

Home Safety

WEDNESDAY MORNING SESSION

October 28, 1942

Presiding:—DONALD B. ARMSTRONG, M.D., Third Vice Pres., Metropolitan Life Insurance Co., New York City

Home Safety—Everybody's Business

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Home safety is everybody's business since it requires, to achieve its aims, universal attention. Everyone has a shelter which is a permanent or temporary home. Accidents which occur in institutions, hotels, hospitals, under dwelling roofs anywhere—are classified as home accidents.

Responsibility for home safety belongs not alone with the householder or the individual but is shared by government, charged with the "preservation and improvement of health"; with architects and builders; with manufacturers and salesmen of household equipment and appliances and with many others whose contact with the householder provides an opportunity to contribute to his safety.

The New York State Department of Health with its large staff of public health nurses and health officers; with facilities for community education through motion pictures, exhibits, radio programs and the printed word seemed especially fitted to undertake a program to control home accidents, a program which must be largely educational without aid of legislation. Such a campaign is long overdue since fatal home accidents in New York State exceeded, by nearly one-third, motor vehicle accidents, even before gasoline rationing, and the farm accident death rate is five times that of all other occupations combined. New York State's home accidents cause annually 3,000 deaths and 500,000 injuries some of which handicap the individual for life.

Many other agencies besides the State Department of Health have long been concerned about home and farm accidents. The American Red Cross, College Extension groups, Parent-Teacher Associations, Girl and Boy Scout organizations and 4-H Clubs are prominent in the field of safety. The schools in New York State were encouraged to step up their teaching when, in 1937, the legislature passed a law which required that traffic and highway safety be taught in the schools of New York State.

Helpful materials for use in home safety education have been developed by the Metropolitan Life Insurance Company and other agencies. The State Department of Health through its Division of Public Health Education entered in March 1942 the field of home and farm safety and has undertaken to consolidate the gains already made while giving each agency a stimulus toward further accomplishment. The function assumed by the Division of Public Health Education with the endorsement of a representative planning committee is that of a clearing house and promotion center.

Effect of War

Urgency of action in the prevention of home accidents is stimulated by the war. Such war work industries as Savage-Arms, General Electric, and Eastman Kodak discovered that "off-the-job" accidents accounted for more absentees than accidents in the plant.

Farm accidents, too, are viewed with alarm because of their effect upon the production of food to win the war. Already an increase of home and farm accidents is experienced due to changed conditions of living particularly to the blackouts and to tasks required of the inexperienced.

In the present New York State program, the Division of Public Health Education serves as a headquarters and clearing house. Each agency is encouraged to continue with renewed emphasis any safety work begun. Local autonomous councils or committees are advocated. One such Home Safety Council was already in existence when the state program was set up.

Following the example of the National Safety Council last February, a New York State Planning Conference of Home and Farm Safety was held in Albany in March. The director of the Division of Public Health Education, B. R. Rickards, was made general chairman empowered to set up a state program which would coordinate all interests related to home and farm safety.

Then followed a State Conference in May with three major objectives:

1. To focus attention on the seriousness of the home and farm accident situation in New York State and its importance in the national war program.
2. To provide an opportunity for an open discussion of the problem under informed leadership.
3. To outline an attack against the major causes of accidents through the cooperation of all interested organizations and agencies.

Represented on an advisory committee, state leaders of social, civic, educational and professional organizations, are given an opportunity to share in the development of a rapidly expanding program of education. We are in touch with the Home Safety Committee of the Greater New York Safety Council, the chairman of that committee being a member of the State Advisory Committee. Subject matter and action committees work out recommendations and methods. Ten groups are at work. A description of some of the activities of the committees will serve further to develop the theme of this paper.

Architects Committee

New York state has invited the cooperation of architects and builders and a committee is active to study their contribution along three major fronts (1) What can be undertaken now in the way of remodeling and repairs, such as to increase storage space to relieve the tendency to clutter the stairs, use of non-slip paints or polishes, and attention to coverings or slippery metal edgings; repairs to or the addition of railings; use of gates or barriers; adequate lighting; (2) Attention to housing in war plant areas to see that, through speed and cheapness, safety factors are not neglected. The chairman of the committee in his capacity as a technical advisor in local government housing discovered ten serious hazards which might be eliminated without undue cost or without undue use of critical materials. These were pointed out to responsible officials in the hope that corrections would be made in subsequent blue prints. (3) Future planning in post-war housing.

The committee also will undertake a program of education with practicing architects and has appointed a subcommittee to work through schools of architecture.

Closely related to architecture and building is landscaping of grounds. A committee of landscape architects is being organized to bring to bear on the home safety problem various conditions about the home premises which contribute to safety. Attention will be directed to clear view in connection with driveways and entrances; anchoring of bird baths so that children cannot pull them over on themselves; the elimination of, or the fencing of, small pools and steep terraces; proper lighting of outside steps; adequate storage space for garden tools.

Household furnishings, equipment and appliances all have a place in safety considerations. This is a field which requires the studied consideration of individuals in a number of professions; electrical and mechanical engineers, household economists, interior decorators, equipment dealers and salesmen. The committee which has this project in charge is about ready to present recommendations in pamphlet form.

Since the New York State Program deals with farm safety as well as with home safety, one of the active committees is at work

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with the problem of farm equipment and engineering. The agricultural engineer and the farm equipment manufacturer are working together to make this approach effective.

4-H Clubs and Red Cross

Closely related to this phase of the program is the work of a special committee on Safety to Children in Farm Work. The chairman of this group is a 4-H Club agent who has taken an especial interest in the health of farm boys and girls. Associated with him are some of the farm specialists of the Cornell Extension Service. In cooperation with the State Department of Health this committee issued a trailer designed for use among the news reels of motion picture theaters. In viewing this trailer think of it also as a method of teaching safety. Here we draw the attention of the farmer to the subject of farm safety by placing upon him the responsibility to teach children safe practices in farm work.

Instruction in Home and Farm Safety has for some years been a part of the program of the American Red Cross. The 114 chapters of the American Red Cross in New York State all have received from the North Atlantic Area Office an official communication urging that they make available their services to the state home and farm safety program. First aid instructors are qualified to teach home and farm safety. Classes to train instructors, however, will be manned from the Red Cross Area office. Formal instruction with college credit designed principally for teachers and school nurses is available at the Center for Safety of New York University.

The public schools are recognized as the most valuable aids to safety instruction. A safety teaching guide is provided by the State Education Department for elementary schools and one for secondary schools. Both of these outlines recognize home safety.

Leaders of youth groups, as well as representatives of the educational system, serve on the committee for youth instruction. Supplemental to the teaching in the schools, the youth groups provide their own safety programs within the organization. The Boy Scouts of America and the Girl Scouts, Inc. teach safety through the achievement of skills, the practice of which is provided in

the troops under trained leadership.

Instructional opportunities are being opened up in industry through the cooperation of the State Labor Department. Wives of employees are expected to be reached, motivated through the importance of keeping the man on the job because of the speed required for the production of war materials. Management is interested in the prevention of home accidents today as never before. A committee, therefore, is at work on the Control of Home Accidents Through Industry.

The Family Doctor

Heretofore the family physician has concerned himself chiefly with the cure of the sick. Today preventive medicine is in the foreground. This brings the physician into the picture of home safety. The old time family physician believes that it is his duty to enter the home only for the purpose of treating the patient. Today's physician takes quite another attitude. The family appreciates it when the physician sees something which might cause an accident and points it out to them. But, aside from this advice the medical profession performs a distinct service in pointing out that persons with certain disabilities as of heart, epilepsy or the like which might cause them to suffer a home accident must not be left unattended. This applies also to young children, and to the very old. Good health habits of nutrition, exercise and relaxation all contribute to the individual's alertness and hence his safe conduct.

A committee of statisticians has been organized to carry on research and studies. One study now underway is made possible through the cooperation of a prominent state organization, the State Federation of Home Bureaus. Those who cooperate in the work will undertake to report in full detail the accidents, both fatal and non-fatal, which occur within their own homes over a given period of time.

Studies in which housewives co-operate are recognized as having definite educational value. It is expected that this method of education will be encouraged among other organizations.

