

THE BEST INDEX TO COMMUNITY HEALTH IS THE PHYSICAL WELFARE OF SCHOOL CHILDREN

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Compulsory education laws, the gregarious instinct of children, the ambition of parents, their self-interest, and the activities of child-labor committees combine to-day to insure that one or more representatives of practically every family in the United States will be in public, parochial, or private schools for some part of the year. The purpose of having these families represented in school is not only to give the children themselves the education which is regarded as a fundamental right of the American child, but to protect the community against the social and industrial evils and the dangers that result from ignorance. Great sacrifices are made by state, individual taxpayer, and individual parent in order that children and state may be benefited by education. Almost no resistance is found to any demand made upon parent or taxpayer, if it can be shown that compliance will remove obstructions to school progress. If, therefore, by any chance, we can find at school a test of home conditions affecting both the child's health and his progress at school, it will be easy, in the name of the school, to correct those conditions, just as it will be easy to read the index, because the child is under state control for six hours a day for the greater part of the years from six to fourteen.¹

What, then, is this test of home conditions prejudicial to health that will register the fact as a thermometer tells us the temperature, or as a barometer shows moisture and air pressure? The house address alone is not enough, for many children surrounded by wealth are denied health rights, such as the right to play, to breathe pure air, to eat wholesome food, to live sanely. Scholarship will not help, because the frailest child is often the most proficient. Manners mislead, for, like dress, they are but externals, the product of emulation, of other people's influence upon us rather than of our living conditions. Nationality is an index to nothing significant in America, where all race and nationality differences melt into Americanisms, all responding in about the same way to American opportunity. No, our test must be something that cannot be put on and off, cannot be left at home, cannot be concealed or pretended, something inseparable from the child and beyond his control. This test it has been conclusively proved in Chicago, Boston, Brookline, Philadelphia, and particularly in New York City, is the physical condition of the school child. To learn this condition the child must be examined and reexamined for [35]the physical signs called for by the card on page 34. Weight, height, and measurements are needed to tell the whole story.

When this card is filled out for every child in a class or school or city, the story told points directly to physical, mental, or health rights neglected. If for every child there is

¹ Sir John E. Gorst in *The Children of the Nation* reads the index of the health of school children in the United Kingdom; John Spargo, in *The Bitter Cry of the Children*, and Simon N. Patten in *The New Basis of Civilization*, suggest the necessity for reading the index in the United States and for heeding it.

begun a special card, that will tell his story over and over again during his school life, noting every time he is sick and every time he is examined, the progress of the community as well as of the child will be clearly shown. Such a history card (p. 314) is now in use in certain New York schools, as well as in several private schools and colleges.

Have you ever watched such an examination? By copying this card your family physician can give you a demonstration in a very short time as to the method and advantage of examination at school. The school physician goes at nine o'clock to the doctor's room in the public school, or, if there is no doctor's room, to that portion of the hall or principal's office where the doctor does his work. The teacher or the nurse stands near to write the physician's decision. The doctor looks the child over, glances at his eyes, his color, the fullness of his cheeks, the soundness of his flesh, etc. If the physician says "B," the principal or nurse marks out the other letter opposite to number 1, so that the card shows that there is bad nutrition.

Traccinile
37 K-1906

B = Bad Y = Yes Def. = Defective
G = Good N = No (21a-207, 120,000 (P))

PHYSICAL RECORD.

P. S. 8 Class 1A' Date Oct. 2 - 1906

Name _____ Age 7 Address _____

1. Nutr.	B. N	10. Def. Nas. Breath,	Y. N
2. Enl. Cerv. Gl.	{ Y. N A. R	11. Teeth,	B. G
3. Chorea,	Y. N.	12. Deform. Palat.	X N.
4. Card. Dis.	Y. N.	13. Hyper. Tons.	Y. N
5. Pulm. Dis.	Y. N.	14. P. Nas. Growths,	X N.
6. Skin Dis.	Y. N.	15. Mentality,	B G.
7. Def. { Spine, Chest, Extrem.	Y. N.	16. Treat. necessary,	Y. N
	Y. N.	17. Nationality. <i>Italian</i>	
	Y. N.	Remarks:	
8. Def. Vjs.	{ Subj. Obj. <i>R 20</i> Y. N <i>30</i>		<i>Anaemia</i>
9. Def. Hear.	X N.		Med. Insp.

