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<td>Roanoke Virginia</td>
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<td>Wheeling West Virginia</td>
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<td>100,000 population or over</td>
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<td>Springfield Mass.</td>
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<td>Worcester Mass.</td>
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<td>Oklahoma City Oka.</td>
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<td>Nashville Tenn.</td>
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<td>Washington D. C.</td>
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<td>Lynn Massachusetts</td>
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<td>Baltimore Maryland</td>
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<td>Cincinnati Ohio</td>
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<td>Boston Massachusetts</td>
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<td></td>
<td>Providence Rhode Island</td>
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<td></td>
<td>1,000,000 population or over</td>
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<tr>
<td></td>
<td>New York City</td>
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<td>Chicago Ill.</td>
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<td>Los Angeles Cal.</td>
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(2) By personal correspondence.

(3) By obtaining copies of annual Board of Education reports and Board of Health Reports.

(4) By intensive reading in the field, as may be seen by the bibliography following the conclusion.

(5) By personal interview and class discussions with super-

intendents of schools.

**Probable Value of the Study**

The value of such a study will lie in the fact that it will present a general picture of the administrative forces in public schools in America. Such a study should show trends, if not tendencies, towards or away from centralization and efficiency in organization.
The Problem of Control: The Board of Health and its representatives versus the Board of Education and its representatives as the final authority in the developing and administering of the school health program.
The Problem of Control: Board of Health and its representatives versus the Board of Education and its representatives as the final authority in the developing and administering of the school health program.

The problem itself at once becomes a moot one, for hardly anywhere today can be found a single authority in either field of medicine or school administration, who can (or will) make a definite move towards the standardization of the control work. Some of the authorities believe that the Board of Health in a given community, county, or state should be in charge of the work. Others claim that the superintendent's office (responsible to the Board of Education) in each respective unit of government should be in charge. Still other claims have been advanced that the two offices should work hand in hand with a trained leader in both fields at the head to control the work.

The Office of Education in the Department of Interior for the Federal Government made a survey in the fall of 1930 all over the country in an attempt to find out if any standards had been set whereby the most effective work in health could be done. The returns are as follows:

1. 75% of the cities in the country had the office of the health work in control of the superintendent's office, responsible to the Board of Education and deriving funds from it.

2. 15% of the cities had the school health work in the hands of the department of health in that community, deriving funds from it to carry on its work.

3. 10% had a combination of the two mentioned.

In 1911, Gulick and Ayres gathered the following data as regards the same problems:

1. Dr. W.H. Maxwell, Report to Board of Health, N.Y. (Gulick and Ayres)p.151
2. Dr. Hugh Grant Rowell; Dr. T.F. Harrington; Dr. J.A. Keenan; Anna Whitney
3. Wood and Rowell, Health Service in City Schools, Report of the Joint committee on Health Problems in Education. p. 4. 1922.
1. Of 443 cities having medical inspection, 106 of these cities were administered by the Board of Health. Size of those cities 10,000 in population and over.

2. 337 of the cities were administered by the Board of Education.

Wood and Rowell, in a similar study in 1922, found the following data:

1. 237 out of 326 cities were under the administration of the Board of Education.

2. 40 out of 326 were under the Board of Health.

3. 41 out of 326 were under private organizations.

4. 4 out of the 326 had no supervision at all. And 1 of those four was a city of 25,000 to 60,000 population. See the chart, p. 1.

Again in 1923 the report of the committee on Municipal Health, Department practice of the American Public Health Association, stated that "School supervision of health in the public schools is carried out in over half of the cities of over 250,000 by the board of health; but this work is handled in over two-thirds of the smaller cities by the department of education. In seven cities both departments are more or less active in the work; and in at least twelve other cities in which the department of education controls the work in the public schools, the board of health inspects the children in the parochial schools."

The arguments are simple and logical, in most cases, and we shall take each step as it presents itself and begin with the opinions on the control in the hands of the Board of Health.

The Board of Health is, in most states, cities, and communities, the health authority. The authority and sanction of the law is in the hands of this group; the local physicians are cooperative with it per orders of the laws of the land and the common respect and ethics of the profession of which they are members. Legally it is in charge of health and responsible for it. The police are required by law to carry out its demands and to respect its summons. Thus the work in the school is but part of the total health work done in a year's time in any

settlement, regardless of its size.

The Board of Health has more in favor of its control than the simple charter rulings and the cooperate police resulting from its powerful and legal standing. It is itself, a machinery already set-up and perfected that can expand without additional cost to the city. For it seems unwise that duplicate machinery of government should be set up, when simply enlarging the force by increasing the offices of the Board of Health would be entirely adequate and satisfactory. Then, too, the doctors and nurses that are employed by the Board of Health can be used outside of the system to aid non-public institutions if the demand arises; whereas the public school employee would be required to stay only within his own system in time of need because employees of the schools are not hired for general public servants, but are hired by the Board of Education and are responsible only to it, or its representatives.

A chief problem of our health work is that of cutting down on the number of contagious diseases, and the segregation of the cases as they arise. The arguments for the Board of Health control are as logical as those of the Board of Education. The leaders in this field feel that in order to avoid friction and duplications, the school administrative officers should be in charge of all things educational. School health supervision in their minds is primarily educational in nature and therefore should be carried on by the school official who best knows the school's needs. They feel that when the Board of Health is in charge of the health work in the school-health program the doctors tend to limit their activities to the control of contagious diseases and

1. Wood and Rowell, Health Supervision and Medical Inspection. Saunders 1927. page 41.
2. Dr. Edna Bailey; Dr. Edna Rood; Dr. John Sundall; Dr. W.H. Burkam; Dr. William F. Snow; Dr. James F. Rogers; Anna Whitney; A.J. Stoddard; Harris R.C. Wilson
tend to neglect the educational features of a health program; and that after all contagious disease control is not the main aim of health work in the school.\(^1\)

They\(^2\) go on to state that the teachers in pur systems are trained in health instruction work from their respective training schools, and that they are now competent enough to carry on the work of education with their regular tasks, and that in the joining of the two tasks the teacher also gets a direct connection with the home. Therefore she can find a better contact when there is need for parental aid in the care of the health of the child.

The leaders\(^3\) feel that it is educational for the classroom procedure to take up health work, to teach health through everyday experience rather than "fly-by-the-hour" examples by a visiting nurse and doctor; that the school system can carry the expense of the nurses and the doctors, and that with good educational procedure and idealism every single day of the school term, the physical compulsion of the policeman will not be needed; nor in the long run of time will certain laws need to prevail.\(^4\)

The findings of the questionnaire mentioned in the introduction, for this problem are as follows:

A. For cities less than 50,000.

1) Burlington, Vt.; School medical examiner responsible to the superintendent of schools.

2) Mansfield, Mass.; Superintendent of schools responsible to the School Committee.

3) Portsmouth, N.H.; School Nurse responsible to Superintendent.

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1. Opinions of Hugh G. Rowell, Columbia; M.C. Bragg, B.U.; Anne Whitney American Child Health Assn. Personal communication see Bibliography.
2. White House Conference, Public Health Adm. School Health Program. Century Co. (Thomas R. Wood, M.D., Chairman)
3. See footnote 2 page 8. 4. Ibid.
B. For cities of less than 75,000 population

1) Charleston, S.C.; No Special office.
2) Cicero, Ill.; Board of Health
3) East Orange, N.J.; Director of Health and Physical Education to the superintendent.
4) Elmira, N.Y.; Board of Health.
5) Macon, Ga.; Department of Health to the Board of Health.
6) Mobile, Ala.; Physicians and Nurses from the Board of Health.
7) Montgomery, Ala.; Physicians responsible to the school commission.
8) Jackson, Mich.; School physician responsible to the city Health officer.
9) Newton, Mass.; Cooperative plan with the Board of Health.
10) New Britain, Conn.; Staff responsible to the Board of Education.
11) Kenosha, Wis.; Department of Public Recreation. But the active health inspection is done at the first of the year by the Board of Health.
13) Portland, Me.; Supervisor of health to the superintendent.
14) Roanoke, Va.; Cooperation.
15) Wheeling, W.Va.; Supervisor of nurses to the superintendent.

C. For cities of less than 100,000 population

1) Altoona, Penn.; Board of Education. Three part-time doctors, and three full-time nurses.
2) Lansing, Mich.; Board of Health.
3) Lincoln, Neb.; Assistant superintendent to superintendent.

4) Pasadena, Cal.; Visits from welfare responsible to superintendent.

5) Schenectady, N.Y.; Full-time program to superintendent.

D. For cities with population of 100,000 or over

1) Springfield, Mass.; School nurses to the Board of Education. Doctors to Board of Health.

2) Worcester, Mass.; Health Department doctor and superintendent cooperating in program.

3) Oklahoma City, Ok.; Director of Health responsible to the superintendent.

4) Nashville, Tenn.; Commissioner of Health for the city.

5) Washington, D.C.; Physical Education department to the superintendent.

6) Lynn, Mass.; Director of Health and Physical Education responsible to school committee, and medical inspection responsible to Board of Health control.

