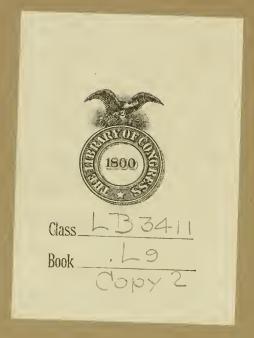
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## TREASURY DEPARTMENT UNITED STATES PUBLIC HEALTH SERVICE

HUGH S. CUMMING, SURGEON GENERAL

# LET THE CHILD DO THE "FOLLOW-UP" IN SCHOOL HEALTH WORK

BY

### EDITH B. LOWRY

Acting Assistant Surgeon United States Public Health Service

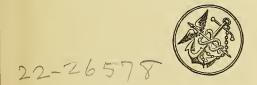
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## LET THE CHILD DO THE "FOLLOW-UP" IN SCHOOL HEALTH WORK.<sup>1</sup>

By EDITH B. LOWRY, Acting Assistant Surgeon, United States Public Health Service.

Medical examination of school children has been carried on in a more or less efficient manner in some parts of the country for approximately 30 years. However, it required the revelations of the World War to start the wave of public opinion in favor of general health for children. Following the cessation of war activities, public opinion has been focused upon the physical condition of the children, as shown by the country-wide campaign for their weighing and measurement, and by the extensive practice of physical examinations and inspections. But, while the need for correction has been established, little has been accomplished as yet in the way of results. Moreover, there is danger that undirected or misdirected effort, failing in definite results and causing annoyance to teachers, may tend to close the schools to health activities.

Investigations proved that although in many cases the physical examinations had been made in a satisfactory manner, the correction of defects was anything but satisfactory. Notes sent to the parents were lost by the wayside or ignored at home; the few public health nurses could reach only an infinitesimal portion of the parents by home visits, which seemed to be the best method of obtaining results. "Lack of trained workers" was the cry everywhere. Efficient workers were unattainable even if funds were provided.

In an effort to discover some method of obtaining results without a prohibitive staff of home visitors, many schools were visited where physical examinations already had been carried on. Questioning the children revealed that the majority of them had forgotten the health advice given them, and the teachers were equally ignorant of the physical condition of their pupils. Everywhere the teachers expressed a desire for some form of record of the physical examinations that could be left in the schoolroom. The ordinary medical examination card was not of much value for this purpose, for the teachers already were overburdened with the multiplicity of duties and could not spend much time going over cards time and again, even if the records on the cards meant anything to them. The teachers, as a rule, were as poorly informed on the subject of health as were their pupils. In many instances the teachers themselves were in as poor physical condition as any of the pupils, some even were found with active tuberculosis, and the teacher with perfect teeth was almost as rare as

<sup>&</sup>lt;sup>1</sup>Read at the meeting of the American Medical Association, Boston, June, 1921. Reprint from the Public Health Reports, vol. 37, No. 11, Mar. 17, 1922, pp. 631-639.

the efficient health worker. "Yes; I know I should go to a dentist," was a remark frequently called forth.

What were we to do about it and what was the solution? Somewhere memory brought forth the old saying, "When in Rome do as Romans do." This, translated according to present needs, meant, "When in the schools, follow the methods of the school people to which the children as well as the teachers are accustomed."

In all lines of education except health, educators have found it necessary to set a certain standard for the children toward which they can work. For instance, a third-grade child is required to learn a certain amount of arithmetic and be able to read certain books. He is not given the indefinite instruction to "Learn arithmetic," "Learn to read."

Following this line of thought, the question came whether it were possible to set a definite standard of health for the children rather than say to them, "Be healthy; be well," without giving them an adequate idea of what health meant.

In the course of child-hygiene investigations by the Service in Mississippi it was suggested that a definite requirement be set for the health of school children for the current year. This suggestion was adopted by the State health department and the State department of education. Later it was adopted by the Kentucky division of child hygiene with satisfactory results.

The requirement outlined is as follows:

Eyes-

(a) Vision normal or corrected by glasses.(b) No evidence of disease or inflammation.

Ears-

- (a) Hearing normal.
- (b) No evidence of disease or inflammation.

Nose-

- (a) No adenoids.
- (b) No other obstruction.