In looking at the teeth and throat a little wooden stick is used to push down the tongue. There should be a stick for every child, so that infection cannot possibly be carried from one to the other. If this is impossible, the stick should be dipped in an antiseptic such as boric acid or listerine. If, because of swollen tonsils, there is but a little slit open in the throat, or if teeth are decayed, the mark is Y or B. The whole examination takes only a couple of minutes, but the physician often finds out in this short time facts that will save a boy and his parents a great deal of trouble. Very often this examination tells a story that overworked mothers have studiously concealed by bright ribbons and clean clothes. I remember one little girl of fourteen who looked very prosperous, but the physician found her so thin that he was sure that for some time she had eaten too little, and called her anæmic. He later found that the mother had seven children whom she was trying to clothe and shelter and feed with only ten dollars a week. A way was found to increase her earnings and to give all the children better living conditions,—all because of the short story told by the examination card. In another instance the card's story led to the discovery of recent immigrant parents earning enough, but, because

unacquainted with American ways and with their new home, unable to give their children proper care.



LOOKING FOR ENLARGED TONSILS AND BAD TEETH
Note the mouth breather waiting

The most extensive inquiry yet made in the United States as to the physical condition of school children is that conducted by the board of health in New York City since 1905. From March, 1905, to January 1, 1908, 275,641 children have been examined, and 198,139 or 71.9 per cent have been found to have defects, as shown in Table VI.

It is generally believed that New York children must have more defects than children elsewhere. If this assumption is wrong, if children in other parts of the United States are as apt to have eye defects, enlarged tonsils, and bad teeth as the children of the great metropolis, then the army of children needing attention would be seven out of ten, or over 14,000,000.

Whether these figures overstate or understate the truth, the school authorities of the country should find out. The chances are that the school in which you are particularly interested is no exception. To learn what the probable number needing attention is, divide your total by ten and multiply the result by seven.

[38]The seriousness of every trouble and its particular relation to school progress and to the general public health will be explained in succeeding chapters. The point to be made here is that the examination of the school child discloses in advance of epidemics and breakdowns the children whose physical condition makes them most likely to "come down" with "catching diseases," least able to withstand an attack, less fitted to profit fully from educational and industrial opportunity.

Table VI
Physical Examination of School Children
Performed by the Department of Health in the Borough of Manhattan, 1905-1907

	Total	Percentage
Number of children examined	275,641	100
Number of children needing treatment	198,139	71.9
<i>Defects found:</i>		
Malnutrition	16,021	5.8
Diseased anterior or posterior cervical glands	125,555	45.5
Chorea	3,776	1.3
Cardiac disease	3,385	1.2
Pulmonary disease	2,841	1.0
Skin disease	4,557	1.6
Deformity of spine, chest, or extremities	4,892	1.7
Defective vision	58,494	21.2
Defective hearing	3,540	1.2
Obstructed nasal breathing	43,613	15.8
Defective teeth	136,146	49.0
Deformed palate	3,625	1.3
Hypertrophied tonsils	75,431	27.4
Posterior nasal growths	46,631	16.9
Defective mentality	7,090	2.5

The only index to community conditions prejudicial to health that will make known the child of the well-to-do who needs attention is the record of physical examination. No other means to-day exists by which the state can, in a recognized and acceptable way, discover the failure of these well-to-do parents to protect their children's health and take steps to teach and, if necessary, to compel the parents to substitute living conditions that benefit for conditions that injure the child.

Among the important health rights that deserve more emphasis is the right to be healthy though not "poor." A child's lungs may be weak, breathing capacity one third below normal, weight and nutrition deficient, and yet that child cannot contract tuberculosis unless directly exposed to the germs of that disease. But such a child can contract chronic hunger, can in a hundred ways pay the penalty for being pampered or otherwise neglected. Physical examination is needed to find every child that has too little vitality, no zest for play, little resistance, even though sent to a private school and kept away from dirt and contagion.