7) Baltimore, Mary.; Director of health and physical Education responsible to the superintendent.

8) Cincinnati, Ohio; Director under superintendent.

9) Boston, Mass.; Director responsible to school committee.

10) Providence, R.I.; Director responsible to the superintendent.

E. For cities of 1,000,000 population and over

1) New York City; Cooperate. Dominated by Board of Health by law.

2) Chicago, Ill.; Staff responsible to the Board of Health.

3) Los Angeles, Cal.; Director to superintendent.

The data stated above shows A. that in three representative cities of 50,000 population or less that the work in health in the schools
is in the hands of the school authorities. B. that of the fifteen cities with less than 75,000 population ten place the control of their school health work in the hands of the Board of Education; The other five work in cooperation with the Board of Health. C. that the five cities of less than 100,000 population place the control in the hands of the Board of Education four to one. D. that the ten cities of population of 100,000 or over place the control in the hands of the Board of Education six to four with the four split, two using dual control, and the other two direct Board of Health supervision. E. that the cities with over a million population place the control in the hands of the Board of Health two to one. New York uses the cooperative system, but the control, by law, is in the hands of the Board of Health. Los Angeles is the only city in this group using the Board of Education control.

The New York system was incorporated in 1897 and the Chicago system soon after. Thus in the cities where the early laws were made in favor of the Board of Health such procedure still stands.

Conclusion

There need be no debate academically on which system seems to be the leader in the American cities questioned—the Board of Education and its representatives is the definite trend.
Problem Secondus

The Problem of Personnel

What is the general American practice as regards employment requirements? Size versus the American theoretical opinion on size, and employment qualifications versus the needs and interests of the American School child.
The Problem of Personnel: What is the general American practice as regards the employment requirements? Size versus the American Theoretical opinion on size, and employment versus the needs of the American school child.

The problem of personnel is as big as the problem of choosing the administration, for after it has been chosen, put to work, and the responsibility placed in its hands, it will find that it can do little without the aid of competent assistants.

Not only is the need for correct assistance great, but the fact that economic and sociological conditions at all times effect his choice and that of his superiors must enter into this discussion. Also the fact that no blanket suggestions can be made by any so-called authority or pseudo-authority due to the thousands of community problems and needs with which he is unfamiliar.

One has only to check over the different books in this field to find wide disagreement among the authors. For example; Commissioner Graves of New York State in his new book, The Administration of American Education, states that a school nurse should be allotted to every two thousand pupils. Gardner in his book called Public Health Nursing, states that the school nurse can handle two thousand pupils but is usually as ignorant as many, and handles them. Reeder in his book, Fundamentals of Public School Administration, states that a city of 25,000 population should have two or three nurses. That would undoubtedly make about one nurse to every thousand children;--Beverley 25,000 population, 4661 pupils; Northampton 24,400 population, 3622 pupils; Gloucester 24,300 population, 4216 pupils.

Before we get caught in the tide of size, (which after all depends upon two or three characters which we shall discuss at length before we close the problem) we must begin with the hiring process and its standards before we outline the duties and size of the staff.

The second question of the survey made by the author of this thesis was: "How large is your personnel? Are they part-time or full-time? Are they hired directly from their training institutions, or are they experienced workers in the fields of their specializations?"

Of the thirty-five odd cities that answered the survey as indicated in the previous problem, three of them reported that the members of the staff, regardless of being registered by the state, must take examinations set up by the Board of Education in the city by which they are employed.

One city of the group reported that it had no set rules as regards the choosing of its help in this line. The rest of the cities demand that their forces be registered by the state in which they practice, the graduates of their respective specialized institutions and have experience. What constitutes experience is difficult to state with this type of survey. But no city stated that it would hire a graduate right out of school, or from the hospital in which the student trained unless he had had some experience. As vague as "experience" may seem (for doctors have internships to serve which gives experience, and nurses practice all the time while they are training), it is assuring that those who are employed are by no means ill prepared.

The results of the questionnaire according to population groupings are as follows:
A. Cities of less than 50,000 population

1) Burlington, Vt.:  
   1 Doctor  
   1 Nurse  
   (members of staff) 1 Part-time Dentist  
   1 Nutritionist

2) Portsmouth, N.H.:  
   1 Full-time Nurse.

3) Mansfield, Mass.:  
   1 Doctor part-time  
   1 Nurse full-time

B. Cities of less than 75,000 population

1) Charleston, S.C.:  
   2 part-time Physicians  
   1 Oculist  
   3 Nurses full-time

2) East Orange, N.J.:  
   1 Supervisor  
   2 Physicians  
   4 Nurses  
   1 part-time dentist  
   1 part-time dental assistant

3) Roanoke, Va.:  
   10 full-time white teachers  
   2 black to Board of Health

4) Phoenix, Ariz.:  
   1 part-time physician  
   4 nurses full-time

5) Macon, Ga.:  
   1 physician part-time  
   1 white nurse full-time  
   1 colored nurse part-time  
   1 dental hygienist full-time

6) Mobile, Ala.:  
   1 part-time physician  
   3 full-time nurses

7) Wheeling, W.Va.:  
   1 part-time physician  
   11 full-time nurses

C. Cities of less than 100,000 population

1) Lincoln, Neb.:  
   1 physician full-time  
   2 nurses full-time  
   1 dentist full-time  
   2 dentists part-time  
   2 dental nurses full-time

D. Cities of 100,000 population and over

1) Worcester, Mass.:  
   1 full-time director
2) Oklahoma City, Ok.; 25 nurses under Board of Health

1 full-time doctor
1 part-time nurse
5 full-time nurses

3) Baltimore, Md.; 1 Supervisor of Health Educa.
17 teachers of Physical Edu-
cation teaching hygiene part-time.
2 classroom teachers teaching full-time on hygiene.
142 nurses from Board of Health.

4) Lynn, Mass.; 5 part-time school physicians under Board of Health.
5 nurses full-time to schools.

5) Washington, D.C.; 2 directors of physical Edu-
cation (one for white, one for colored)
58 white nurses
28 colored nurses
with health education teachers.

6) Dallas, Texas.; 4 nurses.

E. For cities over 1,000,000 population

1) New York City; 100 medical inspectors to Board of Health.
265 nurses full-time to Board of Health.
900 workers in health (as teachers are first line de-

2) Chicago, Ill.; 60 Field workers health offi-
cers.
60 School health officers
120 field nurses.

dence of the schools)

The size must depend upon the economic and sociological con-
ditions of the community, and upon the laws of the respective states
regarding the number of personnel sufficient to carry on the needs of
the people and those of the children.

But we must clear up one point. The evidence existing here in
this survey and in the health records of the nation show that if the system in any community is to be successfully carried out the workers in that system should be full-time workers.¹

This will cut the personnel in some places, but it will cut down communicable diseases (2) and will make the system far more able to cope with each problem as it comes up. It ought to lead to active research and aid the unhealthy to stand firmer on their feet. The proof of the above statements is not wanting. There is plenty of evidence; witness the work of Dr. Lewis at Providence, R.I., in these days, or Dr. Sven Lokrantz³ at Los Angeles, Cal., and the work of Dr. Louis R. Burnett at Baltimore, Md. These men with full-time staffs have been able to cut down the ravages of communicable diseases in such a way that their names are known in all circles of thinking school and medical men. The work of Dr. Book makes interesting reading, and can be found in the Medical Record for May 1918. It is unfortunate that the city went back to the old-time system when Dr. Book went to higher fields of endeavor.

There is no better way to make the system produce the best results than having its workers on the job full-time⁴, in and out of school on regulated schedule, making correct recordings and keeping adequate records, visiting the homes and teachers of the children, and really making the large amount of money spent worth while in its return in health values to the over-taxed citizens.

In the small town where the taxes are hard to pay, and where money is scarce, the Board of Health and the School Board can work to-

gether on a system whereby the nurse and the doctor can be paid half by each board, and the time so allotted that each board will get the maximum amount of work and the maximum amount of success.¹

To conclude this point: the worker must be chosen with previous experience; be hired for full-time work on full-time pay as the economic and sociological conditions of the community and country indicate.

Conclusions

The data presented in this problem would indicate that the systems have a director or supervisor of health, one physician either full or part-time and usually three or four full-time nurses dependent upon the size of the community.

The personnel are chosen on standards of experience and training, the general suggestions of the expert mentioned in the beginning of this chapter being carried out.

¹ Mansfield, Mass. is an excellent example.
Problem Tertius

The Problem of the Control of Communicable Diseases. The "Ever-Present" Cycles, Versus the Best Practices on School Control of Them.
The Problem of the Control of Communicable Diseases. The "Ever-Present" Cycles Versus the Best Practices of School Control of Them.

The problem of the control of contagious diseases is a major problem of the director of health, and the personnel of the staff which works daily under his guidance. It is a major problem of the classroom teacher and the parents at home. It is the problem toward which this thesis has been aiming, and one of the two reasons for its being written.

For about one-half of the three million cases of communicable diseases reported annually occur in children. From 50% to 75% of our crippled children owe their condition to infantile paralysis and tuberculosis. These diseases cause about 15% of the childhood deaths.