Methods of public information and interpretation are under the consideration of a committee. Working with the committee are

publicity and advertising groups, educators, lecturers, representatives of the clergy and various other professions. Use is made of radio, film, poster and printed word. The interest of the public is created through the various organizations whose sponsorship was promised at the outset of the campaign.

New York State is deeply war conscious and has a strong set-up for civilian education. One of the War Council's divisions is the Office of Public Information. This office has appointed in counties and cities publicity chairmen. A directive sent out on September 2, informed the publicity chairmen that on Labor Day, opening with a proclamation from the Governor, would start an intensive campaign of education in Home and Farm Safety. Kits were prepared which included speech materials, radio announcements, newspaper releases and suggestions for local proclamations by mayors.

Newspaper clippings show that extensive use now is being made of this material in local communities. A second kit of material will be sent out in the early spring.

Health News, the weekly publication of the State Department of Health is the official state organ for the Home and Farm Safety Program. This publication is distributed to a mailing list of over 16,000. The mailing list includes physicians, teachers, librarians, and many others in addition to

health officers, public health nurses and sanitary engineers.

P.T.A. and Grange

The State Congress of Parents and Teachers will follow the safety teaching in the schools to urge more attention to the subject of home safety; this especially in view of the fact that the organization was largely responsible for the passage of the law requiring that safety be taught in the schools.

The Master of the State Grange issued, on September 18, a letter to all subordinate Granges in the State in which he enclosed a pledge for members to sign and post on Grange hall Bulletin Boards, which reads: "We the undersigned (members of _____ County) agree to assume, during the War emergency, a special responsibility to keep on the production line.

"We pledge ourselves to think of safe ways to manage about all farm and home operations; to instruct in safety, our young children, our newly employed help and others who come to the farm or home to work with us.

"We resolve to have fewer accidents in order to conserve the time of physicians, nurses, and hospitals and to keep, at the highest point, our own production of food stuffs to win the war."

Home Safety and Civilian Defense

By COLONEL CLARENCE GOLDSMITH

Chief Consultant, Fire Defense Section, Office of Civilian Defense, Washington, D. C.

Civilian Defense has been defined as the volunteer non-military Army of the United States—recruited, classified, and trained in fighting this war within our own territorial limits. This volunteer army of defense workers already has passed the twelve million mark. About one-half have enlisted in the United States Citizens Defense Corps and one-half in the United States Citizens Service Corps. This mobilization has been accomplished by local Civilian Defense Volunteer offices which recruit volunteers for the Citizens Defense Corps and the Citizens Service Corps. The success of the many national war

programs depends on the immediate availability of an adequate reservoir of volunteers in towns and cities. The mobilization and organization in the short period of 18 months of a group of citizens numbering more than twice the present numerical strength of the United States Army has in itself been an outstanding accomplishment. This success has been attained through leadership at national, regional, state and local levels. The major burden of the work has been borne by volunteer workers at the local level.

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lates the activities of the following branches and divisions, each headed by a chief and staffed by experienced specialists: Administrative Branch, Legal Division, Public Advice and Council Division, Civil Air Patrol Division, Mobilization Branch, Protection Branch and Facility Security Branch. Each branch or division is broken down into sections which handle specific details of the many services.

The Protection Branch of the Office of Civilian Defense develops plans for safeguarding the civilian population against all known or anticipated hazards of enemy attacks. This work is carried on by the Blackouts, Camouflage, and Protective Construction Section; Control and Communication Section; Evacuation and Transportation Section; Fire Defense Section; Procurement and Distribution Section; Training Section; Inspection Section and the Medical Division. The safety of the American home is menaced by war time conditions. The necessary changes in the mode of American life introduce immediate hazards. The possibility of aerial bombing raids is definite and no one can tell how remote the time of such raids is. Time may be shorter than we think.

The United States Office of Civilian Defense was created by Executive Order of the President, and at first it was charged only with the organization of civil protection. But equally vital is the need to prevent loss of human life valuable to the war effort and slowdown of production by fires that may result from sabotage or ordinary causes. And, at this time when we are facing material shortages, replacements in the home and elsewhere must be reduced to a minimum.

As has been stated, fire from any cause is, at this time, an active ally of the Axis. If a cottage on a side street burns to the ground or is damaged by fire, few people connect the incident with our war economy. Yet repair or rebuilding takes material that reduces the Nation's stockpile, to say nothing of the individual direct and indirect losses involved. Even such a small fire helps the enemy as much as if the cottage had been bombed—it is more help, because the destruction is accomplished at no cost to the Axis.

To speak first of civil protection, it should be pointed out that we in this country are extremely fortunate to have time to prepare

for air raids. We are fortunate, too, in having the experience of our allies under actual air raid conditions to guide us in making our preparations.

We need not, for instance, make the error that Britain made when she began planning her civil defenses. Britain had no precedent to help her anticipate the character of the raids which she was later to sustain. Much of her civil defense system was planned to protect people from poison gas. Then, when raids came, she found that fire, not gas, was to be feared most, and her defenses against fire were not ready.

We know now that incendiary bombing has become a tested technique of aerial attack. First caused by such bombing against congested urban areas are the most serious consequence of air raids. Pound for pound, fire bombs are more effective than high explosive bombs. Therefore, a large share of our preparations for air raids is concerned primarily with fire.

This does not mean that we can discount the high explosive bomb, nor that we can forget the possible use of poison gas. It does mean that we can take a thoroughly realistic view of the hazards of air raids and make our plans accordingly.

We have a general picture of what a severe fire bomb attack can be. Britain admitted that one hundred thousand incendiaries were dropped on the German city of Cologne. It is calculated that this number of bombs would start about 3,500 fires. There have been 1,000-plane British-American raids against other enemy targets. If one-half this number of planes, each carrying 1,500 bombs, were sent against an American metropolis, 27,500 fires might be started.

The chief objective in fighting fires started by bombs is to limit the spread of fire as completely as possible. Therefore, the less fuel such a fire can find, and the more the fire is confined, the easier it will be to extinguish quickly. This presents the necessity for making each home as impervious to fire as we can.

How is this to be accomplished? A general answer is found in one of the British A.R.P. publications, which contains this passage:

"Emergency measures against fire consist largely of intensifying precautions that ought to be in force at all times."

That sums it up well. The beginning of fire defense during air raids is found in your own field of work—home safety. It consists of the exercise of measures of fire prevention and fire protection that we all should practice even to be ordinarily safe from fire.

After all, except for the introduction of the fire bomb, air raids bring us no new fire problems; they only multiply the old ones many times.

Accumulations of old furniture, clothing, magazines, and newspapers should be removed from attics and cellars. A bomb would find it easy to start a fire in such stuff, and when fire-fighters entered the place where the bomb had fallen they would be met with a mass of flame from a well-advanced fire.

Flammable liquids, too, should not be kept in the house since they ignite easily and burn with great rapidity.

More important than preventative measures, as far as bomb fires are concerned, is the fire protection equipment available on the premises. Fire extinguishers should be ready for instant use and all members of the family should know how to use them.

Sand is of little value in disposing of fire bombs. So tell your people to empty their sand pails and refill them with water. For the kind of fire that may occur in homes, water, and yet more water, is the best fire-putter-outer there is. Tell them to keep pails or other containers filled with water on all floors for use in pump tank extinguishers or stirrup pumps. And the family garden hose, valuable as long as normal water supplies last, should be kept always ready for action.

The emergency equipment problem is far from being solved. The OCD has purchased, as you probably know, 2,258,000 pump tank extinguishers for distribution to the air raid warden service. The same number of stirrup pumps designed by the W. P. B. will be available for sale in the open market at very reasonable prices. We are convinced, in the OCD, that even more equipment of various kinds will be needed to provide adequate emergency protection against fire.

But these are emergency considerations, about which you will be informed by your local defense councils. Meantime, in your own field of work, through your safety councils, your schools, your industries, and other parent groups, you can make the greatest contribution to civilian defense by teaching the rudiments of home fire safety to the citizens of your communities.

Teach them also how to fight small fires. Tell them about the value of a closed door. An ordinary door will hold back smoke and fire gases and will check the spread of flame for some minutes. Moreover, it will restrict the movement of air, and, without air, fire can only burn slowly. If the door of a room on fire is left open, the intensity of the fire will be quickly increased, and the halls and stairways will act as flues to spread the fire quickly through the building.