The New York Committee on the Physical Welfare of School Children visited fourteen hundred homes of children found to have one or more of the physical defects shown on the above card. While they found that low incomes have more than their proper share of defects and of unsanitary living conditions, yet they saw emphatically also that low incomes do not monopolize physical defects and unsanitary living conditions. Many families having \$20, \$30, \$40 a week gave their children neither medical nor dental care. The share each income had in unfavorable conditions is shown by the summary in the following table.

Table VII

Showing Per Cent Share of Physical Defects of Children, Unfavorable Housing Conditions, and Child Mortality found among each Family-income Group

	Weekly Family Income						
	\$0-10	\$10-15	\$16-19	\$20-25	\$25-29	\$30 and over	\$100
	%	%	%	%	%	%	%
Proportion to total families	8.4	32.7	15.2	23.8	3.9	15.6	100
<i>Physical defects:</i>							
Malnutrition	13.8	43.4	12.4	17.9	3.4	9.	"
Enlarged glands	8.6	37.4	14.6	22.6	3.6	13.2	"
Defective breathing	9.6	32.3	15.5	24.4	2.8	15.4	"
Bad teeth	8.1	32.2	15.3	24.5	4.8	15.1	"
Defective vision	8.2	34.6	16.5	22.1	1.4	17.3	"
<i>Unfavorable housing conditions:</i>							
Dark rooms	8.2	35.4	18.1	18.4	3.8	15.9	"
Closed air shaft	6.9	30.2	18.9	26.4	3.2	19.6	"
No baths	10.1	38.5	16.5	19.7	4.4	10.8	"
Paying over 25% rent	8.6	27.6	21.7	14.7	...	27.6	"
<i>Child Mortality:</i>							
Families losing children	10.3	35.5	14.7	20.5	5.4	13.6	"
Families losing no children	6.4	30.1	15.7	26.9	2.4	18.6	"
Children dead	11.7	36.2	13.1	20.8	6.1	12.1	"
Infants dying from intestinal diseases	8.9	37.6	18.3	18.8	4.	12.4	"
Children working	4.2	19.5	13.2	30.3	11.5	21.3	"

The index should be read in all grades from kindergarten to high school and college.

Last winter the chairman of the Committee on the Physical Welfare of School Children was invited to speak of physical examination before an association of high-school principals. He began by saying, "This question does not concern you as directly as it does the grammar-school principals, but you can help secure funds to help their pupils." One after another the high-school principals present told—one of his own daughter, another of his honor girls, a third of his honor boys—the same story of neglected headaches due to eye strain, breakdowns due to undiscovered underfeeding, underexercise, or overwork. Are we coming to the time when the state will step in to prevent any boy or girl in high school, college, or professional school from earning academic honors at the expense of health? Harmful conditions within schoolrooms and on school grounds will not be neglected where pupils, teachers, school and family physicians, and parents set about to find and to remove the causes of physical defects.

Disease centers outside of school buildings quickly register themselves in the schoolroom and in the person of a child who is paying the penalty for living in contact with a disease center. If a child sleeps in a dark, ill-ventilated, crowded room, the result will show in his eyes and complexion; if he has too little to eat or the wrong thing to eat, he will be underweight and undersized; if his nutrition is inadequate and his food improper, he is apt to have eye trouble, adenoids, and enlarged tonsils. He may have defective lung capacity, due to improper breathing, too little exercise in the fresh air, too little food. Existence of physical defects throws little light on income at home, but conclusively shows lack of attention or of understanding. Several days' absence of a child from school leads, in every well-regulated school, to a visit to the child's home or to a letter or card asking that the absence be explained. Even newly arrived immigrants have learned the necessity and [41]the advantage of writing the teacher an "excuse" when their children are absent. Furthermore, neighbors' children are apt to learn by friendly inquiry what the teacher may not have learned by official inquiry, why their playmate is no longer on the street or at the school desk. While physicians are sometimes willing to violate the law that compels notification of infection, rarely would a physician fail to caution an infected family against an indiscriminate mingling with neighbors. Whether the family physician is careless or not, the explanation of the absence which is demanded by the school would give also announcement of any danger that might exist in the home where the child is ill.