Blindness, damaged hearts and kidneys are the direct result of the call at the child body of some communicable disease. The economic and sociological problems growing out of the wake of this ravage year after year is enormous, and must be caught and held in check by the workers in the field of health. "One cannot make the statement that these diseases are the most rampant in the public schools, but one does know that these diseases reach their total strength during the age periods of six to twelve years, and that the effects upon the community is from September to May." Can there be anything more logically laid at the door of the school? Does not the school congregate children of the ages of six to twelve from September to May? Of course the school does these things, but it does not wilfully spread the diseases; in fact it tries to stop the spread. School after school under the mandatory laws of the state in

2. White House Conference School Health Program Century Co. 1930. p. 86
3. Prof. Herbert Blair, Bu U. class Lecture 1932.
which they exist, have medical inspection; for medical inspection was first introduced into this nation and other nations in order that such ravages might be at least cut down.¹

Doctor and nurse, parent and teacher have each tried to defeat the toll that disease makes upon the school child each year. Yet it seems that every fall, winter and spring the cycle of disease comes up anew and gathers new and more victims in its path.² The causes for the diseases are variable, as Dr. Harold Stuart took the time to point out in a long letter.³ They may be traced to such things as impure water or milk, or be transmitted by the hands of the children, or gotten off the doorknobs or pencils. But be all this as it may, we do know that the congregated school and school building is one place, and probably the major place, where the school age child gets disease.

In getting a disease in a school room, the child becomes a problem at home. If the law requires that he be barred from public and private appearances by quarantine, the whole family suffers not only social troubles, but economic worries and perhaps bills for hospitalization, with the constant fear that some life-long ailment may be the result if complications should set in.

The teacher, too, is worried about the child, not only because of the fact that the child caught the disease in her room, but also in that he may have passed it on to other pupils in the class room. This would result in added duties due to attempts at control by the nurse and doctor. But this is not her chief worry. Her chief worry is the real-

1. See table 1 problem 1 p.25.
2. Ethel Perrin, letter received in 1932: American Child Health Assn.
3. Dr. Harold Stuart, Harvard College Medical School, 1932.
ization that she has one or more pupils who is behind in their work—work that will have to be made up after school, or rushed through in order that the child will not be retarded in his school program. The holding back of a child for a whole year and placing him in a group of children in whose presence he feels inferior due to the differences in age does not make for healthful surroundings in the classroom as regards discipline and social adjustment. In the long run the absence of the child from the classroom work means not only retardation for himself, but retardation for the entire group.

The child has the biggest loss because he got a disease without knowing it. It came and he suffered for it. He becomes a home problem; he becomes school problem, and if the disease leaves him with heart, kidney and other organic troubles he is marked for the rest of his life. He may have fared worse than this and been left with infantile paralysis and made a cripple, or left blind. These cases make him a public charge. The state has to pay his way for the rest of his life in recompense for some disease that he caught as a child in a state-controlled and operated institution. The cycle of disease in the public school may be a cycle of death for the pupil or the victim. Either living death or ending death; the cycle of disease in the public school is more than a cycle of death, it is a cycle of increasing costs for the state, for in the end the state pays, when it could afford to eliminate the cost before disease gets under way.

The ways and means—the attempts—the desires—the dreams of the state in this fight have been caught in a very small way in the answers

turned in on the third question of the survey. Thirty-four cities answered the question, four were blank. The results are as follows:

Burlington, Vt. -- "Quarantine and exclusion from schools."

Worcester, Mass.-- "2 Epidemiologists in charge, available for consultation. Follow up and close supervision by nurses of the health department."

Roanoke, Va. ---- 'Under the supervision of the health department.'

Oklahoma City, Ok. "City quarantine or institution. Exclusion from school until released."

Mobile, Ala. ---- "Active cases are barred from school during the active period."

New York City ---- "All suspected cases are referred to the doctor by the principal, whose observation is confirmed by the doctors or the nurses. The Board of Health supervises and revisits and reinstates all cases of communicable disease."

Jackson, Mich. ---- "By quarantine."

Ithaca, N.Y. ---- "Vaccination for smallpox mandatory. All pupils are excluded on suspicion of the principal, and all pupils who have been absent due either to their own sickness or someone in the family are reinstated by school doctor." "Parents have pamphlet information from school on contagious diseases."

Binghampton, N.Y.- "Teachers conduct daily inspection. Suspicious cases reported to the nurse. Vaccination for smallpox, and anti-toxin for diphtheria."


Macon, Ga. ----- "By exclusion from schools, and quarantine."

Nashville, Tenn.-- "Health administered by health department."

Wheeling, W.Va. -- "Treatment and withdrawal from school."

Charleston, S.C.-- "By school medical inspectors and nurses cooperating with the city health department."
East Orange, N.J. "Very close tie-up with the city health officer who makes daily report of cases and contacts,—usual methods of quarantine, etc."

Syracuse, N.Y. --- "The program for the control of communicable diseases includes; (1) daily inspection by the teacher. (2) Examination by the doctor of the suspicious cases found by the teacher. (3) Exclusion for the suspicious cases from the classroom. Admittance by doctor. (4) Immunization and vaccination. Absentee record reduced one-third over period of years due to this system."

Washington, D.C. --- "Through the District of Columbia Health officer, medical supervisor. Service of medical inspector and the school nurses."

Phoenix, Ariz. --- "Quarantine by the city Board of Health."

Chicago, Ill. --- "(a) Preliminary examination of all pupils on opening of school in September, and after Christmas vacation. (b) Preliminary examination of the classroom following major cases of contagion for the incubation period of the disease. Culturing after diphtheria. (c) Daily visits to each school for inspection of children suffering from communicable diseases and those returning from absences. Administration of toxin-antitoxin where permission can be obtained. Vaccination against small-pox, when consent can be obtained."

Mansfield, Mass. --- "State laws and Board of Health rules. Daily inspection by the teachers and the nurse. School physician called in when the superintendent thinks the situation is serious enough, to aid in making the daily inspection with the school nurse."

Portland, Me. ---- "Aid of the city Board of Health."

Lynn, Mass. ----- "Cooperation of the activities of School and Board of Health."

Portsmouth, N.H. --- "(a) By requiring pupils entering the school for the first time, and from other cities, to be examined by the nurse before issuing an admission certificate. (b) By requiring pupils absent, due to serious illness or any communicable disease, to be certified by the school nurse before readmission."

Baltimore, Md. ---- "The Board of Health furnishes the doctor, dentists and the nurses who have varying assignments at all
the respective schools. They make the diagnosis and follow-up the case."

Utica, N.Y. ---- "The medical inspection is made upon the child's entrance to the school system. This examination is repeated every third year. The Utica clinic takes care of the defects if the parent cannot pay."

Schenectady, N.Y.- "Classroom inspection by the nurse each day. Vaccination of all the smaller children. Exclusion of the diseased by the school physician and readmitted by the same office."

Newton, Mass. ---- "The communicable disease work is under the control of the city Board of Health. All physicians, or parents, are required to report communicable diseases within twenty-four hours. The usual standards of exclusion and readmission hold true here, as in the country generally.

The Board of Health mails to the school attendance department a daily list of all children reported as having communicable diseases. These reports are promptly mailed to the various school principals. When there are repeated cases of contagious diseases in one school the school is inspected daily by the school doctor."

Los Angeles, Cal.- "One of the greatest aids to the control on communicable diseases has come from the teacher in excluding the cases of extreme colds, and giving other teaching in the cleanliness of the body. Isolation and immunization with vaccination are the best ways that we find to cut down the ravages of the diseases."

Boston, Mass. ---- "The daily inspection by the nurse, with the cooperation of the teacher, plus the desire of both health divisions of the city seems to be the way that we keep down the health cycles. As yet I have nothing that would be at all objective on this—and I doubt if you will find anything in your survey that will be at all objective. Nevertheless the general laws in cooperation of agencies should succeed where competent workers are engaged."

Fitchburg, Mass.-- "Examination by doctor for eye and ear once a year. Doctors and nurses of the board called in when there is suspicion."

Rochester, N.Y.-- "Daily inspection by the teacher for suspicious cases. Exclusion by the district doctor with follow up by the nurse. Vaccination for small children. Some immunization."
Kenosha, Wis. --- "The work in this field is done by routine inspection each month by the public nurse, and weighing by the teachers."

Elmira, N.Y. ----- "The teacher watches for suspicious cases and reports to the principal, who in turn notifies the nurse who may exclude. The doctor readmits the children. Vaccination and immunization recommended."

Jamestown, N.Y. --- "We are proud of the cooperation of our two systems. The Board of Health each morning furnishes the names of the children that have contagious diseases to the school physician, who in turn gives the names of the immunized children. All sore throats are cultured, and children with running noses are excluded from school and cannot be readmitted without the written report of the school physician. Vaccination is not popular in this city due to religious objections."

It will be noted here that most of the systems follow the laws of their various states as regards the vaccination problem, while in New York State, where the vaccination law is made according to the population of cities\(^1\), the cities that do not have it for that reason under mandatory force, do recommend to its citizens that such procedure should be taken for the best health of the beginning child.

