

Protecting  
The Health of Young Workers  
in Wartime



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<sup>1</sup> Single copies of the Children's Bureau publications may be obtained from the Bureau. Subsequent bulletins and additional information may also be obtained from the same source.

<sup>2</sup> The other reports in this series are also available for distribution; they are not listed here because they relate to accident rather than health hazards. These reports provided the factual basis for hazardous-occupations orders issued under the child-labor provisions of the Fair Labor Standards Act of 1938.

## Protecting the Health of Young Workers in Wartime

Protecting the health of the thousands of new, young workers who are flocking into jobs—in war plants, in stores and offices, in laundries, hotels, restaurants, and places of amusement, and on farms—is a matter of urgent concern to all citizens. There is need today, as at no other time since the first World War, for an organized and persistent community effort to take care of the health of young workers. The task challenges the resourcefulness of the whole community—health and labor departments, placement officers, schools, employers, professional workers, parents—indeed, every public-spirited citizen.

Rough estimates indicate that about 2 million boys and girls between 14 and 18 years of age were employed in October 1942, more than twice as many as in April 1940. More than 3 million were employed during the 1942 summer vacation. As the demand for labor grows more urgent, the number of young workers will undoubtedly increase still further. Hundreds of thousands of boys and girls are expected to work on farms during the coming summer.

Great numbers of youngsters have left school for employment. Thousands more are working outside school hours, often at jobs too strenuous to be carried in addition to their school work. For instance, a survey of the employment outside school hours of pupils in junior and senior high schools made in one eastern State revealed that children from 11 to 18 years of age were employed in all sorts of enterprises—from setting pins in bowling alleys to sheet-metal work in aircraft factories. They were working 6 and 7 days a week, 40, 50, and 60 hours a week, and at night till long after midnight. Boys 16 and 17 years of age were working the “graveyard” shift in factories and girls of 16 worked from 3 to 11 p. m. after a full day’s attendance at school. This situation is not unique. Surveys of part-time and full-time work in other areas reveal similar conditions detrimental to the health and welfare of children.

## Why Special Health Protection?

When we see a lively teen-age youngster assembling parts in a factory or harvesting crops in the field, the job may appear no more taxing upon him than upon the mature worker alongside him. Actually, the adolescent is carrying a heavier load than the adult. Boys and girls in their middle teens are growing rapidly. They are undergoing many physical and emotional changes. The rapid growth, in fact, the whole maturing process, throws an added strain upon the young worker. And because he is still growing, he is especially susceptible to unfavorable health conditions that may even alter the course of his physical development. Thus everything that interferes with his normal growth—overfatigue, improper or insufficient food, inadequate rest, or lack of fresh air, of sunshine, and of exercise—may have a lasting effect upon him.

The adolescent is probably more susceptible than the adult to industrial poisons. And he is more liable to have accidents because he is more venturesome than the adult and has less knowledge of hazards. He likes to take risks and is apt to neglect the use of protective measures in jobs involving health or accident hazards.

Safeguarding the health and safety of young workers should be a public concern at all times. It becomes doubly important in wartime when young, immature, and inexperienced workers are expected to handle jobs previously performed by adults, and under the pressure of war-production goals. Nevertheless, there is danger that our natural preoccupation with production may lead us to pay too little attention to the welfare of young people, upon whom the Nation's future depends, at precisely the time when their protection is most urgent.

## What Special Health Protection?

### Physical Check-up Before Employment.

Children of the same age vary greatly in their physical capacity. Some teen-age boys and girls are less mature physically than others of the same age and cannot stand as

strenuous exertion. Some have physical defects or weaknesses which the wrong type of job may aggravate into life-long handicaps. For a few young people any job may be a danger to life. For example:

*Tuberculosis* may show no outward symptoms in its early stages. When large groups of presumably healthy boys and girls are examined, a few are usually found with hitherto unsuspected infections. Some of these young people may need special care if they are to recover. For them any type of work may lead to catastrophe. A larger number are likely to have infection in inactive form. Work may carry no special hazard for these boys and girls if conditions are favorable, but work at a job too strenuous may cause the infection to flare into active disease.

