

Occupational health aspects of forest work in steep terrain

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Abstract:

Forest work in steep terrain is very physical labour. Workers need to be in a good state of physical and mental health. In fact the work people who can cope with the requirements (selection effect). Employers face a specific responsibility in assessing the workers ability in the everyday business using common sense.

Keywords: heavy labour, physical and mental requirements, employers, use of common sense

1 Introduction

Working in steep terrain requires good physical and mental health as a prerequisite. A basic health check can be useful to rule out major health problems. It is, however, not legally required in Austria. I would like to stress the importance of the use of common sense by employers and the importance of a good relation within the work force. It should be sufficient to ensure the health and safety of the workers.

2 Scope of forestry work

Forestry work is permanent outdoor work which means that people have to deal with heat, coldness, wetness and windy conditions and cannot choose their environment. There is a certain hazard of infections eg. tick born diseases as borreliosis or encephalitis. The environment consists of steep sites up to very steep sites. On the same time it means working on shaky ground (e.g. stones, holes, wood) with additional obstructions like e.g. rambling briars. The biggest health problem is caused by manual lifting, but also forced postures and stooped postures stress the musculoskeletal system. The walking and standing in the slope needs good ability for balance. Additionally the personal safety equipment (helmet, ear muffs, cut protection trousers, gloves – sometimes if necessary breathing protection) bears some effort in using it. The working tools are vibrating and noisy. Time is a crucial factor as most of the work is contract work.

3 Physical requirements for occupational aptitude

Basic requirement for this work is fitness (bodily and mentally). Workers should be free from giddiness and have good vision and acute hearing. In Austria there is no obligation for a specific medical exam to assess the workers' capabilities to meet the physical requirements.

4 Employers are of crucial importance

According to the Council Directive [89/391/EEC](#) Employers are obliged to ensure the safety and health of workers in every aspect related to the work and to evaluate the risks to the safety and health of workers

inter alia in the choice of work equipment, the chemical substances or preparations used, and the fitting-out of work places. Where he or she entrusts tasks to a worker, the employer has to take into consideration the workers' capabilities as regards health and safety. It is essential that they ensure those working on steep ground sites have received the necessary training and have sufficient experience using the chosen equipment on steep slopes.

Most training should be and will be provided "in-house" and the workers' experience of working on slopes should be built up gradually! Communication is very important. Workers should report right away if they perceive that their work is outside their capabilities (or the capabilities of their machines.)

5 Written regulations for physical requirements

In Germany exist "Unfallverhütungsvorschriften UVV" e.g. regulations for the prevention of injuries which call for a formal medical assessment of every worker before his or her first employment. Additionally exist guidelines for the medical assessment e.g. before the start of dangerous work with trees or danger of falling. This one is called "G 41 Arbeiten mit Absturzgefahr" (Work with the danger of falling from heights) and can be made in addition to the basic check. The exam is not obligatory but we notice a factual obligation even in Austria as employers in Germany ask the exam as a prerequisite for hiring a worker.

G41 comprises various tests:

- Patient history
- Urin tests
- Blood pressure, lung function, ECG
- Ergometry if older than 40
- Control of hearing and vision
- Exam of musculoskeletal system
- Neurological tests

It also specifies which diseases forbid to execute this kind of dangerous work:

- Diseases of the cardiovascular system with loss of ability of regulation and performance
- High blood pressure
- Chronic inflammatory diseases
- Musculoskeletal disorders
- Disorders of the nervous system (central and peripheral)
- Epilepsy
- Addiction (alcohol, drugs)
- Depression
- Pulmonary diseases with functional impairment
- Complicated diabetes mellitus

- Defective vision
- Relevant skin diseases
- Relevant hearing impairment
- Hernia

6 Recommendations

Occupational physicians can use the recommendations specified in G 41 for an assessment if required. The most important feature, however, is the non-medical assessment by workers and responsible managers. Health status is not a permanent quality of a person but a changing and adapting one. Training, experience and communication are of utmost importance. The personal perception of day-to-day fitness has also to be taken into account for the assignment of specific work load.

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