If it be said that in hundreds of thousands of cases the child labor law is violated and that therefore school examination is not an index to the poverty or neglect occasioning such child labor, it should be remembered that the best physical test is the child's presence at school. The first step in thorough physical examination is a thorough school census,—the counting of every child of school age. Moreover, a relatively small number of children who violate the child labor law are the only members of the family who ought to be in school. Younger children furnish the index and occasion the visit that should discover the violation of law.

Appreciation of health, as well as its neglect, is indexed by the physical condition of school children. Habits of health are the other side of the shield of health rights unprotected. Physical examination will discover what parents are trying to do as well as what they fail to do because of their ignorance, indifference, or poverty. In so far as parents are alive to the importance of health, the school examination furnishes the occasion of enlisting them in crusades to protect the public health and to enforce health rights. The Committee on the Physical Welfare of School Children found many parents unwilling to answer [42]questions as to their own living conditions until told that the answers would make it easier to get better health environment not only for their own children but for their neighbors' children. Generally speaking, fathers and mothers can easily be interested in any kind of campaign in the name of health and in behalf of

children. The advantage of starting this health crusade from the most popular American institution, the public school,—the advantage of instituting corrective work through democratic machinery such as the public school,—is incalculable. To any teacher, pastor, civic leader, health official, or taxpayer wanting to take the necessary steps for the removal of conditions prejudicial to health and for the enforcement of health rights of child and adult, the best possible advice is to learn the facts disclosed by the physical examination of your school children. See that those facts are used first for the benefit of the children themselves, secondly for the benefit of the community as a whole. If your school has not yet introduced the thorough physical examination of school children, take steps at once to secure such examination. If necessary, volunteer to test the eyes and the breathing of one class, persuade one or two physicians to cooperate until you have proved to parent, taxpayer, health official, and teacher that such an examination is both a money-saving, energy-saving step and an act of justice.

We shall have occasion to emphasize over and over again the fact that it is the use of information and not the gathering of information that improves the health. The United States Weather Bureau saves millions of dollars annually, not because flags are raised and bulletins issued foretelling the weather, but because shipowners, sailors, farmers, and fruit growers obey the warnings. Mere examination of school children does little good. The child does not breathe better or see better because the school physician fills out a card stating that there is [43]something wrong with his eyes, nose, and tonsils. The examination tells where the need is, what children should have special attention, what parents need to be warned as to the condition of the child, what home conditions need to be corrected. If the facts are not used, that is an argument not against obtaining facts but against disregarding them.

In understanding medical examination we should keep clearly in mind the distinction between medical school inspection, medical school examination, and medical treatment at school. Medical inspection is the search for communicable disease. The results of medical inspection, therefore, furnish an index to the presence of communicable diseases in the community. Medical examination is the search for physical defects, some of which furnish the soil for contagion. Its results are an index not only to contagion but to conditions that favor contagion by producing or aggravating physical defects and by reducing vitality. Medical treatment at school refers to steps taken under the school roof, or by school funds, to remove the defects or check the infection brought to light by medical inspection and medical examination. Treatment is not an index. In separate chapters are given the reasons for and against trying to treat at school symptoms of causes that exist outside of school. When, how often, and by whom inspection and examination should be made is also discussed later. The one point of this chapter is this: if we really want to know where in our community health rights are endangered, the shortest cut to the largest number of dangers is the physical examination of children at school,—private, parochial, reformatory, public, high, college.

Apart from the advantage to the community of locating its health problems, physical examination is due every child. No matter where his schooling or at whose expense, every child has the right to advance as fast as his own powers [44]will permit without hindrance from his own or his playmates' removable defects. He has the right to learn that simplified breathing is more necessary than simplified spelling, that nose plus adenoids makes backwardness, that a decayed tooth multiplied by ten gives malnutrition, and that hypertrophied tonsils are even more menacing than hypertrophied playfulness. He has the right to learn that his own mother in his own home, with the aid of his own family physician, can remove his physical defects so that it will be unnecessary for outsiders to give him a palliative free lunch at school, thus neglecting the cause of his defects and those of fellow-pupils.

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