*Defective vision* may be a serious handicap to a young person who performs work involving long-continued, close use of the eyes. Not only does the defect limit his efficiency on the job, but the continued eye strain may result in permanent damage to his eyes. Defective vision also increases liability to accident.

*A hernia* is likely to become exaggerated if the individual undertakes work that involves much standing, carrying, or lifting.

*Heart disease* may occur in young people in varying degrees of severity. It is most often caused by rheumatic fever. This may leave the boy or girl with a heart so seriously impaired that it is obvious he should not work. It may, however, leave no sign that his heart is damaged; the danger then lies in the possible recurrence of the rheumatic fever. A boy or girl with such latent heart disease should not undertake a job in which strenuous work, overfatigue, or other unfavorable conditions will lower his resistance to the disease.

It is extremely important that young people be given physical examinations before they are employed, to determine whether the proposed jobs are suited to their physical capacity. Such examinations are already required in a number of States before employment certificates are issued to children 14 and 15 years of age. On the basis of these examinations a certificate may be denied altogether if the child's health would be imperiled by employment in any job. Or a limited certificate may be issued, permitting his employment only in specified jobs under specified conditions and requiring reexamination within a few months.

The practice of giving physical examinations before employment should be extended as widely and rapidly as possible, for

older youth as well as for youngsters 14 and 15 years of age. It is desirable that the examining physician be designated by the authorities responsible for issuing employment certificates and be accustomed to considering young people's physical condition in relation to employment. The certificating authorities may call on the local health departments or the school health service to provide the examining physicians and other personnel and facilities necessary for the work. When resources for examinations are inadequate, school health records might be utilized as a means of checking at least for major defects, such as cardiac conditions and hernia.

But preemployment examinations are not enough. They should be followed by remedial care of boys and girls found to have defects. Such care should be made available through organized community programs. If possible, provision should be made also for regular follow-up examinations to make sure that the young worker's health is holding up under the job, and to spot and treat early any injury to health that may have occurred since he started on the job.

### **Protection Against Hazardous Jobs.**

Young people seldom attain full muscular development before they reach 18 years. Boys under 18, as well as girls, should, therefore, be excluded from jobs involving the lifting of heavy weights and from other heavy labor because of the danger of excessive fatigue and of serious muscular strain.

Because of their susceptibility to injury from industrial poisons, workers under 18 should be excluded also from jobs involving exposure to toxic substances, even though control measures considered adequate for adults are in effect. And because such young workers lack mature judgment and caution, they should be kept from jobs involving high risk of accidental injury.

Many hazardous occupations are now prohibited for workers under 18 by State laws and regulations and by Federal hazardous-occupations orders issued under the Fair Labor Standards Act. For fields of work not yet covered by these orders, suggestions as to which jobs are suitable for young workers and which jobs are too hazardous for them are being issued in a

series of advisory standards prepared by the Children's Bureau, called Which Jobs for Young Workers and listed on page II.

### Protection Against Overfatigue.

It is poor economy in the long run to prolong working hours beyond a certain point. Excessive fatigue not only reduces the efficiency of the young worker but may lead to accidents and, if long continued, may damage his health. To prevent overfatigue, boys and girls under 18 should not be permitted to work more than 8 hours a day or 48 hours a week either on farms or on other jobs.

In most States the standards mentioned are a matter of law, at least for children up to 16 years of age, in many fields of employment. The child-labor laws of 42 States now have a maximum workweek of 48 hours or less for workers up to 16 or 18 years of age in a range of occupations that varies from State to State. These standards are also a matter of National policy. In a joint statement to war contractors and other war-production agencies, eight Government agencies that have major responsibility for the successful conduct of the war have recommended an 8-hour day and a 48-hour week as the best work schedule for sustained efficiency in most industrial operations. (This statement is listed on page II.)

For youngsters who attend school and who also work, these same limits should be put on the combined hours of school and work—except that, as school is likely to be different from a job and less strenuous, a total of 9 hours a day may not be too much for some boys and girls of 16 and 17.