Not only the fact that it is of discomfort to the victim, but the fact that it disturbs the classroom are the two main reasons why the child with a disease should be excluded until he has successfully gotten over the disease. Also the fact that a running nose or sore throat, that so commonly are a part of a cold, may be symptoms of a contagious disease such as measles, etc.

Sanford \(^2\) and Mason found that in a private school respiratory infections are the most common cause of school absences; that contagious disease form the other really significant cause for poor health.

attendance. While in the public school the infectious contagious skin was given for one of the causes of absences.

"In New York City at a meeting May, 1925, of the 'School Physicians' (an association of representatives from such schools as Horace Mann, Riverdale Country, Lawrenceville, St. Paul's of Concord, N. H., and the Lincoln School) it was shown by Dr. Haven Emerson from statistics supplied by members of the association, that the respiratory infection causes from 35% to 100% of the average day school attendance. 1

With such data at hand, the director of health and his staff can not seemingly fail to realize that contagious disease control involves: (1) The expulsion of suspicious cases (2) Careful readmittance program and procedure. With the cooperation of the home with the school in seeing that the child is healthy before coming to the school building, where it is examined each morning and noon-time (if the child makes out-side school contacts at meal time during the school hours).

The control of disease involves more than the principles above mentioned by Wood and Rowell. It involves the cooperation of the home and the school with the home. The school must educate the home by sending out from time to time data as regards health, and the ways that the home can healthily help the school. Such information might be as follows.

For Parents

Indication of health disorders for which parents should keep children at home and notify the school as once.

Nausea
Vomiting
Chills or convulsions (fits)
Dizziness, faintness, weakness in color
Eruption of the skin

1. Wood and Rowell p. 31.
Every person fit to be a parent should at least make known to himself the health rules of the school to which his child is in attendance. When his child is sent home for some reason he should cooperate with the school in finding out the reason, and then carry out the suggestions of the medical authority in keeping the child in the house or away from the children of the neighborhood. If he fails to cooperate, the school staff can do little in curbing the diseases and making the school safe for normal procedures. The weight on the parent is two-fold; to educate and to cooperate, and to pay the bills. Will he but cooperate, the bills will be smaller, and vice versa.

The parent is not the only person that must cooperate with the staff, for perhaps in the long run the parent can stand aside and watch the procedure if the teachers in the various classrooms will at least show favorable attitudes towards the attempts to cut down in the number of cases of contagious diseases.

The function of every classroom teacher is to make the morning inspection. This must take place before the child is allowed to take his classroom exercises. The teacher should make a superficial examination of hands, skin, eyes, ears, and nose, and return the child immediately to the nurse who can do the diagnosing. (In the larger systems nurses could be hired to do this, but the teacher has to do it in

2. New York City procedure.
almost every school).

New York City gives its teachers the following card to aid in
them in the morning inspection:

Daily Morning Inspection

I. Class inspection (sweaters and rubbers should not be worn) Make a rapid survey in the front of the room for:
   Symptoms of Illness (see course of study and syllabus on Hygiene)
   Not cleanliness and order or blouse, tie, collar, dress
   hair ribbon and hair.
2. Handkerchiefs.
   Children raise right hand with handkerchief in palm.
   Note presence of and cleanliness of.
3. Shoes.
   Children's body toward windows with their feet in aisles. Note condition of shoes and stockings.
4. Teeth.
   Note number who used toothbrush before school of night before.

II. Individual inspection.
   Sleeves rolled up.
   Hygiene position with the head backward and the face toward the light. One hand straight out, the other
   back of the head and smile. When children are in such a position the teacher makes a close inspection for symptoms of illness and clean clothes.
   Once a week the whole class will file by the teacher while she looks at their scalps.

(similar blanks can be procurred in the reports or records of almost every up-to-date school system in the country. This one was used merely to give a good reference.)

Such teacher advice should come from courses taken in her training schools.¹ The teacher who has not had such training should have access to state programs such as are used in Massachusetts, or the type of courses at New Bedford, Mass., and Providence, R.I.

¹. Such as Massachusetts Health Education Programs taught in teacher colleges and Boston University.
The teacher should be the one to make the normal daily inspection for the reason that she is in the administrative position in the classroom and can allot the time necessary for the inspection. Then, too, she is in a better position, through daily contact with the pupils, to know when they are normal and when they are sub-normal, she can quickly tell any symptoms.  

The morning health inspection seems to the most used system in the prevention of disease from the teachers and pupils point of view. The reasons for this are as follows:

(1) It can be done in two to five minutes.
(2) The daily program is yet to begin so the child can be sent home before he makes any contacts.
(3) The child and the teacher are both in their best health condition after a good night's sleep; defects would then be more readily noticed.
(4) It comes early in the morning which allows the suspicious child's case to be taken of before many hours have elapsed.
(5) It soon becomes the accepted routine with the children. Starts the day with the thought of the healthy body and the healthy mind.

The objections to the morning inspection are:
(1) "A layman should never diagnose." This is a very correct attitude. The teacher is not trained to diagnose. She can only send the pupil with the suspicious health signs to the doctor or nurse.

(2) "The teacher's time is taken from the classwork." If she does not take this time from the work, then the entire class might get some disease, or she herself be taken sick and the whole class lose. Again, some disease might force the closing of her room altogether. Educationally this time is well spent.

(3) "It endangers the teacher." Such a statement is weak-kneed and thoughtless. The teacher has no need to touch the body of the child, nor has she got to breathe in its disease. The classroom at all times is in danger if the teacher does not give an examination on the health of the children that first thing after the class assembles. A clean bill of health is a clean class fit for study and mental work. A coated bill of health makes for poor

1. White House Conference. School Health Program p. 87.
classroom work and constant fear.

(4) "Inspection is uninspiring." Inspiring is the fault of the teacher. If she cannot see the value of health remove her and have someone else who does, and in seeing the value of health inspire her children to happier lives and greater life.

(5) "The teacher does not have the adequate training." The teacher can be trained in this field. She must be. The school need not hire the teacher today who has not health training.

(6) "The teacher handles the child." This is the chief rebuke of the parent. The teacher, as pointed out, need not handle the child, and what's more has no legal right to do so. But on the other hand, if this objection were allowed to carry its full weight, most of the work in the public and private schools would cease. The parents must be educated by home literature.

The teacher, then, is the cog upon which our system revolves. She must be trained, at least superficially, in the field of hygiene, and be cooperative with the staff and the home.

The pupil for whom all this elaborate program is made, and for whom millions of minds spend hours in thought and work in research fields and in the classroom, will automatically become accustomed to the routine of the system as soon as the teacher in his room and the principal in the school inspire him to the need of clean living at home and in the classroom. The name given to such courses is called "Health Education" or "Hygiene". Such training will educate him and his home to cut down on communicable diseases.

For this program of inspection and the work by the staff cannot be a success unless the groundwork is carefully laid by the teacher in the mind of the child, so that the child can take it back into his home life and his play life. For it is in these places that he usually
finds disease, or where he can spread it; these places where the searching eye of the teacher, or the quick, alert mind of the nurse cannot see him or guide his actions, where he himself is responsible for his attitudes and the things which happen to his mind and body.

If the training in the school has been earnest by the teacher, and the home has caught the gleam of the thought behind the action of the school, then he will be safe, and disease cycles will be cut down.

"With successful shewing-away, the day may dawn whereby disease will be no more."

Our cities, in their reports, have shown that disease control in their respective parts of the nation is taken care of by the staff of nurse and teachers in daily inspection. This is overwhelmingly in evidence. The cooperation of staffs of the city is also noted and this is as it should be for an adequate system of control.

The constant visitation of the doctor to each school once a day, with a nurse on hand at the morning inspection with the critical teacher inspecting, will lay disease cycles a great deal. Objective proof can be found in comparing the various records of a series of years in these various named systems. There are data enough. For this thesis we have only looked to see what was being done, to see how the problem was being met—thus we found law—vaccination and immunization, and found finely working machines busy keeping the American School child healthy.

The situation points to expert service. We have had it for a long time, and we have successfully cut out many plagues of the schools. But it would seem that we have not introduced only pre-school clinics

into our systems since the early 1920's, except for health education to a fuller degree. Perhaps health education will be the further salvation of the lives of little children from destitute lives of suffering and pain. It will aim at least to yield to them the reason for our system of inspection, vaccination, immunization, expulsion and quarantine. Teach them that these are aids to their lives rather than a hindrance.

Superintendent after superintendent states that he feels that contagious diseases will always remain. Doctors and nurses state that health education can only educate, but the doctors tell the writer that if the things which they now have as tools were more promptly recognized by school people, and administered better by them—then one of the serious problems of school health administration would be largely solved. If this is true, then, shall we not link the education of the teacher, parent, child and home together and add them to the now working systems?—in doing this save more lives than if we tried to work the two ideas separately? For the fuller control of these diseases then we must start in the classroom rather than in the doctor's office, then branch at once into the doctor's office when anything at all is found wrong with the child, or the teacher.