Throat—

- (a) No diseased or enlarged tonsils.
- (b) No evidence of disease or inflammation.

Mouth—

- (a) No unfilled cavities in teeth.
- (b) Teeth clean, showing evidence of daily care.
- (c) Gums healthy.

Skin-

- (a) No eruption.
- (b) Scalp clean, free from scales.
- (c) Scalp free from pediculosis.

Chest-

- (a) No evidence of disease or inflammation of lungs.
- (b) Chest expansion of at least 2 inches.

Vaccination-

Good scar or certificate of recent vaccination for smallpox.

Nutrition—

- (a) Weight normal or not more than 10 per cent over.
- (b) Negative hookworm report.
- (c) No enlarged spleen (malaria).

No claim is made that this is an ideal health standard, but it is claimed to be a standard that should and can be lived up to by every person, whether child or adult. The requirement purposely was set sufficiently low so that it would be possible for it to be reached by practically every child in school who made the effort. For this reason, no mention was made of cardiac lesions, for instance, as such a condition probably could not be corrected by the child. The child should not be discouraged by an impossible standard.

The outline was arranged to take in the more obvious defects and does not include many defects that would be noted on a more rigid examination, the object being to interest the child in his own health and to secure his cooperation in having these more common defects corrected. As the health condition of a school improves from year to year, the requirement can be raised accordingly. How common the defects mentioned in the requirement are in the average school is shown by the fact that it is rare to find more than one child in a room (with the exception of a few cities) that meets all the requirements. The greatest failure was under the requirement for mouth, and the failure for throat requirement followed a close second.

### HEALTH SCORE CHART.

In order to visualize health to the pupils and teachers, to give it a definite meaning, a Health Score was devised which tells at a glance the physical condition of the children in the room.

The charts were designed, first, to meet the request of teachers for a record to be left in the school and, second, to impress upon the children the ideal of health. In other words, "It is a record in the language to which children are accustomed." Charts and stars are used in practically every school all over the country. By the use of these charts the child himself is stimulated to do "follow-up work" in the home. It is felt that in his desire to "follow the crowd" and have a gold star placed before his name, his importunities will be more successful in securing the attention of the parents than any other method.

What the Health Score means in the school room is this: The principal of the school is visiting this room and hears a little child read very badly. Looking at the Health Record he probably finds that the child has no star in the column headed "Eyes." The thought comes immediately, "Why, that child has something the matter with his eyes." At once health is a vital subject to him.

On the Health Score a red star indicates that the child was, on the original examination, up to the standard in the subject indicated at the head of the column. For instance, a red star in the column marked "Eyes" indicates that at the time of the first examination the child's vision was normal or corrected by glasses; also that there was no evidence of disease or inflammation.

Blue stars indicate corrections. For example, if the child had poor vision and later had this corrected by glasses, and there was no evidence of disease or inflammation, he would be entitled to a blue star under "Eyes." The two colors simply show graphically whether any corrections are being obtained.

Gold stars are placed before the names of children who have met all health requirements, that is, when every space following the child's name is filled with either a red or a blue star.

An especially designed health button may be presented to every child who has obtained a gold star. This should be presented with as much ceremony as a diploma, for we consider that any child who has given the necessary attention to his health to become a gold star pupil is entitled to some recognition.

The following instructions are given for using the Health Score Chart, which is intended to be used in connection with the height and weight record.

Names.—The names of the children should be filled in plainly with black ink in the same order as they appear on the classroom weight chart. The two charts are companions and should be hung together in the schoolroom in such position that they can be seen readily by the pupils.

Red Star.—Red stars are stamped in the various columns when the child is free from defects or is up to the standard of the subject indicated at the head of the column at the time of the original medical examination. For example, a red star in the column marked "Eyes" indicates that at the first examination the child's vision was either normal or had been corrected by glasses, and also that there was no evidence of disease or inflammation of the eyes.

Blue Star.—Blue stars indicate correction. For example, if at the time of the first medical examination the child had poor vision, which was later corrected by glasses, and there is no evidence of disease or inflammation, he would be entitled to a blue star under the heading "Eyes."

Gold Star.—A gold star is placed in the column in front of the name of the child who has met all the health requirements; that is, when every space following the child's name is filled with either a red or blue star.