Working hours shorter than 8 a day and 48 a week may be essential for young people on jobs that call for marked physical exertion, monotonous and repetitive work, continuous standing, or continuous sitting in one position. Growing boys and girls should have variety and free movement in their activities. The confinement and monotony of repetitive factory work for long hours, especially when a speed-up system permits no moments of relaxation on the job, take their toll among young workers in nervous strain and chronic fatigue or in accidents.

Young people need adequate lunch and rest periods and at least 1 day's rest in 7. They should be spared the added fatigue of night work. Uninterrupted sleep during the daytime is difficult, especially under the crowded living conditions in many defense areas, and young people who work on the night shift are unlikely to obtain the rest they require for healthful growth.

### **A Healthful Environment on the Job.**

The amount of strain in a young worker's job depends on the surroundings in which he works as well as on his working hours. Adequate lighting and ventilation are of great importance and should be provided on all indoor jobs. From working in light too poor for the type of work performed, boys and girls may develop permanent visual defects. Breathing the atmosphere of a poorly ventilated room over long periods has a depressing effect. It hastens fatigue and diminishes the appetite. When the operations performed create dust or fumes, even nontoxic fumes, the worker should be protected by effective exhaust ventilation.

Seats should be available in all workrooms so that during the work period boys and girls may sit for short intervals, at least. In sedentary occupations the type of seat provided assumes special significance. Unless chairs are properly designed, serious posture defects may develop in young workers engaged, for example, in office work, in the needle trades, and in light assembly work in many types of war production.

Sanitary toilet facilities and an approved water supply are essential to health for all workers, young and old, in all jobs. On farms good water should be made conveniently available to workers in the fields.

Appropriate care in case of illness or accident while on the job should be planned for. In small plants and on farms a readily available first-aid kit and the training of some workers in first aid may be all that is possible. In larger plants professional care by physicians and nurses in well-equipped dispensaries should be provided.

### **Meals During Working Hours.**

Growing boys and girls are always hungry. They must have generous amounts of the right foods for their healthful physical



development. Factories that employ young people should make it possible for them to obtain nourishing meals, regardless of their hours of work, and also food to supplement lunches they bring to work. For the well-being of students carrying the added strain of employment, school lunches assume special importance. Both on the job and in school a lunch period long enough to permit an unhurried meal at a table should be allowed.

### **A Healthful Environment Outside Working Hours.**

The conditions under which young workers live affect their health and efficiency almost as much as do the conditions under which they work. Suggestions as to the living conditions suitable for boys and girls recruited for farm work have already been published by the Children's Bureau in the booklet, *Guides to the Successful Employment of Non-Farm Youth in Wartime Agriculture*. In this publication (included in the list of references on p. 11) it is pointed out that work camps and farm homes should have good sanitation and a safe water and milk supply, and should afford nourishing food and adequate rest and recreation. These essentials of health protection are no less important to young workers living at home.

The right kind of recreation is also important in keeping young workers well. Athletics, for example, can give a big boost to the well-being and the spirits of boys and girls confined all day at sedentary, repetitive jobs. Young workers who do heavy laboring jobs, however, may find relaxation and stimulation during their leisure hours in social activities or in creative ones, such as arts and crafts, music, and dramatics.

### **Health and Safety Education.**

Young workers need to appreciate the importance of protecting their own health and to understand what such protection means. There should be programs of health and safety education directed to the special needs of boys and girls on the job. These should be so planned as to arrest the attention of young people and enlist their understanding effort in the protection of their health.

## What Can Various Groups Do?

*Health officials* are in a strategic position to assume leadership in developing health protection for young workers in war-time. They can sponsor educational programs to awaken the community to the importance of this protection. In cooperation with the schools and other groups they can organize or give advice on programs for physical examinations, for medical care, and for other follow-up and corrective services.

The leadership of county health departments will be needed, especially in developing plans for the provision of medical care for young farm workers if they are sick or have accidents.

