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Need for protective clothing and equipment in small workplaces

by ANIKA VAARANEN, R.N.,¹ TERTTU KOLIVUORI, R.N.,² KITTA ROSSI, R.N.,³ MATTI TOLONEN, M.D.,¹ and JUHANI HASSI, M.D.²

VAARANEN, A., KOLIVUORI, T., ROSSI, K., TOLONEN, M. and HASSI, J. Need for protective clothing and equipment in small workplaces. *Scand. j. work environ. & health* 5 (1979): suppl. 2, 21—23. Some kind of protective clothing and personal safety items was needed in 90 % of the 163 workplaces surveyed. Protective clothing was used in 31 %, ear protectors in 28 %, eye protectors in 22 %, respiratory tract protectors in 18 % and other safety items in 1 % of the firms. Gloves were the most commonly used type of protective clothing. Protection against risks was proper in one-fourth of the firms, satisfactory in half, and poor or lacking in the rest. Ninety-five percent of the protectors available were appropriate, but only in a few companies were they properly cared for. Seven (12 %) industrial firms, 15 (20 %) service establishments and 1 (7 %) other firm lacked proper protective clothing or safety items. Faults were generally attributed to insufficient knowledge or negligence of responsibilities on the part of the employers. Management should provide more appropriate instruction for workers in the use and, particularly, the maintenance of personal protectors. To be effective, the inspection of the appropriateness of the protectors requires suitable training. This training should also be received by the staff providing occupational health services. Visits to workplaces, as well as health examinations, provide an opportunity to discuss protection and to advise employers and employees on protection. The problems of protection against harmful exposures is closely connected with health counseling. Yet, the provision of proper protectors and the supervision of their use is still the responsibility of the employer.

Key words: occupational health nursing, personal safety items, protective clothing, small enterprises.

The Labor Safety Law of 1958 stipulates the following with respect to protective

equipment: When other sufficient measures cannot be taken to prevent an accident or a disease or such measures cannot be reasonably requested, the worker must be provided with pertinent personal safety equipment.

The employee must follow the safety instructions, and he must use the safety items offered to him in order to prevent an accident or ill health. He also must report the faults and defects in the safety equipment, and he must carefully maintain his personal equipment.

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THE WALK — THROUGH SURVEY

In all the 163 workplaces surveyed (1), the occupational health nurses checked whether or not the jobs required the use of safety items. They also checked and recorded the available equipment and its pertinence on one hand and the use, maintenance and storage on the other.

The protective devices were divided into the following five basic groups: 1. respiratory tract protectors; 2. ear protectors; 3. eye protectors; 4. protective clothing including head, hand and feet protectors; and 5. safety belts and lines. The protective clothing or suits of workers handling foodstuffs were considered separately.

Exposures requiring the use of personal protectors were recorded. The need for protection and the availability and pertinence of the safety items were rated according to the scoring system presented in table 1. The use, condition and care of the safety items were also evaluated, and each was given a score of 0 to 5.

RESULTS

Need of protective clothing and equipment

Protective clothing and equipment were considered necessary in 146 places of work (89 %). Only two firms complied with the requirements totally. Safety items were not provided at all, or they were improper, in one-third of the workplaces surveyed (table 2).

Employees handling food needed protective clothing in 31 establishments, six of which were industrial workplaces and the rest were shops.

Thirty-six industrial, 48 service and 11 other (73 %) places of work had appropriate protective items. Twelve percent of the industrial, 20 % of the service, and 7 % of other workplaces lacked protective clothing or equipment.

Available protective clothing and equipment

The most commonly available items were protective clothing and ear and eye protectors (table 3). Ear and eye protectors were the most frequent in industry, whereas protective clothing was the most needed in service vocations.

Gloves were the most frequent type of protective clothing, ear muffs the most frequent type of ear protector, and goggles the most common type of eye protector. A dust mask was the most common respiratory tract protector.

Personal protection was good or satisfactory in 74 % of the workplaces and poor

Table 1. Scoring system used for protective clothing and safety items.

Score	Safety items
0	Appropriate
2—4	Improper
5	Lacking

Table 2. Availability and pertinence of protective clothing and equipment in the 163 surveyed industrial, service and other types of workplaces.

Protective items	Industry (%)	Service (%)	Other (%)
No need	—	—	—
Proper	63	65	73
Improper	25	15	20
Lacking	12	20	7
Total	100	100	100

Table 3. Available protective items.

Protective item	Firms	
	N	%
Protective clothing	81	31
Ear protectors	73	28
Eye protectors	59	22
Respiratory tract protectors	48	18
Safety belts and ropes	4	1
Total		100

or lacking in 26 %. Adequate maintenance programs, including inspection, cleaning, repair, and storage of the devices, had been established only in a few places of work.

DISCUSSION

Protective clothing or equipment was considered necessary in most industrial and other places of work. Protection was proper in a quarter, satisfactory in half, and inadequate or lacking in one-fourth of the establishments. The faults could not be attributed to the commercial shortage of equipment. Evidently the defects were due to insufficient knowledge and the general ignorant attitude towards labor protection in certain places of work. This impression was confirmed by the notion that personal protection was also properly arranged in those firms paying attention to labor protection as a whole. Therefore, before proper protection can be assured, appropriate information must be provided for the employers, foremen and workers.

The inspection and information related to personal protection is closely associated

with first-aid preparedness and job-related health counseling. Even in this respect the official inspection is the legal obligation of the labor inspectorate, and this survey indicates that it should inspect the availability, use, maintenance, and storage of personal safety equipment more efficiently.

Labor protection should be an integral part of work itself. Therefore the worker himself must be made aware of possible hazards, and he must be motivated to take care of his personal protection at work. The staff providing occupational health services can participate in establishing and maintaining proper personal protection in that they can evaluate the need for certain protective devices and notify management, supervisors, safety personnel, and individual workers about health aspects associated with personal protection.

REFERENCE

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