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Agriculture: accident-prone working environment

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Abstract

The article presents the analysis of agriculture as working environment prone to accidents. A questionnaire has been used for the evaluation which included 15 questions for establishing causes of accidents at work in agriculture. Studies have shown that haste, mess and failure to comply with basic safety rules is the most common cause of accidents. It is therefore necessary to raise farmers' awareness about the risks of accident.

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1. Introduction

Working on a private farm is considerably different to working on an industrial farm. It can be described as seasonal and it entails frequent changes of performed activities as well as conditions in which they are performed. It takes more than 12 hours a day for people working in the countryside to do their tasks whatever the season and weather conditions (Pawlak and Hołaj, 2012; Cież, 2010). Their workplace is not only the house but also the yard, farm buildings, the field and sometimes ponds. Farmers changing their workplace, the level of its mechanization, working tools and daily working time change, which along with the exposure to many hazardous mechanical factors including thermal, dust, biological and chemical ones, leads to fatigue and increases the risk of an accident (KRUS, CIOP, 2015; Juliszewski, 2007; Nowakowicz-Dębek et al., 2011; Nowakowicz-Dębek et al., 2014; Pawlak et al.,

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2013). The act of social insurance for farmers defines an occupational accident as an unexpected occurrence caused by an external factor which happened whilst conducting an activity on a farm, on the way from the house to the farm and on the way back, as well as during usual activities conducted away from the farm but connected with the farm (Dz.U., 2009; Dz.U., 2015). In the year 2014 21,939 accidents were recorded in agriculture in Poland. One-off compensations were paid, for damage to health or death accruing from occupational accidents, to 15,649 cases. The number of accidents is smaller compared to 2013 (6.1% decline), however, the overall number is still high (fig.1). KRUS statistics (2015) show a downturn as accidents with children are not recorded.

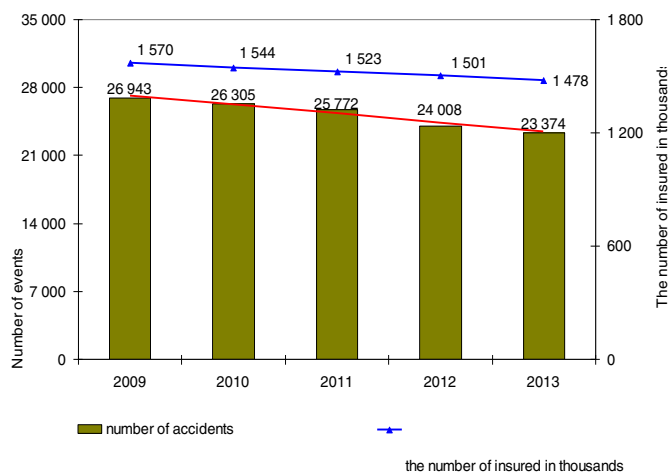


Fig.1. Number of farming accidents between 2005 and 2014 (KRUS, 2015)

According to statistics, most fatal accidents happened due to ‘being run over, being struck, being caught by a moving vehicle’ and ‘falling’ – 15 victims, ‘falling objects’ – 14 victims, ‘sudden attack of illness’ – 11 people, but the cause of fatal accidents mentioned was mostly badly organized work (GUS, 2014). Taking into consideration types of incidents, most people were injured because of ‘falling’ – 7,647 (49 % of all one-off paid compensations), ‘being caught or hit by moving parts of machines and devices’ – 2,047 (13.1 %) and ‘being hit, crushed or bitten by animals’ – 1,867 (12 %).

Statistics show that there is no voivodeship (territorial unit) in Poland where there have been no recorded agricultural accident. There are still a high number of accidents in this economic sector. This is why a detailed analysis of this particular work environment has been conducted.

2. Material and methods

The analysis was conducted amongst farmers running medium-size and small agricultural holdings in central and eastern Poland. An independent survey was used to conduct the analysis; it included 15 varied multiple-choice questions, open questions, yes/no questions. The questions were arranged into thematic sections: principles of OHS, training, maintenance of machines and equipment, use of personal protective equipment, causes and effects of accidents. The group of respondents selected for the study consisted of 100 farmers aged 20-48. The results were analysed statistically.

3. Results and analysis

Taking preventive actions leads to raising awareness concerning hazards occurring in a farmer’s work environment. Access to information about prevention measures and their usage at work indirectly causes the

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