Show them how to open a door when it is suspected that fire may be on the other side. This is done safely by placing the foot about three inches away from the opening edge, so the door will be checked and can be closed again, if necessary. The need for this precaution can be appreciated when you understand that hot gases in a room on fire will burst open to let loose a blast of flame, smoke, and super-heated gases if the door is not checked. Show people how to fight small fires safely with fire extinguishers, or other devices. They should stay on their feet, so they can move around a fire, stooping, if necessary to avoid the smoke. They should use the full length of the stream, in order to avoid the heat as much as possible. They should know how to take cover behind a door or other piece of furniture. And in all cases, they should remember to place themselves between an exit and the fire, so they will be able to escape from the room, if necessary.

Tell them, too, how to avoid smoke and heat, how to search a house for fallen bombs or for people who may be trapped.

If we succeed in convincing people that ordinary fire precautions, plus a few emergency measures will make their homes safer during air raids, we will be avoiding another of the pitfalls that slowed up British civil defense.

There is another incentive to keep in mind. If we can make this emergency program

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really function, we will have within our grasp the solution to the most perplexing problem of peacetime—the dwelling fire problem.

Fire protection authorities have been noting for years that the most serious aspect of our national fire problem is the dwelling fire. There are more dwelling fires, and they cause more dollar-damage than fires in any other occupancy. In peacetime there are about 400,000 fires every year in homes of one kind or another, and the losses amount to about \$100,000,000 annually.

One reason for this may be the fact that our homes are, in general, the least fire-resisting of all our structures.

First of all, they are wood, for the most part. We design them so our rooms are placed around hallways, and in the middle of the pile of kindling we build a stairwell. Hallways and stairwells act like chimneys, enabling fire to spread rapidly from one part of the house to another.

Such construction would not be tolerated in a school, a hospital, or similar public building. But it is good enough for our homes, and no one says anything about it.

We can hope, however, that the present interest in fire safety, fostered by the emergency, will mark the beginning of a new era in home fire safety.

By leading people to improve the security of their homes in anticipation of air raids, we automatically will eliminate many of the hazards that produce ordinary fires. There are some indications that this is happening. The fire loss figures for this year show signs of a healthy reduction, and we suspect that this reduction is occurring in part in home fires. In every month since March, the fire losses have been lower by a million or more dollars than in the same months last year. Many authorities believe this is the result of a greater common interest in fire safety brought about by civilian defense.

Fire is not the only dangerous consequence of air raids, of course, though it is the greatest common danger. The effects of high explosive bombs and poison gas also must be considered. But measures to minimize their consequences are almost entirely in the hands

of special emergency services—rescue squads, decontamination squads, first aid squads, and others. However, other aspects of home safety are involved in the situation.

Test blackouts held by many communities and defense areas are not a fair sample of what we can expect. During these tests, few home accidents have been reported, but this is because they have been of short duration—fifteen minutes to an hour or two. People have been content to sit quietly without moving about in their homes during these periods. When blackouts occur night after night, we are likely to become careless, and then we will see an increase in home accidents.

Then it will be up to you as exponents of home safety to provide information that will enable people to live safely through these trying experiences. Here is a whole new field of safety engineering to be explored.

We can take advantage of this opportunity if we are willing to regard home safety as a common problem, one that merits the attention of the best minds we can attract to the field.

Perhaps we need a new approach to the home accident problem. It seems to me the only way to capture the attention of the householder and to make him do something to improve his security is to impress him with the consequences of accidents—the pain and suffering, the financial expense, and the emotional upset he or the members of his family may undergo.

A great deal of time and effort is devoted to teaching home safety. But often enough these efforts fail of their purpose.

More skill, more imagination, more human understanding should be given to the preparation of the home safety message. The safety story must be freshened up continuously or we are going to get boredom instead of interest on the part of the people we are most intent upon reaching.

The Office of Civilian Defense has similar problems. We have the task of maintaining interest on the part of volunteer workers through long periods of inactivity. We have teaching and training responsibilities the like of which have never been encountered before. We have difficulties of organization.

Here again, at these points, the interests of home safety and civilian defense meet.

We can carry out our respective obligations best, in my opinion, if we recognize

these points of interest and cooperate as we can to reach our common objectives. If we take the meaning of home safety in its broadest sense, it encompasses all the purposes of civilian defense.

Controlling Home Accidents Through Industry

By A. BURTON METZGER

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The experience of twenty-five large industries representing over 350,000 employees indicates an average ratio of over twice as much lost-time due to non-industrial injuries than was incurred by industrial injuries over a period of three years. The absence due to sickness varied from five to one, to twenty to one as compared with absence due to industrial injuries.

Considering the question first from a standpoint of expense, there is sometimes a tendency to overlook the economic loss in view of the fact that in many cases employees are not paid for sickness absence or absence due to non-industrial injuries at all, or are not paid for the first seven days of such absence. The fact that the medical expense is paid by the employee also contributes to the impression that such absences are not costly to the employer.

You have undoubtedly heard a lot about the indirect costs of industrial accidents, which average at least four times the direct cost. This is generally accepted in computing industrial accident expense. With a few exceptions, the same indirect costs apply to non-industrial absences, and are definitely present, even though less spectacular and tangible than the direct cost of industrial injuries.

Indirect Losses

We must select and train another employee to replace the absent employee during the period of disability. This costs money as does the lowered production of the substitute employee.

In some plants the personnel is insufficient to permit the assignment of a substitute worker, with the result that production is proportionately lowered. Consequently, in addition to the loss of production, you experi-

ence a loss of profit on the absent employee's productivity.

In many cases, we must add the cost of materials spoiled by the inexperienced employee who is replacing the absent worker.

We cannot overlook the costs of preparing reports covering these cases, as well as the costs involved due to failure to meet schedules.

When the employee returns to work, he may, for a time, be unable to produce to his normal capacity with the result that his services are worth only a part of their normal value.

Regardless of whether the operating department pays his full salary upon return to work or whether the benefit department or similar unit makes up the difference, the cost to the company as a whole is still there.

The over-head cost per absent employee, such as the expense of light, heat, rent and other such items continues while the employee is a non-producer, or, upon his return to work, produces only a part of his normal output.

Our first step to effect a remedy lies in selling ourselves on the need for and the value of a definite program to reduce causes of non-industrial absence.

I am often told that it is difficult, not only to get the industrial health and safety program across but to arouse any interest in non-industrial absence due to the fact that Management is not sold on the question. I have also heard safety engineers complain because they cannot get their executives to come out to meetings such as these.

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ings, if he brings it back to his plant and if he presents it intelligently to his management, it should not be necessary for the higher executive body personally to attend these specialized sessions.

The very fact that you men are here today indicates the interest of your management in accident prevention and health promotion. The only reason management is apparently more interested in production schedules is because the production men have been doing a better selling job.

Management is always anxious to improve business methods and reduce expenses. Reduction of non-industrial absences will accomplish this, but cannot be effected if the safety engineer merely brings back the notes he takes and files them.

Having obtained managements support of the program to reduce non-industrial absences, we must take steps to educate the employees on the economic and humane value of preventing these absences in order to dispel the illusion that industry is interfering with their civil rights and liberties by carrying the health and safety program outside of the plant. The employees must be educated to realize that they are greater losers than industry, and that the program is one of mutual benefit and not one of selfish interest.

Case Records

In order to effectively analyze our problem, it will be necessary to first obtain essential data regarding non-industrial absences. To do this, case records must be kept and these records should include the so-called minor cases. If we limit our records to absences of eight days and over, we are missing the most important part of our job, since it is those cases of seven days or less which lend themselves more readily to action and which constitute the greater number of cases.

Complete records not only provide a plan of action, but help to convince Management of the expense incurred by non-industrial absence.

The case records should include:

- (a) Name of employee. (Repeaters.)
- (b) Department (Effect of location in plant on absence).

- (c) Country of birth. (Racial types.)
- (d) Occupation (Effect of occupation).
- (e) Home address (Geographical location).
- (f) Sex.
- (g) Date of birth (Effect of age on absence).
- (h) Marital status.
- (i) Length of service.
- (j) Rate of pay (Effect on living conditions and recreation).
- (k) Location of accident (High spots in community).
- (l) Cause of accident or illness.
- (m) Nature of accident or illness.
- (n) Proper medical care?
- (o) Date returned to work.
- (p) Record during employment (accident or sickness prone?).
- (q) Suggestions to prevent reoccurrence.