It would seem that this has been the fault of the past that we have not recognized the fact that all plans have some value, and that two or three plans incorporated with the best ideals of the group will work better than one alone. Too long has one plan fought the other, failing to realize that the child's life is more important and more valuable than the plan.

More and more, in order to solve this problem, we must stren-
gthen the administration which in turn will link the good points of the classroom discussion and education and the skilled work of the members of the staffs. The sooner this is done—the better off the child will be—the sooner will contagious disease be cut down, if not out of our school life.

The span of history is long. Time is forever changing, for change is one of the first laws of life. Our change, as mentioned here, may not come as the earthquake in the night, but it must come. Perhaps not in the generation of this hour. We shall never lose the gleam that will come through the cooperation of the members of both professions and the home,—to bring with its coming a fairer day with more peace and happiness, with less pain and strife—with less taxes for state aid to our "Untouchables".
The Problem of Practical Use of Health Supervision. — A study of Nation-wide Practice as Regards medical examinations for children entering industry.
This problem is the fourth of our problems that confront the administration of the American School systems. It is also naturally following such discussions as personnel and contagious disease, because the personnel must give the health service; and the contagious disease problem well handled, will aid the administrator in the control of the problem.

The first paragraph may not indicate the seriousness of this problem for in this particular division of the thesis, it will mean the problem of the health service to the child who is to leave school and go to work as soon as the law allows him to, also the relation to the school graduate in furnishing his employer the adequate records of the child's health throughout his whole school career. The employer has access to the mental record--the report cards and the intelligence tests if he so desires. Why, then, should not the school also be able to furnish him with the child's health record?

Not only this point of the problem but another will be brought out in this discussion. The relation and responsibility of the school health records to the requirements of the laws of the various states that the child entering industry shall have a physical examination. And in the absence of such school records how well done is the examination?

The general practice in the case of the child of the controlled ages who plans to enter industry, is for the individual child to re-
quest a certificate from the school to which he has been in attendance. Also to request from his employer the description of the job and the hours of employment. In the majority of states, the child must have reached a certain specific grade in school and be a certain specific age before he can request either a certificate or the other forms. If the child has not reached the prescribed age in school, he must get from the authorities in charge a statement that due to lack of mental capacities and abilities, he cannot fulfill the prescribed age requirements.

The law requires that the health records shall be presented as evidence of physical fitness. But in spite of the fact that public schools generally have cumulative health reports for each child, no state as yet requires that such records, or copies thereof, be brought to the certificating office.¹ Herein lies the weakness on the present scale of plans.² The only requirements that can be found are that a medical officer shall examine the child. Out of the forty-eight states in the Union, fourteen of these states have no such provisions and seven make it mandatory on the option of the examining officer.³

The minimum standards set up by the Federal committees on Physical standards for children in 1926 are as follows:⁴

a. Certificate should be refused to children who do not come up to the following standards of height and weight for the specific age, which are based on reliable experience and present-day practice. (Since at present, the children under 16 may be legally employed in a considerable number of states, minimum standards of height and weight are furnished for children 14 and 15, as well as 16 years of age).

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>80 lbs</td>
<td>58 inches</td>
</tr>
<tr>
<td>15</td>
<td>85 lbs</td>
<td>58 inches</td>
</tr>
<tr>
<td>16</td>
<td>90 lbs</td>
<td>59 inches</td>
</tr>
</tbody>
</table>

¹ Majority of states, see chart
² U.S. Dep't of Labor--Children's Bureau.
³ Child Labor--H.C. Rowell, p. 12 National Child Labor Committee
In exceptional cases, where child falls below the this standard, if two doctors agree that this is due to family or racial characteristics, and that he is free from other defects, he may be issued a certificate.

b. Certificates should be refused to all children who have no unmistakable signs of puberty.

2. Standards of sound health and physical fitness for employment.

a. Certificates should be refused to all children who have the following defects:

1) Cardia disease with broken compensation.
2) Pulmonary tuberculosis or other evidence of pulmonary defects.
3) Active glandular tuberculosis, defects.
4) Active tuberculosis, or syphilitic disease of the joints of the bones.
5) Total blindness (unless some further educational facilities can be provided for the child).
6) Total deafness (same provision as for blind).
7) Trachoma
8) Chorea
9) Syphilides
10) Hyperthyroidism
11) Acute or subacute nephritis
12) Hookworm.

All children who are refused employment certificates because of the physical defects noted under "a" should be referred to some appropriate person or agency for whatever medical assistance they need.

b. Certificates should be refused to all children pending correction of all serious diseases or defects such as:

1) Defective eye subject to correction by glasses.
2) Contagious eye and skin diseases.
3) Defective teeth: extraction or care.
4) Malnutrition.
5) Untreated inguinal or femoral hernia.
6) Diseased tonsils.
7) Defective nasal breathing.
8) Defective ears not under treatment.
9) Orthopedic defects not under treatment.
10) Intestinal defects other than hookworm not under treat-

All children who are temporarily refused employment certificates because of the existence of the physical defects outlined here under "b" should be referred to the care of a public medical officer, school doctor or the family physician; or the school nurse if neither of the above can cooperate. As soon as the defect or treatment has been improved or completed the child should be allowed his employment certificate.
c. Provisional certificates for the period of three months may be issued on the recommendation of the medical examiner under the following conditions:

1) Where treatment has been started but not completed in such cases as:
   (a) defective teeth.
   (b) Malnutrition
   (c) Orthopedica
   (d) Defective nasal breathing
   (e) Discharging ear
   (f) Intestinal parasites other than hookworm

2) Partial blindness
3) Partial deafness
4) Other defects that are not under either "a" or "b" that the medical examiner thinks are necessary.

The various state standards follow the above outline almost to the letter,¹ and the school systems that are doing the work use the same style sheet. Private organizations like the National Child Labor, The Cardiac Vocational Guidance Service, and the American Child Health Association recommend the use of the above.

The Federal report goes on to give the following points that should be covered in any physical examination. They are as follows:

1. Items for inquiry:

   a. Information with reference to the following items should be recorded upon the examination record blank by the issuing officer or his clerk before the child is sent to the physician for examination:

   1) Age
   2) Sex
   3) Color
   4) Nationality of Father
   5) Nationality of mother
   6) Intended employer
   7) Industry
   8) Occupation
   9) Grade completed
   10) Previous industrial history

   b. The examining physician should enquire into and record the condition found with reference to the following

   1. see New York and Massachusetts standards.
items:

1) Significant family history (medical)
2) Previous illnesses.
   a) Scarlet fever
   b) Diphtheria
   c) Infantile paralysis
   d) Asthma
   e) Bronchitis
   f) Pneumonia
   g) Pleurisy with effusion
   h) Chorea
   i) Epilepsy
   j) Rheumatism
   k) Frequent sore throats
   l) Operations
   m) Hospital and dispensary care.

3) Physical examination.
   a) General physical condition--
      Height in inches and fractions
      Weight in pounds and fractions
      Nutritution
      Anemia
      Evidence of Puberty
      Menes (sr. abnormalities)
   b) Skin--
      Parasitic diseases
      Other diseases
   c) Eyes--
      Vision
      Diseases
   d) Ears--
      Hearing
      Diseases
   e) Mouth--
      Dental care
      Gingivitis
   f) Nasopharynx--
      Nasal obstruction
      Tonsils--enlarge--diseased.
   g) Glands--
      Enlarged
      Infected
   h) Thyroid--
      Goiter--simple--exophlamic
   i) Chest--
      Deformities
j) Heart—
   Apex—interspace
   Sounds
   Murmurs
   Pulse rate
   Heart disease
   Pulse rate

k) Lungs—
   Abnormal breathing
   Abnormal dullness
   Rales
   Respiratory diseases

l) Abdomen—
   Hernia—truss—operation
   Intestinal parasites.

m) Orthopedic defects—

n) Nervous system—
   Chorea
   Other Abnormalities

o) Kidneys—
   Disease
   Diabetes

The fourth question of the survey asked whether the health records of each child were kept, and if the advisors and the like had access to them. The question was purposely left vague just to see what type of answers would be returned. Another letter survey had been made last year—the materials of which will be considered in the next step. The results of the fourth question are as follows:

Pasadena, Cal.;--- "The child's record is part of the permanent record. It goes with him, and is always available. It is used in any cases in which a question arises."

Burlington, Vt.;— "Yes".

Worcester, Mass.;— "Health records for the school pupils kept with school records, with all reports made in duplicate and a copy sent to the superintendent."

Roanoke, Va.; ---- "Physical education teachers have access to individual health records kept in the schools."
Oklahoma City, Okla.; "The records are available. The child's health record on the scholastic permanent record kept by the teacher."

Mobile, Ala.; "Yes. The records are kept and used by the teachers in every case where they may be helpful. Publicity is taboo."

New York City; "Records are kept by the Board of Health. The individual and the schools are notified accordingly."

Jackson, Mich.; "Yes, very small."

Lincoln, Neb.; "Yes. Constant use."

Wheeling, W. Va.; "Yes. Impossible to give percentage."

Charleston, S.C.; "Yes, Through the principal's office."

