

Cost of Agricultural Injuries and Occupational Diseases in Finland

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Summary

Background: Although agriculture is one of the most hazardous industries, the costs of agricultural injuries and illnesses are not well known.

Objectives: This study aims to characterize compensated agricultural injury and illness costs in Finnish agriculture and to identify risk factors for high claim costs.

Methods: The annual costs to the workers' compensation insurance system were quantified from 1982 to 1999. Claims occurring in 1996 (n=10,922) were used for assessing cost characteristics and risk factors. The *t*-test, chi-square test, and General Linear Models procedures were used in the analyses.

Results: The total insurance cost in 1996 was €23.5 million Euros, which is 0.7% of the national gross farm income and 2.2% of the net farm income. The cost consisted of medical (16%), lost time per diem (37%), accident pension (23%), survivors' pension (3%), impediment allowance (7%), rehabilitation (6%) and other costs (9%). The mean cost of 1996 claims was €1340 for injuries, €6636 for occupational diseases, and €1743 for both. Only 0.6% of the claims led to permanent pension, but the present value of the permanent pensions was 23% of the total injury and illness costs. Women had a higher risk of permanent pension compared to men (RR=1.8, CI: 1.1-2.9), and occupational diseases had a higher risk of permanent pension compared to injuries (RR=6.9, CI: 4.2-11.4). The most costly health outcomes included asthma, hypersensitivity pneumonitis, brain and spinal cord injuries, amputations, dermatitis, and bone fractures. High-cost causes included biological and organic dusts, large animals, floors and walkways, slippery and uneven terrain, sudden movements, scaffoldings, ladders, stairs, wagons, saws, wood splitters and chippers, tractors, power take-offs, and repetitive motion.