From the above data it should not be difficult to formulate a plan of action based on the information it discloses. A general program should be inaugurated and supplemented by such features as are deemed necessary from the case analyses.

The general program should include:

- (a) Support of management.
- (b) Provide parking lots where possible.
- (c) Physical examination and interview of employees having repeated absences.
- (d) Bulletin boards.
- (e) Literature (Safety council or insurance companies).
- (f) Articles in works newspapers, cartoons, posters, etc. (show samples).
- (g) Plant employee meetings.
- (h) Employee family meetings.
- (i) Safe driving clubs.

(j) Recreational activities.

(k) First aid and health courses. As a supplement to our first aid and health courses, we have distributed to all employees an attractive chart entitled "First Aid Reminders." This chart outlines briefly, yet clearly, first aid measures to be employed in the most common off-the-job emergencies. The back of the chart has a gummed surface which will permit it to be pasted on the inside of a medicine cabinet or similar convenient surface. (Exhibit the chart for the information of the group.)

(l) Home safety inspections and distribution of inspection blanks.

(m) Health questionnaires, which permit self-analysis of health habits.

(n) Active part in community health and safety programs.

Off-the-job accidents are the concern not only of the executives and workers in any individual plant, but also of their families and of the entire community. The costs of

accidents are spread in taxes, in charity hospital service, in poverty and in other losses over the whole people. It is important, therefore, to enlist in the safety campaign every influence which may have a bearing upon stopping accidents, whether in industry, in the home, on the streets and highways, or in other public places.

The same applies to non-company sickness except that the ratio of sickness absence is considerably higher than that of non-company accident absence.

There is no question but that out-of-hour health and safety is a responsibility of the industrial safety engineer. An accident-prone employee off the job is accident-prone on the job. Conversely, an employee who is safety minded at home is a safe worker on the job. An employee in poor health is a poor producer and creates a hazard to himself and to his fellow employees. As long as industry suffers economically through direct or indirect non-company sickness or accident costs, it is not only a privilege of industry but a responsibility to make a definite effort to reduce absence from these causes.

WEDNESDAY AFTERNOON SESSION

October 28, 1942

Presiding:—BURT R. RICKARDS, Dir., Div. of Public Health Education, New York State Health Department, Albany, N. Y.

The Wartime Approach to Home Safety

By DR. IRMA GENE NEVINS

Traffic Engineering and Safety Department, American Automobile Association, Washington, D. C.

Each accident that occurs in the home interferes with the war effort program and is unintentional sabotage. It is the family member; the worker, the homemaker, the bread winner, the more mature person or the child who suffers the injury.

The injury of any person handicaps the war effort program in the following ways:

Victims lose production hours which may

be translated into lessened production of guns, ammunition, planes, tanks and other materials necessary for successful completion of the war.

Men and women lost through accidents are replaced by untrained workers which slows down war production operations.

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war purposes to care for accident victims.

Money is spent for doctors, nurses and hospital bills which otherwise might be used to buy war bonds.

Doctors, nurses, surgeons and other key professional people devote time to accident victims.

Knowledge of an accident to a family member reacts upon the morale of persons in the armed forces.

Why Home Accidents Will Increase

It is impossible to view this situation with complacency and say home accidents will decrease. The present statistics indicate home accidents will be the major cause of fatalities during the year 1942. This may be due to the following reasons:

New electrical appliances are a thing of the past. There will be an increased use of products which are constructed of poor material and it will be possible to get old ones repaired.

Material otherwise discarded will be used to repair products, such as, a thin layer of low grade rubber not vulcanized and which has relatively little mechanical strength for fixing of electrical equipment. Also synthetic materials will be used as a substitute.

The inability to secure materials will result in equipment not being kept in good condition; worn cords will not be fixed; door handles will be left broken.

There will be poor workmanship in the repairing of a product because the expert will be on a defense job or in the armed forces.

More work will be done in the home such as washing, ironing and canning. At the same time more homemakers will be contributing their time and energy to the Office of Civilian Defense, the American Red Cross and other wartime activities, leaving care of the house to younger children or inexperienced help. These folk because of lack of training or inability to cope with home problems will no doubt, have more accidents.

Excessive fatigue and undue haste on the part of women who are performing two-time

jobs—taking care of home and working in defense plants will increase home accidents.

Because of fuel rationing, some folk will have stored gasoline in their basements. This is particularly hazardous now with the necessity of using the heating plant.

A desire to cooperate with the government's request for conservation has caused more women to can fruits and vegetables. Many women have not been doing this and, therefore, lack knowledge and necessary experience which makes for safety and efficiency.

The children will spend more time in the home because of limited transportation facilities. Sunday afternoon rides will be eliminated. Unless special attention is given to this new phase of home living, and to children who are without directed recreation and inadequate play toys, "rough house" situations will develop. This results in accidental injuries, windows broken as well as arms, legs, etc.

The lighting efficiency of the home will be decreased, because of the curtailment of electrical power. This will increase the frequency and severity of falls. Especially is this true on poorly lighted stairways, halls, etc.

More people will clean garments in the home because of curtailment of cleaning solutions to the cleaners as well as increase in cost of cleaning. The safe cleaning fluids, such as carbon tetrachloride, are off the market. More inflammable and explosive cleaning fluids will be used, and accidents will result from lack of care.

Curtailment of certain stimulating foods will produce irritability and nervousness. This will cause a tension and in turn may prevent freedom and ease of movement which may result in accidents.

The curtailment of fuel and the bringing back of older methods of heating will be a factor in increasing accidents in the home.

The victory gardens produced a number of injured backs, sprained knees and wounds in fingers and hands.

Grandmother will "come out of the corner" and assume a home responsibility which has been relinquished, and her inability to

solve problems quickly and accurately will be apparent.

Large groupings of persons in poorly constructed houses in defense areas will no doubt cause an increase in home accidents.

The stress and strain under which the family members are working will cause the misuse of the appliance, which in turn will cause an accident.

A number of situations have been presented which show why there will be an increase in home accidents. From these "causes" one recognizes the fact that the difficulty and manner of correcting them lie in the person's mind.

The Wartime Approach to Home Accidents

Each condition that creates a new home hazard can through constructive planning be eliminated. This necessitates doing something about it by those persons who are acquainted with the problems and then getting the desired information across to the right people. The most difficult part of the home accident problem is getting people interested in doing something about the known conditions which are hazardous.

One of the hopeful signs that something is being done is that manufacturers of some household equipment are doing something through the medium of advertising and are attempting to get the information across. For example, instructive copy is being put out by some heating appliances such as "keep me heating" by proper cleaning, adequate care, and emphasis on be sure and keep the furnace in good condition.

The salvage campaigns have done much to eliminate conditions in the home which were hazardous. The cleaning out of the attic, burning old paper, removing objects which were no longer serviceable yet materials greatly needed, has made the home a safer place in which to live.

The recent regulation governing the heating of homes has caused the home owner and homemaker to be cognizant of a need for making needed repairs. An order from OPA states that the obtaining of distillate fuel oil (homeheating type) is dependent on

insulation character of the house and the efficiency of the heating repairs. Making the needed repairs on the chimney and proper storing of the oil may be the reason the fire did not occur in your home this year.

The wartime approach to home safety emphasizes the need for doing something and doing it now. This war has demonstrated that old techniques must be changed; new and more efficient methods must be used. This is true in the approach to the elimination of home accidents. This new approach is to begin with the individual, the person who had the accident, suffers the pain, loses time from work, endures decreased efficiency, and pays the cost. For this reason, the prevention of home accidents should begin with the person—not the factors found to be significant nor the type of injury received.

Why not study home accidents as the psychologist studies the reactions of the individual according to the interests, needs, abilities and reactions of the mind, or as the physiologist studies the science of the body as manifested in growth and development patterns? There are known characteristics, physical, mental and psychological which are factors in accidents. A study of these would reveal a better interpretation of the human factors involved in an accident. This would give insight into the person's aptitudes, experiences, and skills, his knowledge, attitudes, emotional control and customs.