Through vigorous enforcement of laws and ordinances pertaining to sanitation, water supply, and other public-health essentials in factories, schools, homes, and work camps, and on farms, health officials serving in city or country can make sure that standards for health protection are maintained.

*State labor departments*, as the agencies responsible in most States for enforcing child-labor and other labor laws, can do much to protect boys and girls against work at too early an age or under harmful conditions. Through careful supervision of the issuance of employment certificates, where this is their function, they can also contribute greatly to upholding good child-labor standards. They should be a source of information as to the extent of child labor and the conditions under which young people are working.

*Employment offices and placement workers* can help by referring boys and girls to jobs for which they are fitted physically, as well as by training and ability. They should develop and expand their junior placement and vocational counseling into individualized services for all young people seeking work.

*Employers* should take responsibility for providing good working conditions and for limiting hours of work for boys and girls. They should place young people in jobs suited to their age and strength, and should exclude them from jobs with serious accident or health hazards. They should also see that young workers are trained in safe methods of work.

*Schools* can contribute facilities for physical examinations and follow-up. They can adapt their hot-lunch program to the

requirements of students who have jobs outside school. If other agencies do not offer vocational-guidance and junior-placement services, schools should give these services in order to steer students into occupations for which they are fitted. Schools should be active in protecting boys and girls who are working after school by watching to see that the kinds of employment they enter and the hours they work are not detrimental to them. Through health-education activities the schools should convince young people of the importance of safeguarding their health themselves.

When issuance of employment and age certificates is a school function, the school can make an additional contribution to the health and legal protection of young workers by issuing the certificates promptly and carefully.

*Youth-serving agencies* are in a position to promote public understanding of what should be done to keep young workers well. They can guide them into employment having proper safeguards and can help them to accept responsibility for their own health. They can promote health directly by offering recreational and leisure-time activities to satisfy young workers' need for play, relaxation, and companionship.

*Parent-teacher associations, labor unions, and other organized groups* can play a vital part in this program of health protection. They can find out where and under what conditions boys and girls are being employed and what is being done to keep them in good health. They can cooperate with other groups to make sure that health services are available to young workers.

*Physicians*, through their contacts with young people and their families, are frequently in a position to point out the value of having a physical examination before beginning work and periodic health check-ups. They can often advise boys and girls about jobs suited to their physical capacities.

All physicians should be alert to the health problems of young workers. Those who are concerned with school health, industrial hygiene, or community health programs should make special effort to have these programs available to and known to young working people, who for one reason or another often fail to benefit from them fully.

*Social workers, public-health nurses, and other professional workers* who are in a position to advise the families of young workers can help them understand what health protection boys and girls should have and through which local resources needed medical or related services may be obtained.

*Parents* can help their children to protect their own health. Parents can learn about community facilities for health services and vocational guidance and can encourage their children to use them. They can take opportunities to get and use the latest information on nutrition and other health factors, so that to the limit of their means they may make a healthful home environment for their children.

*The young workers themselves* can do much to protect their own health. They should plan their time so as to get enough sleep, fresh air, exercise, and nourishing food. On the job they should scrupulously observe all health and safety precautions. They should take advantage of the opportunities the community offers for physical examinations and other health services, for vocational guidance, and for constructive recreation.

## Protecting Our Future Manpower

Young people want to contribute to victory. The Nation needs their contribution. But all individuals and groups must be aware of the danger of exploiting young people in the name of the war effort. The War Manpower Commission has stated in its Policy on Employment of Youth Under 18 Years of Age:

The first responsibility and obligation of youth under 18 even in wartime is to take full advantage of their educational opportunities in order to prepare themselves for war and post-war services and for the duties of citizenship. \* \* \* But it is recognized that the demands of the war period will increase the number who in normal times leave school to enter full-time employment before reaching 18. In any case all forms of employment of such youth, including employment in agriculture, must be specially safeguarded. Their services must be used in such ways as to bring about their maximum contribution to manpower needs consistent with the protection of their health and welfare and the fullest utilization and development of their aptitudes, abilities, and interests.