Two Gold Stars.—Two gold stars may be placed in the column in front of the name of the child when it is impossible for the child to obtain relief from certain physical defects, even though everything possible has been done. In such a case the child may have two gold stars after all other corrections have been made. For example, if a child's deafness is such that it is impossible to correct it, even though everything possible is done; or if a child suffering from chronic infantile paralysis has met all the other requirements of the health score card, then he is entitled to the two gold stars.

The child should not be given a health button in such case until after conference with the director of the State division of child hygiene.

Health button.—In order further to stimulate the interest of the child in completing the health score, an award in addition to the gold star should be made in the form of a health button, after the physician in charge of the examination finds that he has completed the health score.

The health button should show the year in which it is given so that if the score is changed another year, or the child develops defects, there will be no question con-

cerning his right to wear the button. The health button should be furnished by the State division of child hygiene.

The presentation of a health button should be an occasion of special ceremony, and the child's parents should be invited to attend.

How to make out the Health Score record.—The health record can be made in the office from the school examination cards. It will save time to make the entire chart before adding any stars, indicating by "O" the space for red stars and then pasting or stamping the stars over these letters.

Every space after a child's name should be marked in some manner, as blank spaces will indicate that the examination has not been made.

Indicate by "a," "b," or "c" the defects found, using the Health Score Chart as a guide. Example:

In the column headed "Eves"-

If the examination has not been completed, leave this space blank.

If vision is normal and there is no evidence of disease or inflammation, put an "o" in this space.

If vision is normal but there is some inflammation, use a "b."

If vision is defective but there is no inflammation or disease, use an "a."

If vision is defective and there is also inflammation, use "a-b."

Again, under nutrition, a small "a" will indicate under weight, while a capital "A" will indicate those who are over weight for a given age. This will make it easy to distinguish the children who are under weight and those who are over weight.

By using this method it will be easy to make a summary of defects from the chart, as by adding all the "a" marks in the column under "Eyes" the total number with defective vision will be found.

#### CLASSROOM WEIGHT CHARTS.

The following instructions are given for the use of the Weight Chart:

Names of the children should be filled in by the teacher in alphabetical order, surname first. Use black ink.

Age (nearest birthday) should be filled in by the teacher. Use black ink.

Height should be recorded in inches. Height should be taken without shoes, as the heels of shoes vary in height. Use black ink.

Normal weight can be found by consulting height and weight tables. The normal weight column should be filled in with red ink.

Monthly weight may be filled in first with pencil, then inked according to the following directions:

- (a) If a child is of normal weight or not more than 10 per cent above, use red ink. This calls attention to the children who have reached the goal.
  - (b) If the child is below normal weight or more than 10 per cent above, use black ink. Weight should be taken without shoes, coats, or sweaters.

Later weighing.—Arrangements should be made to have the children weighed every month, as this will show whether they are improving in nutrition. In some cases the nurse or permanent worker will have time to do this; in others the teachers will do the weighing; in other cases a committee of two mothers will volunteer for this help; sometimes this may be assigned to one of the older pupils. In all cases the weighing should be done as nearly as possible on the same day of the month.

Scales.—Every school building should have good balance scales as a part of the permanent equipment. Do not buy spring scales, as they get out of order easily and are not reliable. It is economy to buy good scales. A description of scales and price

lists will be furnished from this office on request. The money to buy scales may be obtained in several ways, among which are the following: (1) Appropriated from school funds; (2) purchased from funds of parent-teacher organization; (3) purchased from Christmas seal money: (4) purchased from Junior Red Cross funds; (5) purchased by proceeds from entertainment or "tea" given for this purpose.

These charts are designed to be left in the schoolroom. They are supplied by the State. They may be obtained from the United States Public Health Service or the Bureau of Education, Department of the Interior, Washington, D. C.

Teacher.

U. S. Public Health Service, Health Score of the Children in ............. Grade, ................ School.

192 -192 .

U. S. Public Health Service.

Weight record of the children in .....grade .....School. 192..-192...

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Height and weight to be taken in house clothes without shoes. Weigh on the same day each month. Age, the nearest birthday. Each child to enter his own weight.

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