Recognition of Individual Differences

The recognition of individual differences means assignment to various duties and responsibilities in accordance with the known psycho-physical condition of the family member. I grant you this understanding of individual differences involves a study and appreciation of human conduct, a difficult task yet quite essential to the best type of home living and successful elimination of accidents.

The age and sex of the member of the family should be a determining factor in the assignment of home duties. The more mature member, or person above 65 should not be assigned a job which necessitates quick action or too much responsibility. The same is true of those that are less than five years of age.

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The extreme in age groups constitute the accident-prone individuals. Cognizance should be made of this. The ability of the older person to fall down steps is colossal and for the younger person to contact heat is stupendous. Why can't we realize that to assign a woman of 70 the job of cleaning steps is an invitation to an accident?

Physical defects such as lameness, poor muscular coordinations and visual acuity are hazards and should be recognized the same as a broken step. Compensation should be made if corrections are impossible.

The person who is lame should not be assigned the job of lifting or carrying a heavy object. The person with poor visual acuity should be given tasks which deal with large and easily seen work materials. Many times these persons cannot judge distance, color, speed or size of an object. They do not see the discernible factors which produce accidents such as a broken appliance cord or the uneven height of steps.

One's muscular coordination determines his ability to perform with speed and accuracy. A person with improper timing cannot be efficient in work demanding close observation and minute detail.

One's reaction time, simple and complex, is likewise of importance in assignment of specific home duties. Emphasis should not be placed on one's ability to respond to the situation involving a single answer, but to one in which various problems are presented. The doing of a wash, cooking a meal and taking care of a baby is utterly impossible for a number of people. We hear of this combination being factors in accidents, and frequently it is the baby that is injured.

One's adaptability to the performance of a job should be taken into consideration when assignments are made. In each industry it has been found that certain persons are adaptable to the performance of certain jobs. Others are not. To discover this among the home members would involve a study and investigation of habits, attitudes, emotions of each home member as well as his knowledge concerning the activity. This is quite apparent and through observation one can notice that one person is more dexterous with the use of the sewing machine, while others are always burning themselves each

time they attempt to cook.

In the determination of job analysis, those persons who are required to perform certain jobs and know they are not adaptable to it, should exercise more precautions in the performance of those tasks.

The ability to concentrate on the job at hand should be considered in making home adjustments. It is quite difficult for the smaller member of the family to concentrate for a period of any length on a particular job. Also the older members of the family may forget the job assigned. For this reason jobs which require close attention for a long period of time should be given to those people whose interest span is equal to the time allotted for performance.

The amount of training a home member has had in a specific job is many times an indication of his ability to perform the activity safely.

This brings to our attention the fact that the lack of knowledge concerning safe living within the home is appalling. Performance of home duties is to a large extent based on imitation rather than on correct performance. The homemaker performs exactly as did Mother. This is a fallacy. Today's problems are different; where once producers, we are now consumers. Homes are small, very compact, and unheard of equipment and appliances are a necessary part of labor saving devices. We have accepted these devices without recognizing the need for knowing how to use them. This is not true in industry. When a new piece of machinery is put into operation, the employer knows that the employee selected to run the gadget knows how to operate it. Here we have brought into our homes, various new labor saving devices and fail to give the operator the necessary information for successful and safe operation.

Educational Institutions Have Failed

The educational institutions have failed to assume their responsibilities in teaching the boys and girls how to be safe home members. Too frequently a girl has not been taught that not only must one know how to mix the ingredients to make the cake, but one must know how to light the oven and put the batter

into the oven. Along with this, the children in school should learn that successful home living is based on cooperation. Each person should assume his place in the institution of home; and this involves acceptance of responsibilities in accordance with growth and development patterns. To deny a child the right to help in his home, is robbing him of his birthright. The child should learn to work at school and to help at home.

Today we are in need of teaching the home members to live in their homes. This necessitates instruction to be given to those beyond the school age group. What they need to learn is basic to the elimination of home accidents.

Through the medium of the Home and Farm Accident Prevention Program of the American Red Cross, the Home Safety Program of the National Safety Council, there should be conducted courses which will enable the homemaker to know what should be done to make her home a safe place in which to live.

The Office of Civilian Defense should provide courses in home accident prevention for the homemaker which will enable her to know how to create a safe home environment. This course might be sponsored by the Home Safety Committee of the local Safety Council and offered with the assistance of the utility companies and educational institutions. Instructions should include:

I. Instruction for safe living in the home to be extremely practical and be based on actual living experiences. Such practical courses are as follows:

A. Ways of fixing electrical appliances

1. Fix cords—how to observe projective copper wire through the insulation and then what to do about it.

2. Method of replacement of fuse and means of locating the source of the "blow-out."

3. Technique used in dismantling and locating trouble in electric iron.

4. Method of cleaning and adjusting the vacuum cleaner.

B. Means of cleaning gas stoves and keeping them in good condition.

C. Method of fixing faucets so they will not leak.

D. Use of hammer and nails and method

of fixing the broken step, driving or pulling nail.

E. Methods of repairing furniture. No doubt articles which have been stored in the attic or basement will be put into use and will need to be fixed. Also means of keeping that which is in use in good condition is most essential.

F. Ways in which rugs may be mended. The frayed rug is an invitation to an accident, and many women are unaware of methods of keeping these in good condition.

G. Discussion should be conducted on topics such as:

1. Why one should avoid the use of strong cleaning solutions or gritty abrasives when cleaning fixtures.

2. The reasons for keeping the temperature in the hot water heater as low as practical.

H. Provide special instruction in methods of canning fruits and vegetables—how to use the cold pack method or the earlier cooking methods.

Home Inspectors

Along with specific instruction the women should be trained to be inspectors within the confines of their own homes. Many a tragedy could have been prevented if one only knew how it could be done. There are two specific points to be considered under this:

A. Inspect the physical equipment of the home, such as examination of wiring, outlets, appliances, using existing standards as guides.

Recommendations for this are given in the:

1. Regulations of International Association of Electrical Inspectors.

2. Regulations of the American Gas Association.

3. Standards of the National Board of Fire Underwriters.

B. Provide an opportunity for women to check their own work habits and survey the environment under which they work. Such items include:

1. Check height of work shelf. If too high, provide a bench on which to stand or change height of shelf if at all possible.

2. Place equipment for efficient use, thereby insure safety.

3. Provide adequate lighting for performance of various duties. If the light

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casts a glare over article which is being ironed, it may be an invitation to an accident.

4. Eliminate accident production situations, such as light. Sockets should be so arranged that one does not touch a socket when hand is in water.

5. Provide for proper ventilation of kitchen. Provision should be made for the carrying away of fumes, for many times they cause one to become ill, thereby being accident producing.

6. Eliminate false movements. Some persons actually lose energy because of doing too many movements. Remember to place needed objects in handy position, and have a place for everything and keep everything in its place.

C. Prepare questions for the homemaker to answer relative to conditions in the home.

Examination—Elimination—Evaluation of Hazards in the Home

Questions to be Answered by the Homemaker:

1. Do the members of your family devise and enforce their own safety rules?

2. Is a record kept of all home accidents regardless of their seriousness?

3. Are these accidents analyzed and on this analysis are basic changes in home activities made?

4. Is the home safety program based on the safety needs of the individual family members as determined by:

a. An analysis of the environment in which he lives, including,

(1) The building features of the home

(2) The mechanical installations of the home.

b. An analysis of the knowledge and skills already acquired by the family members and of the attitudes they possess?

c. An analysis of the family member's health handicaps which relate to safety—poor eyesight, poor coordination, general weakness, specific deformities, etc?

5. Do you make an attempt to instill in the family members a feeling of security? For example, act calmly during air raid alert, plan for unusual circumstances and meet them with poise.

6. Do you make discriminating use of the safety resources of the community? Health, fire and police departments.

7. Do you consider it your responsibility to be consciously on the alert for hazards to the family members?

8. Do you accept your responsibility as a good citizen in regard to safety as: strictly observing safety practices on your own property; supporting safety projects as advanced by the officials of the community?

9. Do you recognize the fact that safety begins with the individual?

10. Do you cooperate with the Office of Civilian Defense in the carrying out of all air raid precautions which are essential in keeping your home safe during a blackout?