East Orange, N. J.; "Teachers have the records and they are responsible for the use of them. Regarded as necessary for the successful work of the teacher."

Washington, D.C.; "Yes. No figures on file."

Chicago, Ill.; "Yes, to the extent that they are kept in the schools."

Mansfield, Mass.; "Yes."

Portland, Me.; "Yes."

Lynn, Mass.; "Records kept."

Portsmouth, N. H.; "Yes. 10\%.

Baltimore, Md.; "Records of each child, mental, medical are kept in the school and follow him from grade to grade. Cases are referred to the doctors for special attention are known to the teacher, principal, and nurse. 100\% use."

The answers on this point are practically of no value. They indicate that records are kept. Some cities took the trouble to send forms. In general they are all poorly constructed. If they are kept they have no record of their use. Most of them "think" they are used.
But on the whole, nothing of constructive value was found in this manner of questioning. Not one of them made any record of the fact that such records were being used to aid the better understanding of the child who was applying for his working certificate.

In the spring and fall of 1932, questionnaires were sent to the issuing officers, or the officers of vocational guidance, in the following cities:

- Washington, D.C.
- Chicago, Ill.
- Cincinnati, Ohio
- Mansfield, Ohio
- Los Angeles, Cal.
- Lynchburg, Va.
- Milwaukee, Wis.
- Baltimore, Md.
- New York City
- Dallas, Texas
- Boston, Mass.
- Providence, R.I.
- Oakland, Cal.

Of the above group only two cities, Lynchburg, Va., and Mansfield, Ohio, reported that they had no organized system by which they took care of the children and used their health records before giving an examination prior to a working certificate. Boston, Providence, Milwaukee, and Cincinnati sent full copies of their programs. Those that sent evidence had fulfilled all suggestions of the Federal Government bulletin, and Milwaukee included remarks on attitudes and emotional reacting.

The writer's data tends to show that the larger type city, no matter where it is located, seems to have the system of health record and use for the working child well in hand. We shall now look at a survey made by The National Tuberculosis Association in 1930, and made under the personal direction of Dr. Viola Anderson and Marion Nelson, both officers in that organization. The survey is as follows:

"This study was undertaken for the purpose of determining the

1. see charts 3, 4, 5;
efficacy of the physical examination of children entering industry.
There is some legal provision for determining the child's physical a-

tility to go to work in 33 states. The District of Columbia and 25
states (two with certain exemptions) have made an examination by a phys-
ician mandatory before a regular employment certificate may be issued
to a child.

Scope

Eleven cities in eight states, and the District of Columbia,
were selected for study. They were Yonkers, Utica and Binghamton, in
New York State; Cincinnati, Ohio; Chicago, Ill.; Milwaukee, Wis.; Dur-
ham, N.C.; Lynchburg, Va.; and the District of Columbia.

These places were selected for the following reasons: (1) be-
cause they are in the concentrated population area of employment of
children whose occupaions fall under the jurisdiction of the Federal
and state child labor laws; (2) because they are striking in the way
that they administer the mandatory laws, or in some one provision of
the law.

In making the study, the six months period from July to Dec-
ember of the year 1929 was decided upon. Accordingly all figures, ex-
cept where noted, are from this period only.

Standards

The efficacy of the physical examinations depend upon certain

elements in any set-up: (1) the thoroughness of the examination; (2) ac-
tion upon the findings it reveals; (3) Provisions for and the frequency
of re-examinations; (4) action upon the subsequent findings; (5) The
facilities for an interpretation of the relation of the child found to
be physically handicapped not totally disabled, and a job suitable to his
condition.

Standards of procedure for these elements of the work of cer-
tification which are directly related to the physical examination may
be outlined as follows:

(1) The initial examination. This would involve the use of
minimum standards of physical fitness and the use of the
uniform record card. With use of previous records.

(2) Action upon the followings and findings of the examina-
tion. Application of the Minimum standards of physical
fitness as the determining factor, temporary approval, or
permanent disapproval.

(3) Provision for re-examination. This involves a follow-up
of those cases passed on provisionally pending the cor-
rection of remedial defects. For other cases a yearly
examination should be the requirement.
(4) Action upon subsequent findings. Insistence upon the correction of remedial defects. For other cases a provision for assistance.

(5) Relation of the child to his job. This involves a knowledge of the local industries and conditions by the physician, and definite knowledge of the job which the child intends to take, as furnished upon the prospective employer's card. In cases where there is some physical handicap, particular attention should be paid to the kind of employment, and every attempt made to keep the child from entering any employment which would tend to aggravate the situation.

There are two recognized standards available upon which an evaluation of these physical examinations may be based; "Physical Standards for Working Children", pub. no. 79 of the Children's Bur. of the United States Department of Labor, and the section on school hygiene as set forth in the "Appraisal Form for City Work (health)" of the American Public Health Association.

Findings

The physical examinations for the most part are poorly done. This is not due to a mediocre personnel or to the lack of equipment or machinery, but rather to a desultory interest in the proceedings. The impression carried away and borne out by the tabulated data is that the average physical examination is hastily made—simply a going through of the motions required by law, and for which the remuneration is not unattractive.

Only one physician gave an examination measuring up to the Children's Bureau standards. The chest examinations are generally sketchy, and it is not the prevailing custom to strip the child to the waist. Ordinarily the examination consists in dropping the stethoscope down inside the girl's dress, or the boy's unbuttoned blouse, to the mitral area of the heart, and placing it over the right and left apices anteriorly just long enough to catch an inspiration and expiration. Only five physicians made thorough auscultatory chest examinations. Percussion is rarely used.

Height and Weight were seen to be recorded in all but one city. The technique used in uniformly the accepted one.

In all but two cities the snekken chart was observed as being used in the vision test, with as much care as prevails in a school medical examination? But is this test alone a fair test?

In all but two cities the throat examinations as that of the nose seemed adequate.

An accurate test of the hearing was being made at the time of
the examination in one city. In one other city the examining physician refers the audiometer test records made by him on every school child within the year.

No physical examination was made in one city in spite of the fact that the health officer is of recognized ability and accomplishment, and apparently has ample personnel. Here a public nurse in the office of the health department weighs and measures the applicants to determine age as indicated by age standards in relation to height and weight as printed on the physical record card.

In one city there is no appointed health officer to make the physical examinations for work permits. Applicants are solely obliged to bring to the issuing officer the certificate of health signed by any physician. A few of the applicants have been examined at the outpatient department of the local hospitals.

In two cities the examining physicians are the same one that give the examinations for the continuation schools. This saves time—makes for follow up work and observation.

A total of thirteen physicians were seen at work, of whom four were women. All were said to be in good standing professionally. The oldest graduate had received his degree in 1895, and the youngest in 1925. Four were graduated from schools now merged or out of existence. The average since graduation was twenty-seven and one-half years. The others come from medical schools of accepted standing. Four specialized in pediatrics, two in public health, one in tuberculosis, one in anesthesia, and one in dermatology. The remaining four were in general practice.

The average pay is $3.20 an hour, and the average time employed a month is sixty hours. The two physicians in Chicago are the only one putting in full-time work, although the physicians at New Bedford is a full-time medical inspector (chief) in the schools, and the physician in Cincinnati a full-time medical inspector.

Full advantage is not being taken of personal history, and a good physical examination did not necessarily go hand in hand with a complete personal history. The taking of personal history was observed as being customary in half of the cities. Where the history was not obtained by the physician it is likely to be parrot-talk. Frequently the applicant is asked only about his own health. It is doubtful if the average applicant understands the meaning of the word "tuberculosis" as it is used on the conventional sense. Yet no person has made any explanation on any card in this study.

School records were referred to by examiners in five cities—less than half. The procedure seems to depend upon two things, the location of the cards or the frequency of the examinations by the staff. In some cases the child brings all records and in others they are on file.
Summary

1) The physical examinations for the most part are poorly done.
2) Inadequate personal history taking.
3) Lack of standard of minimum essentials.
4) Detailed knowledge of the industrial conditions not known to the examining physician.
5) Lack of school records from the child's previous work.
6) School Medical inspection and the follow-up program need opportunity to grow.
7) Present follow up lacks backbone.
8) There are hopeful signs for the handicapped child.
9) There must be a reorganization, and stronger control from the office of the superintendent of schools, in order that the children will get the best results from the school medical examinations and inspections program prior to going to work."

Conclusions.

These three investigations (the above, and the two conducted by the author), each pursued in a different manner, seem to show that there is little work being done in the way of health service to the working child when he applies for his physical examination.

It is apparent that there is need for clearer application of the recommendations of the Federal Children's Bureau, if not for a Federal child labor law that will force every state to give these examinations before any child is allowed to leave school and begin earning his living in conditions that may cause the termination of his life a short time after he has taken employment, or that will make him a local charge for the rest of his life.

Not only is it apparent that there must be more careful legis-
lation but that in the absence of such the superintendents of schools, in their respective offices must set about for an immediate revamping of their respective organization of certifications prior to work, as well as the follow-up system for those who have been turned down pending certain remedial changes.