Home Safety Councils

In order to create interest on the part of each person, it is recommended that each family should form a home safety council. This could be promoted through the employees of a company, asking each head of the family to activate such an organization. The safety director of a company could direct the undertaking. This council could be organized by the local safety council, or through the home accident prevention chairman of the American Red Cross.

Specific suggestions for the conduct of such a program are as follows: The father or mother should call together all members of the family and organize the Jones Home Conference. It might function better if the word safety is eliminated; such a program would be a means of regaining the home comradeship which was lost when there was a decentralizing of the heating unit. This may be a means of getting the family back together as the centralized heating unit is used.

The home safety meeting should be held at a regular scheduled time. At the first meeting discuss the responsibility of each member of the family in keeping the home safe. Secure check sheet blanks from the American Red Cross, National Safety Council, or the National Fire Protective Association and use these to find conditions which are hazardous. For the smaller members of the family there should be worked out a chart which fits his experiences in home living, that is give him a sheet on which is written the name of his personal belongings and the place where they belong. Check should be kept to see that he performs his

tasks daily and is a successful home member.

It does no good to know if the hazard exists if nothing is done about it. The next step is action. Do something and eliminate the condition which may cause you to be

laid off from work and prevent the construction of that gun. Each day lost from work because of an accident may be the cause of death to one of your loved ones. The time is short and we have no time to lose, therefore, the home hazards must be eliminated.

Keeping Household Appliances Safe

By GEORGE W. ALDER

Technical Director, Good Housekeeping Institute, New York City

Relatively the household appliance accident rate is good. That we can say is a tribute to those household appliance manufacturers who, through design and construction, have built inherent safety into their products. Further assurance of the relative safety of household appliances has been given to the consumer public through the work of such organizations as the American Gas Association's Laboratories, the Underwriters' Laboratories in the electrical and other fields, the American Standards Association, and through our own work in the laboratories, kitchen, and laundries at Good Housekeeping, and through governmental divisions, states, cities, and others in their promulgation of safety codes. In spite of these efforts, and because of the lack of preventive laws, it has been possible for poorly designed and poorly constructed appliances to appear on the market. Fortunately they have been in the minority.

Apart from the question of the original safety of a household appliance, there are still the accident hazards that spring from improper use and improper care. Their prevention is the same broad problem that applies to all accident prevention: education to inculcate safe habits, and education to make known what IS proper use and what IS proper care.

We must stress again and again all of the fundamentals—such simple things as how to disconnect electrical appliances by grasping the plug instead of yanking on the cord. We must educate people to know that there is a difference between connecting cords for different services—that there are separate types for heating appliances, for appliances used in damp places, for lamps, and so on. We must stress the hazards of overloading

circuits, particularly now when the installation of house wiring is restricted. We must tell the function that the fuse performs, and stress the fact that when a fuse blows the first thing to do is to find out what caused it to blow, before we try to replace the fuse.

We must stress the hazards of location. Especial care is needed in operating electrical appliances, particularly in damp cellars, laundries, and bathrooms. The toll of bathroom accidents has been mounting because of hazards that are not appreciated, such as taking a portable radio into the bathroom and operating it while seated in the bathtub. In more than one case fatal accidents have resulted from this. With gas burning equipment we must stress the importance of proper adjustment of burners and the need for cleanliness. We must tell, and tell again, the essential facts of combustion and the reason for the need of ventilation. We must instruct women how to know what to do in case of leaks and particularly to seek the services of qualified people to take care of trouble.

Repair of Appliances

In the matter of repairs to appliances, we have to fear the amateur. Most household appliances today, when they need service, need the attention of an expert. If amateur repairing is encouraged, we can look for an increase in the accident rate. Obviously, it is possible for others than experts to make some types of repairs—for example, replacing a plug on a connecting cord. However, even this must be done correctly to insure safety. There will be the necessity because of shortage of manpower to educate people how to make minor repairs to appliances. The essential machinery for doing this may already be available. In many of the schools through-

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out the country there are classes for adult education, under the titles of Applied Electricity or Plumbing or House Wiring, and so on. Obviously, with relatively minor changes in curriculum, these schools could establish classes for adults to teach them how to make those repairs which it is safe for the inexpert to make.

Facing the problem of repairs, many manufacturers of appliances are establishing certified repair depots, and are making this fact known to the general public through their advertising and by other means. Public utilities are assisting their customers to get proper repairs. Their efforts are to be commended and every assistance should be given to them, not only so that appliances may be kept in service as long as possible, but also in the interest of safety. In normal times the cause of safety is furthered through the replacement of appliances because of obsolescence or because they have worn out. We know from surveys that there are many appliances in use that are relatively old, and that either may be or may become hazardous. With replacement out of the picture for the duration of the war, this aid to accident prevention is gone. Herein is another reason for stressing the proper care and proper use. In addition we must not hesitate to recommend discarding unsafe appliances even though they may not be replaceable. Such a program, however, will only be successful if we are able to convince appliance users that safety is a first consideration.

Every conceivable makeshift will be used to eke out the heat supply. Old stoves will be resurrected, smoke pipes will jut through improvised openings in walls, partitions and roofs, fireplaces used only for show will be worked overtime. Fires and asphyxiations lurk in this situation.

People will be taking to bed with them everything from hot water bottles to heating pads and lamp bulbs to try to get comfortable sleep in cold bedrooms.

The temptation to improve will be very strong and it is to be feared that the results may be tragic in too many cases. We must try to anticipate some of these things if we can, but we must be on the watch for the unusual that may find repetition in succeeding cases unless we can prevent them.

I have tried so far in this talk to take a broader view of the prevention of accidents due to the use of appliances. To be more specific, I would like to conclude my talk with what might be called "A short course in keeping safe with your appliances."

Electrical Appliances

Wiring. Makeshift wiring is a fire and accident hazard. House wiring should be done only by a licensed electrician who not only knows the requirements for safety but will put in wiring that is adequate, also, from the standpoint of service and utility. House wiring is not a job for amateurs.

Connecting Cords. Long connecting cords trailing across rooms, under rugs or along baseboards are a fire hazard and a tripping hazard, and for children may even be a shock hazard. Do not allow connecting cords to touch hot radiators or other sources of heat. Use connecting cords of correct types. There are cords for lamps, for heating appliances such as smoothing irons, for washing machines, etc.—each made to do a specific job. When replacing a connecting cord, get the same kind of cord that is on the appliance. If, because of war conditions, you cannot do this, your electrician will tell you of the proper type to use in the emergency.

Keep cords in good repair. Discard badly worn cords. If the outer surface of the cord is damaged, several layers of electrician's tape around the cord usually will make a safe repair. If the cord is badly damaged, do not attempt to repair it.

Fuses. When fuses blow it is a sign of trouble—a short circuit or an overload. Do not replace blown fuses until you have located and corrected the trouble. Do not use substitutes for fuses. Use only fuses of the correct rating for each circuit. The rating in amperes is marked on the fuse. Be sure the fuses are approved by Underwriters' Laboratories. It is dangerous to attempt to overcome fuse blowing trouble by using a fuse of higher rating. The fuse blew because you had too many appliances on the circuit, spread the load of the appliances by plugging them into different circuits.

Connect appliances to appliance outlets, not light sockets. Light sockets are con-

structed only for lighting, and do not have the capacity to supply the power needed by most appliances. Using light sockets for appliances may cause a short circuit or a fire. Disconnect promptly all appliances when you are through using them, especially heating devices such as irons, curling irons, etc. This will help keep the fire department away. Do not operate too many appliances at one time on one circuit. The result may be an overloaded circuit and a blown fuse. At best, appliances do not operate efficiently under such conditions and will cost more to operate too.

Electricity and water or dampness are a bad combination. Avoid handling switches, connecting cords and appliances with wet hands. The use of portable electrical appliances, such as portable heaters, curling irons, radios, etc., in the bathroom is hazardous because water, plumbing and damp surfaces there make the shock hazard extremely great. Bathroom heaters should be of the built-in kind. If you must use a portable heater in the bathroom, place it where you will not come in contact with it and do not touch it when it is connected to the electricity supply. Your electrician can ground the heater by means of a special wire to increase the safety in use. Lights in bathrooms or in basements or other damp places should be operated by wall switches and moisture-proof sockets should be used. If pull-switch operated, there should be an insulating link in the chain or a cord should be attached.

Washing machines. The frames of washing machines and ironers can be electrically grounded to make their use safer in damp laundries. Your electrician can do this properly. Know how to operate your washing machine safely. Know just what all of the controls are used for, especially the wringer release. When you are wringing clothes, give the job your full attention. Do not wear loose clothing that may be caught in the wringer rolls.

Kitchen appliances should be used away from sinks so that it is not possible to touch the appliance and the water faucet at the same time.

Do not attempt to adjust, oil or clean any electrical appliance while it is connected to the electricity supply. Even though

the appliance has a switch to control the operation, pull the plug.

Outdoor wiring and lighting call for lamp sockets, convenience outlets, and wiring, etc., of a special waterproof type. Your electrician will install the proper types of materials.

Electrical toys operated on house current should not be given to children unless you are sure that they are designed and constructed for safe operation. Electrical toys should be inspected frequently and discarded if electrical parts are found to be worn or damaged.

Have appliances repaired promptly. As soon as any appliance shows signs of trouble, send it to a competent repair man. Do not attempt to do the work yourself. A professional repair job is usually not only safer but will help to make the appliance last longer. Even though they appear to be working satisfactorily, it is a good idea to have your appliances inspected at regular intervals by a competent repair man. They will last longer. When cleaning electrical appliances, do not put the electrical parts in water. Follow the manufacturer's instructions. Radio servicing should be done only by competent repair men. Do not tamper with the radio yourself and never touch the electrical parts while the radio is connected to the electricity supply.

Buy approved electrical appliances and equipment. Look for the label of the Underwriters' Laboratories on appliances, connecting cords, wiring supplies, etc. This is your assurance that products comply with recognized safety standards in design and construction.

Bed warmers. Don't use electric warming pads, smoothing irons, or makeshift heaters as "bed" warmers where they will be operated while you are asleep. They can prove a fire hazard or even a shock hazard.

Know how to operate your electrical appliances. Study and keep the manufacturer's directions. Use appliances carefully and don't abuse them. Keep them clean.

Gas Appliances

Leaks. Any odor or other evidence of the escape of unburned gas calls for prompt

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action. Extinguish all flames. Do not use a lighted match, candle, or other flame to find the leak. If the location of the leak, such as open gas cock on the range or unlighted pilot, is not immediately discovered, open doors and windows, notify your gas company, licensed plumber or other qualified service man to locate and correct the trouble. If there appears to be a large leak, get out of the house.

When lighting gas burners have the match lighted and hold it near the burner before turning on the burner cock. If the flame flashes back and burns inside the burner, turn off the gas, wait a moment, and then relight. If the flashback continues, the burner needs to be readjusted and cleaned before further use. The air shutter near the cock of each burner should be kept clean and set to give a regular blue flame. Too little air may cause a yellow flame which blackens pans and wastes fuel. If the gas flow to the burner is properly adjusted, keeping the air shutter clean should give the proper flame.

Automatic lighting of range burners—top stove, oven and broiler—is provided in many modern gas ranges. If it should fail to operate, call your gas company, licensed plumber, or other qualified service man.

Pilot lights of the push-button type on kitchen ranges sometimes go out and allow gas to escape because they need cleaning. This can be done with a fine wire about hairpin size. If the pilot needs readjustment to light all nearby burners, turn the regulating screw to the left to increase the size of the flame, and to the right to decrease it. If the pilot light on your automatic hot-water heater goes out, follow the manufacturer's directions for relighting it, or call your gas company, licensed plumber, or other qualified service man.

Loose burner cocks should be repaired or replaced immediately to prevent leaks, and the danger of being turned on unintentionally.

Keep range burners clean. A clean and properly adjusted burner will give a regular, blue flame. If your range has a "star-shaped" burner and the flame tips become irregular, clean out the small holes on the face of the burner with a fine wire. Once or twice a year this type of burner should

be washed in warm water and washing soda, and dried thoroughly before replacing. Round burners should not be immersed in water, but should be cleaned with a brush and wiped with a wet cloth. When cooking, turn down the heat before you have boil-overs. It will help keep burners clean, and avoid the danger of the flame being extinguished and unburned gas escaping. For the same reason, do not leave pots to boil in an unguarded kitchen.

Gas refrigerators shut off automatically if the flame goes out or if there is an interruption in the gas supply. In lighting the burner follow the instructions on the refrigerator. Adequate ventilation is necessary for the proper operation of a gas refrigerator. The openings at the bottom of the refrigerator, the space behind, and the ventilating screen should be kept clean and unobstructed.

Connect gas appliances with iron pipe or semi-rigid gas tubing. If flexible tubing must be used, make sure it is a type tested and approved by the American Gas Association Laboratories, with special ends designed for use as gas connections. When using flexible tubing, turn the gas on and off by using the cock on the end of the tubing which is attached to the house piping. Then gas can't escape when the appliance is shut off should the tube spring a leak. Do not use flexible tubing which is cracked or damaged.

Venting. Any gas appliance burning comparatively large volumes of gas should be connected to an adequate flue or chimney. Be sure that the pipe connecting the appliances to the chimney is kept open.

Flues on kitchen ranges should be kept open at all times. Do not stuff your range flue with steel wool or similar materials in order to decrease smoke or grease deposits on nearby walls. It interferes with safe, efficient operation. Some grease deflectors or "diverters" with open passages are safe to use, but make sure by consulting your gas company before installing one.

Ventilation is important in rooms heated by gas heaters. Oxygen used by a heater must be replaced and products of combustion gotten rid of. In no case should gas heaters without flues be operated in rooms while you are sleeping.

Buy approved gas appliances. Look for the

seal of approval of the American Gas Association Laboratories before buying. This seal is your assurance that the gas appliance which displays it complies with the National Safety Requirements of the American Standards Association. Do not buy so-called "gas saving" devices. If they had any merit or if they were necessary for effective operation, manufacturers would incorporate them in their appliances. Their use may impair the safe and economical operation of your range or other gas-burning appliances.

Oil Burning Appliances

Scrupulously clean oil ranges, heaters, lamps for best operation and greater safety. Keep wicks trimmed and wick controls operating smoothly. Have damaged parts replaced. Do not fill oil burning appliances or lamps when they are lit. Be sure to use the proper fuel. Adjust the flame height to avoid smoking.

Ventilation is necessary in rooms where oil burning appliances are used. Do not go to sleep in a room with portable oil heater lit. Use care in placing heaters so they cannot come in contact with flammable material or be knocked over.

Coal and Wood Burning Appliances

Flues and chimneys must be kept clear, clean and in good condition. Draft and damper operation must be understood for safety as well as for maintaining proper fire. Particularly at night, when the fire is banked, they must be adjusted to make sure that coal gas will not escape into the house.

Keep children away from appliances of all kinds. Never leave them alone in rooms with auxiliary heaters or in the kitchen while cooking is going on or in the laundry when laundry appliances are operating. Put electric fans out of reach.

A Report of Progress

By STANLEY H. KERSHAW

Director, Home and Farm Safety Division, National Safety Council, Chicago

At the last National Safety Congress, a year ago, I presented to you some indication of the status of home safety, and ventured to explain briefly what might be the trend of the Council's work in that field.

We were then engaged in the early stages of a study to determine what might be the logical method of approach to the problem. Subsequent events have served to justify this study and to demonstrate that its conclusions were sound.

While a comprehensive report has recently been presented to the Council's executive committee, which authorized the study and provided the funds with which it was to be made, this is, by no means, an indication that the study has been completed. The task is so large and has so many ramifications that I dare say it will be many years before any of us can claim to know all the answers. We do know now, however, enough to proceed with a national program of home safety work. The urgency of war demands immediate action.

Now, before proceeding too far with a discussion of current problems and methods of dealing with them, permit me to remind you that we were not actually at war a year ago. During the past twelve months we have been witnessing the rapid conversion of the country to a war-time state of activity. Millions of men and women have been recruited from the homes of the country to serve in the armed forces or to work in the war industries. Huge war plant communities have sprung up in many places at an unprecedented rate of speed. Great masses of our population have shifted from place to place. For instance, do you know that 3,000,000 women are, at this very moment, at work on our production lines and that a year from now, it is estimated, there will be close to 15,000,000?