Too long has this been ill done; too long has it been in poor working order. The time has come to change our systems. The following changes are suggested:

a. (1) Adequate scholastic records in the employment office. Up to date with the last semester's report cards.

(2) Adequate filing of these records so that they can be gotten to and removed at a moments notice. Preferably on cards.

(3) Clerks enough to handle such procedure.

b. (1) Records of the family history of each child that has attended school. With the names, records, etc., of fathers and other members employed.

(2) Records of the illnesses that have occurred while the child has been in the school system, personal and family.

c. (1) Records of the physical examinations from the very day that the child entered school. All records of any type by nurse, doctor or teacher.

(2) Records of any participation in school athletic programs.

d. (1) All members of the medical staff to know the laws of the state in which they work—with regard to child health.

(2) All members of the staff shall "Make monthly visits to the places of labor in the town in order to acquaint themselves with information as regards the future environment of the child."1

1. Davis, Jesse B. Lecture on "Health in Vocational Guidance"—1932.
(3) All members of the staff to have had some training in child defects and remedies.

(4) All members of the staff subject to state supervision as to work. No rigid requirements by the state—just simple visitations and consultations.

(5) An adequate follow-up system to be done by the examining physician who examined a given child, to be assisted by the school nurse.

(1) As the whole field of child labor is in the investigation stage it is necessary that the superintendent or his subordinate, who is the director in this work, shall keep an open eye on the advances in this field: keeping at all times a positive attitude of honesty towards the problem.

(2) Direct research.

(3) Plan for correction of defects through the work of his organization in cooperation with the institutions of the city.

(4) Cooperate with the classroom teacher in vocational guidance, and link it all at all times with his work in health and health education.

(5) Always be willing to give his community "pep-talks" on the subject, and keep the problem before them—in good, honest service and in frequent publications.

1. Wood and Rowell: "Health Supervision and Medical Inspection of the Schools." Saunders 1927 p. 29.
Table ( ) showing Classification of States According to Legal Requirements for Physical Examination for regular Employment Certificates.

<table>
<thead>
<tr>
<th>Examination by Physician</th>
<th>Examination by physician</th>
<th>No Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory</td>
<td>Optional</td>
<td>(except for age)</td>
</tr>
</tbody>
</table>

- Alabama
- Arizona
- California
- Connecticut
- District of Columbia
- Delaware
- Georgia
- Illinois (exceptions)
- Iowa
- Kentucky
- Louisiana
- Maryland
- Massachusetts
- Minnesota
- Missouri
- New Hampshire
- New Jersey
- New York
- North Carolina (exceptions)
- Ohio
- Pennsylvania
- Rhode Island
- Tennessee
- Virginia
- West Virginia

- Florida
- Maine
- Michigan
- Nebraska
- New Mexico
- Oklahoma
- Oregon
- Wisconsin

- Arkansas
- Colorado
- Idaho
- Kansas
- Mississippi
- Montana
- Nevada
- North Dakota
- South Dakota
- South Carolina
- Texas (exceptions)
- Utah
- Vermont
- Washington
- Wyoming.
Suggested plan
<table>
<thead>
<tr>
<th>Result of First examination</th>
<th>Number</th>
<th>Per cent</th>
<th>Chicago</th>
<th>Cincinnati</th>
<th>Milwaukee</th>
<th>Yonkers</th>
<th>New Bedford</th>
<th>Washington</th>
<th>Utica</th>
<th>Worcester</th>
<th>Binghamton</th>
<th>Providence</th>
<th>Durham</th>
<th>Lynchburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Children examined</td>
<td>10,900</td>
<td>100.0</td>
<td>3,006</td>
<td>1,846</td>
<td>1,817</td>
<td>745</td>
<td>597</td>
<td>571</td>
<td>534</td>
<td>530</td>
<td>467</td>
<td>411</td>
<td>277</td>
<td>153</td>
</tr>
<tr>
<td>Accepted</td>
<td>5,564</td>
<td>51.0</td>
<td>1,799</td>
<td>118</td>
<td>714</td>
<td>542</td>
<td>509</td>
<td>289</td>
<td>517</td>
<td>530</td>
<td>411</td>
<td>353</td>
<td>277</td>
<td>153</td>
</tr>
<tr>
<td>Limited in TIME</td>
<td>3,678</td>
<td>33.7</td>
<td>1,437</td>
<td>1,664</td>
<td>197</td>
<td>66</td>
<td>282</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 1 month</td>
<td>1,383</td>
<td>12.7</td>
<td>1,363</td>
<td>--</td>
<td>11</td>
<td>9</td>
<td>--</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mo. less than 2</td>
<td>777</td>
<td>7.1</td>
<td>74</td>
<td>383</td>
<td>36</td>
<td>7</td>
<td>278</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2 months and over</td>
<td>1,518</td>
<td>13.9</td>
<td>--</td>
<td>1,301</td>
<td>151</td>
<td>50</td>
<td>4</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>in OCCUPATION</td>
<td>8 (121)*</td>
<td>.1 (1.1)*</td>
<td>--</td>
<td>1 (4)* (100)*</td>
<td>5</td>
<td>--</td>
<td>1</td>
<td>--</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rejected</td>
<td>1,650</td>
<td>15.1</td>
<td>1,209</td>
<td>284</td>
<td>19</td>
<td>1</td>
<td>22</td>
<td>--</td>
<td>2</td>
<td>55</td>
<td>58</td>
<td>--</td>
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</table>

*Also limited in time and included in the number (and Per cent) given above.
<table>
<thead>
<tr>
<th>CITY</th>
<th>Number</th>
<th>Percent Male</th>
<th>Female</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cities</td>
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<td>100.0</td>
<td>6,343</td>
<td>4,557</td>
<td>158</td>
<td>154</td>
<td>2,910</td>
<td>4,466</td>
<td>2,914</td>
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<tr>
<td>Chicago</td>
<td>3,006</td>
<td>27.6</td>
<td>1,998</td>
<td>1,008</td>
<td>92</td>
<td>96</td>
<td>1,166</td>
<td>1,740</td>
<td>296</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>1,840</td>
<td>16.9</td>
<td>904</td>
<td>904</td>
<td>5</td>
<td>160</td>
<td>379</td>
<td>1,000</td>
<td>296</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>1,617</td>
<td>16.7</td>
<td>1,004</td>
<td>613</td>
<td>---</td>
<td>----</td>
<td>106</td>
<td>382</td>
<td>1,329</td>
</tr>
<tr>
<td>Yonkers</td>
<td>745</td>
<td>6.8</td>
<td>426</td>
<td>300</td>
<td>21</td>
<td>25</td>
<td>171</td>
<td>296</td>
<td>230</td>
</tr>
<tr>
<td>New Bedford</td>
<td>597</td>
<td>5.5</td>
<td>310</td>
<td>287</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>258</td>
<td>---</td>
</tr>
<tr>
<td>Washington</td>
<td>571</td>
<td>5.2</td>
<td>468</td>
<td>103</td>
<td>91</td>
<td>75</td>
<td>263</td>
<td>152</td>
<td>258</td>
</tr>
<tr>
<td>Utica</td>
<td>524</td>
<td>4.9</td>
<td>342</td>
<td>166</td>
<td>6</td>
<td>92</td>
<td>280</td>
<td>154</td>
<td>275</td>
</tr>
<tr>
<td>Providence</td>
<td>411</td>
<td>3.6</td>
<td>216</td>
<td>195</td>
<td>1</td>
<td>95</td>
<td>184</td>
<td>411</td>
<td>---</td>
</tr>
<tr>
<td>Durham</td>
<td>227</td>
<td>2.1</td>
<td>151</td>
<td>74</td>
<td>49</td>
<td>26</td>
<td>90</td>
<td>15</td>
<td>64</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>153</td>
<td>1.4</td>
<td>91</td>
<td>29</td>
<td>1</td>
<td>---</td>
<td>---</td>
<td>---</td>
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Table IV

Physical Examinations of Children Entering Industry

Summary Table Showing Distribution of all Children Examined according to Grade Completed.