The building of private homes has virtually stopped and in its place great housing projects have developed with mushroom growth. In many localities circumstances have forced people to resort to makeshift housing facilities. And the large centers of population

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with normal housing capacity during ordinary times have become overcrowded. You folks must know of the deplorable conditions caused in some places by the conglomerate trailer towns and shack communities.

In addition, the production of household equipment and appliances has practically ceased and the heads of the American household are confronted with the problem of getting along with what they have. Furthermore, people are having to readjust themselves to other new conditions, many of which are hardly conducive to safety.

The farm home has become the center of agricultural business and production problems of no small proportions. Many of the children, housewives and old folks on the farm are no longer free to live a normal life, for all must work who can, and the end of each day brings a weary group together to do the final chores and to plan work of another day.

Changed Conditions

We must not lose sight of the fact that we are facing conditions which have changed radically from what they were a relatively short time ago. Those who have not gone to war must adjust themselves to the required work on the home front and similarly, those of us who are concerned with the prevention of home accidents must adjust ourselves to the changed conditions. We must necessarily think in terms of the demands of war. Normally, we would plan to develop a long time national program of home safety work, but now we must think of it as one of the very essential parts of the war effort and act accordingly. We must make our efforts felt at once, not three or six months from now, but right now. This program must be accelerated beyond all previous conception. Let the distant future bring what it may! We can only trust that what we do now will lead to lasting results and fit into a long-term program.

It is going to be essential that every single person connected with this movement to conserve manpower for warpower be inspired by that intangible something which makes it possible to take that one more step and to launch that one additional program of accident prevention.

It is necessary that we put to work every known method that has proved effective. We

will have to discover new ideas as we go along. We cannot take time for much experimental work.

This is far from being the picture I'd like to present to you, but there is no alternative and I am sure you would prefer to have me present the facts.

It was quite apparent a year ago that the task is too large for any single organization to accomplish with direct methods, and that it must be met with the cooperative effort of hundreds of existing agencies—and when I say “cooperative effort” I mean genuine activity which will produce results.

First Nation Home and Farm Conference

It was this observation that led to the planning of the First National Home and Farm Safety Conference which was held in Chicago on February 17 and 18 of this year. This was an exploratory conference and it is no secret that its underlying objectives were: (1) to get some idea of what organizations would respond immediately, and (2) to do some preliminary planning work.

Close to a hundred national organizations were represented at this conference which, to me, was an impressive testimonial of the broad humanitarian spirit that underlies the activities of so many of our national institutions.

The constructive effects of this conference will always be a source of amazement. I suppose it would be impossible to bring so many fine people together without beneficial results, but I am frank to say I did not think it would touch off so many good activities in so many different directions.

I cannot enumerate all of these activities to you, for fear of giving the impression of claiming too much credit for the conference, but there is one in particular which promises to provide the solution to many of our problems, and it deserves your earnest attention. I speak of the development of state home and farm safety conferences.

Mrs. Hendriksen, who attended the conference as a representative of the New York State Health Department, returned to her State headquarters with the idea that if a national conference was good for the Nation as a means of bringing the National organizations together to plan programs, why

wouldn't a similar conference be equally valuable to launch a state-wide program of home and farm safety work.

She met with very sympathetic response from her superior officers and plans were soon under way. Not long after a conference was held in Syracuse with an attendance of 196 representatives of approximately 70 organizations, appropriate exhibits and enthusiastic sessions. The response was so favorable that the committee which planned the conference voted unanimously to make it an annual event, and ten standing committees were appointed to develop logical, sound and speedy ways of carrying the work to the people in the counties and communities.

The state home and farm safety conference idea has since met with enthusiastic response in other states. A very successful conference along similar lines was held in Lincoln, Nebraska, on October 2nd, under the sponsorship of the Agricultural Extension Service; another is scheduled for New Jersey to take place in Trenton some time in November; still another is receiving consideration in Pennsylvania and I could mention numerous other states where the seed of the idea has been planted and is beginning to take root.

I do not mean to indicate that the conference method of dealing with such problems is entirely new. The Farm Security Administration initiated and planned two very effective farm safety conferences, one in the state of Washington, and another in Minnesota where it was held jointly with the Minnesota Safety Council. Furthermore, farm safety sessions and numerous home safety sessions have been held under the auspices of state and community safety councils in many places in times past. However, what I do mean to indicate is that the National Conference seems to have given impetus to the idea of the conference method of attacking the home and farm safety problems on a broader scale than ever before and promises to be a means of more speedily arousing a safety awareness throughout the nation.

From now on we must sacrifice periods of study for action, putting into practice what we know should produce immediate results.

Action Needed

After all, we have but two ultimate ob-

jectives, namely: (1) to arouse a safety consciousness, and (2) to teach people how they can avoid accidents. In order to accomplish these, it will be necessary to weave a web of safety influence, so that no matter which way a person turns, he will be reminded of the importance of his personal safety.

Of course, no conference means very much if those who participate in it do no more than display an interest in the proceedings. Every such conference must be made to bear fruit in the form of substantial activities and we must find ways of bringing this about.

I can assure you that I mean no offense when I say to you who are here today that I cannot help wondering how many of you will return to your respective headquarters and immediately put into practice the many things you have learned at this Congress. I believe, very sincerely, that you people have every intention of doing just this, but I am sure you will appreciate the point I am trying to make. With this tremendous and very urgent war-time job ahead of us we cannot be content with talk; we must have action.

You have all probably become familiar with the Council's effort to raise a substantial fund with which to project its work into the fields where it will do the most good in this emergency. I can announce to you now that the availability of some of this money has made it possible for the Council to enlarge its staff and to plan a program which will be far reaching in its effect.

The staff of the home and farm safety division has already been increased to enable us to proceed with the expanded work. In order to use this field staff most effectively, we have divided the country up into seven regions, and field representatives have recently been assigned to several of the regions that demand immediate attention.

Through the efforts of these field people we hope to be of greater service in promoting more widespread activity and in giving helpful advice to those already actively engaged in the work.

We hope to establish closer relationship with many of the national, state, county and community organizations desirous of participating in the work, and to help them plan

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their work along lines that will fit effectively into the war emergency program.

Already we have in production certain program aids in the form of instructive and educational literature, and will soon present to you a small magazine which will keep you informed of what is going on throughout the nation in home safety work, and what methods are being used with success here and there.

Our statistical division is enlarging its staff to enable a more comprehensive study of the home and farm accident experience of the nation. This alone will be very helpful in supplying the facts upon which effective activities may be founded.

Special Committee

In all this new development work, we shall have the guidance of two top advisory committees, which are meeting for the first time here this week. These two committees are, a Home Safety Advisory Committee and a Farm Occupational Safety Advisory Committee. Both of them are composed of representatives of various leading national organizations whose participation will assure the development of a sound and practical program of work.

I cannot say to you that what we have done to date with your fine help has actually prevented accidents—no one knows. However, I do believe very sincerely that there has already been considerable progress toward that end. The contacts I have made, the conferences I have attended and the cor-

respondence which comes to my desk, including hundreds of inquiries for helpful information from all parts of the country, all seem to me to be a positive indication that we are on the right road and that we are developing more and more momentum.

If it were only possible for each of you to accompany me or one of our field representatives out into the field, or to sit with me in my office and read some of the many sincerely enthusiastic letters received from those who are participating actively in the work, I am confident you would be elated over the fine response and cooperation which appears to be everywhere in evidence. I can say to you with all sincerity that, in all my years of experience in safety work, I have never seen a time when there was such widespread appreciation of the need for the prevention of accidents and such eager desire to do something about it.

There are literally thousands of people throughout the country who are willing and ready to volunteer their efforts in behalf of home and farm safety and who need only be shown the way. It is up to those of us who know the way to speed up our efforts to get that information to them and continually to enlarge the circle of volunteer workers. After all, it makes little difference whether we do it by the conference method, by personal contact, by including it in the programs of activities of far-reaching organizations, by the distribution of literature, by teaching it in schools or by carrying on extensive correspondence. The main thing is to do the job and to do it well. We must have action.