<table>
<thead>
<tr>
<th>City</th>
<th>All Children Examined</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>High*</th>
<th>Special Ungraded</th>
<th>Other</th>
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</thead>
<tbody>
<tr>
<td>All Cities</td>
<td>10,900</td>
<td>4</td>
<td>17</td>
<td>35</td>
<td>99</td>
<td>220</td>
<td>749</td>
<td>1,479</td>
<td>4,570</td>
<td></td>
<td>3,365</td>
<td>100</td>
<td>261</td>
</tr>
<tr>
<td>Chicago</td>
<td>3,008</td>
<td>44</td>
<td>28</td>
<td>198</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>81</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>1,840</td>
<td>23</td>
<td>79</td>
<td>257</td>
<td>673</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>1,817</td>
<td>9</td>
<td>37</td>
<td>153</td>
<td>909</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Yonkers</td>
<td>745</td>
<td>10</td>
<td>5</td>
<td>85</td>
<td>108</td>
<td>161</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>287</td>
<td>14</td>
</tr>
<tr>
<td>New Bedford</td>
<td>597</td>
<td>2</td>
<td>123</td>
<td>168</td>
<td>136</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>86</td>
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</tr>
<tr>
<td>Washington</td>
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<td>4</td>
<td>18</td>
<td>36</td>
<td>76</td>
<td>135</td>
<td>157</td>
<td></td>
<td></td>
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<tr>
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<td>4</td>
<td>2</td>
<td>71</td>
<td>95</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>127</td>
<td>4</td>
</tr>
<tr>
<td>Worcester</td>
<td>530</td>
<td>4</td>
<td>77</td>
<td>115</td>
<td>190</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>134</td>
<td>10</td>
</tr>
<tr>
<td>Binghamton</td>
<td>467</td>
<td>2</td>
<td>9</td>
<td>61</td>
<td>87</td>
<td>136</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>151</td>
<td>21</td>
</tr>
<tr>
<td>Providence</td>
<td>411</td>
<td>6</td>
<td>10</td>
<td>39</td>
<td>85</td>
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<td>10</td>
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</tr>
<tr>
<td>Lynchburg</td>
<td>153</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>10</td>
<td>27</td>
<td>28</td>
<td>48</td>
<td>5</td>
<td></td>
<td></td>
<td>17</td>
<td>--</td>
</tr>
</tbody>
</table>

*Includes all who reached High School or completed some High School work.
Conclusion
This thesis has attempted to meet the need of a sampling, yet comprehensive study of four major problems of public school administration of health. The study, while not as thorough as one would cover a period of years with visitations to all the cities of the study, does seem to show that it has gleaned some worth-while, though probably not new data, as regards the problem of administration and supervision.

The thesis has assumed that the functions of public school health administration consisted of the eight following points:

(1) To understand the school child thoroughly; and to develop in him the best type of physical and mental health which his abilities would allow.

(2) That it was the duty of the administration to protect the child while he was in the school programs from the ravages of contagious diseases. And if the child had the disease to prevent that child from spreading it to his classmates or to any members of the faculty.

(3) To supply the best type of personnel; trained in the finest schools; with the interests of the child at heart, to see that the above two functions were carried out.

(4) To define the duties of this personnel so that all data regarding the child could be used in any school need. To keep these on file in order that they might be used when the child becomes ready to enter industry.

(5) To cooperate with all the existing agencies of the community: to cooperate with the industry and places of employment in the community so that the staff and teachers may know the conditions under which the pupil will be employed in the future; and so to develop their programs of health to meet this need.

(6) To make the school healthy in every way,—healthy for the mind as well as the body.

(7) To make the child and his home health conscious; and to make the lives of those who are handicapped easier by an assurance of their abilities.

(8) To be honest at all times with the pupil in his examination, follow-up and service; honest with the city to
which they owe their livelihood; and, honesty with their profession, records and service when called upon for public appearances: honest with themselves.

Such a list may at first appear to be too high a standard for those who hold the more pragmatic standard of life. But nevertheless, the results of the investigations show that the country taken as a whole seems to agree with these ideals...........

The general trend of the administration of health programs for the public schools seems to be towards the recognition that all phases of the program have importance and contributions to make to every day education of every child. Therefore, all activities of the program should be under the direction of the Board of Education, with the cooperation of other units of health in the local situations.¹

Some of the larger cities and smaller towns have adopted the idea of allowing the control of the health work to be in the hands of the Board of Health or some other agency. Such an arrangement is fundamentally unsound because health services that are used as a basis of the program of health education in the schools should be administered by the Board of Education. Recent studies of the problem—as well as this thesis—have shown that the trend is away from this dual control idea. This thesis has shown that the major practice is using this single control by the Board of Education,—with the superintendent or his representative in charge of the work.

The health program is fast becoming recognized as being essentially educational, and only the best type of personnel is to be employed. More and more the schools are demanding that the worker in the professional field be of experience in their own fields as well as gradua-

¹. White House Conference Century Co. 1930 "School Health Program."
ates from their respective training institutions. There is some demand that they be taught the certain basic techniques of teaching if they are to have direct contact with the classroom and its procedure from day to day.

The type of organization for the administration is for every community to have the best that it can with economy and convenience. In the larger cities it has been shown that the health work is usually under a separate head or member of the superintendent's office—a director of health. In the smaller systems it has seemed best to coordinate the works of the health programs under the director of Health and Physical Education. This arrangement can only be justified on the basis of convenience and economy, and not on the basis of line of objectives.

The individual who is to direct such a program should have had wide experience in the general fields of public schools administration; with specific training in the work of health administration; be a graduate of medicine. The doctor of medicine seems to be the best type of man to have in such a huge undertaking, but for second choice—which many will have to make—the man with the Ph.D., or Ed.D., who has had training in the essentials of medicine, and is professionally trained in the field of health education, or allied fields, will be found to be nearly as efficient. He must be recognized as a superintendent of schools, either as a deputy or an assistant.

The problem of personnel was found to be varying as the number of cities that were interviewed. Naturally enough, the number on any staff depends upon the needs of the community. Its needs are those of the children rather than the needs of economy.
While in a broader sense every member of the faculty in the school system is working for the best health of the children, a staff in any size community should include at least one full-time doctor, one full-time nurse to every thousand pupils and one part-time dentist. As the size of the community increases and the needs of the community become more diversified, then the staff of doctors will increase, as will that of the nurses. The staff of doctors and nurses, to obtain the best work and honest care of the pupils, must be on a full-time basis with full-time compensation. The reasons are obvious enough—the greatest being the elimination of petty graft and office spoils.

The rest of the long list of types of personnel employed by the various cities is of little value to us in this conclusion, we need only mention the fact that the truly only members of the active staff—not physical education—that should be on full-time pay are the doctors and nurses, with the possible exception of the dentist in the cities where there are no public clinics to which the school children can go.

Physicians and other specialists should be—must be—graduates in medicine, or their special fields, with training in their fields. This was found to be true in every city that reported. The school nurse must be a graduate of a hospital training course, and must have passed the state examinations for the state in which she is employed. Public health training should have/followed while in her training days. These two (doctors and nurses) should rank on the salary schedule with the teachers.

The program with health examinations as the strongest feature has three purposes: to learn the physical condition of the child's body
in order that accurate recoordination and correction may be made so that he may live a fuller, happier life; to detect the communicable diseases in their earlier stages in order that they may be cut down and also cut down the force of the disease in the life of the child, and that they may cut down the spread of it in the classroom and prevent the interruption of daily routine which prevails where contagious diseases are rampant; and to effect a personal knowledge of each child so that all the work of the school day--in the classroom, on the playground, and in the gymnasium floor--may be made personal, and therefore of value to the child.

While the yearly examination is required by law in most states, and was so indicated by all the cities that replied, it is not a desirable mechanism for practical use. In the first place a yearly examination of a superficial nature (five or ten minutes with each child) is not sufficient to gather data as regards the normal health of the child, nor will it aid in the stopping of contagious disease cycles. The examination, as an examination, must be made monthly, with morning inspections by the teachers, and with all suspects being sent to the nurse who will make another examination and report the case to the doctor who will diagnose the case.

The control of communicable disease begins here. In the examinations and daily check-up--whether the check-ups be only once a day or twice a day--depends upon the school day and the program of the entire system.

Our report on the control of the disease work in the cities showed very plainly that the reason for the lack of control laid in the fact that there was too much double checking, not enough examination
work, too much dependence upon quarantine and immunization, with not enough emphasis placed upon the proper administration of the classroom teacher and the nurses, or the cooperation of the classroom teacher with the home. Communicable disease may never be cut down until the personnel and the administrative group become full-time, and give full-time work to a full-time job, and work hand in hand with the classroom teacher and the home.

The problem of aiding the working child at the present time is limited by the schools to the mere haphazard issuance of certificates in a brave and bold-front attitude to fulfill the laws. Economy is one of the reasons for this very bad situation, but the largest and biggest reason seems to be the fact that child labor is undergoing a period of investigation. The laws are only half-way attempts pushed by fearsome legislators in an attempt to clear up some unpleasant situations.

The superintendent must be watchful of legal changes, but at the same time he must have the best interests of the child at heart. He must see that the child gets the best type of examinations that his best doctors can give. He must see that the records of the child's entire school life are kept in his office in order so that the physicians may note with more than a casual eye the little person he is passing out into the world to labor for a few cents a day.

The responsibility of the Board of Education, through its representatives, in this program of health is momentous. The complexity of life makes it necessary that health shall be guarded very carefully during the days the child is in the classroom. The school should so e-
quip the child that he may live a life of usefulness, unhampered by the lack of zest, and the urge that enables all men to express their individuality and thereby make their contributions to civilization.

There is a sign of strong work being done in these four problems. But there is a greater need for centralization of control, the choice of finer personnel, and more complete and adequate examination work in the control of communicable disease and the planning for the working child.

Educators everywhere should regrasp their work with finer zeal, and hasten to make school health programs that will allow

"For every child from birth through adolescence, promotion of health, including health instruction and a health program, wholesome physical and mental recreation, with teachers and leaders adequately trained."

(from the Children's Charter)
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