

# APPLICATION OF COMPUTERIZED RECORDS OF LABOR ACCIDENTS

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#### **Abstract:**

Working injuries introduces a serious problem in the existing relationships between employer and employee. This alarming negative event has an increasing character in conditions of Slovak Republic in recent years. The number of vital working injuries increases from year to year as show appropriate statistics. The employer's liability is defined by existing legislation: Act no. 311/2001 of Statute from Labour Code, as amended.

### 1. INTRODUCTION

Working injury represents an adverse event as a result of danger occurring it the workplace. On the basis of Law No. 124/2006 on the safety and health in the workplace and on the amendment of certain laws results the obligation of the employer's to implement the process of risk assessment in the workplace. In the case of existing risk factors must be all measures of technical, organizational and teaching character eliminated and / or must be achieved an acceptable level of risk. With the regard to the occurrence of the injury in a workplace the employer is required after notification to make the necessary arrangements to prevent further threats of health or of lives of employees. In paragraph 17 of this Act is given duty of the employer to register the working injury which caused the employee incapacity lasting more than three days, or death of an employee which results from an injury in the workplace, so that [4]:

- finds out the cause and all circumstances of its emergence, and with the participation of an employee who suffered a registered injury in the workplace, if possible with regard to his health status, and with the participation of the competent representative of employees for security in the case of death, severe injury or if estimated or actual duration of incapacity is at least 42 days (a serious working injury). The employer is obliged to invite for identification of the causes also certified security technician,
- writes record of the registered working injury, not later than four days after the notification of the emergence of a registered working injury,
- ♣ adopts and implements the necessary measures to prevent recurrence of similar working injury.

  In addition as to the registration of serious working injuries results the obligation for an employer to keep records [4]:
- of working injuries, stating the data necessary for making up a record of the registered working injury when the consequences of an injury in the workplace will show later,
- of other injuries such as working injuries and dangerous events, while stating the details of the cause of the emergence of an injury and also of taken and implemented measures to prevent similar injuries and incidents,
- of granted illnesses resulting from profession, indicating the details of the cause of emergence, the adopted and implemented measures to prevent the same or similar disease resulting from profession.

## 2. DRAFT OF ENVIRONMENT FOR COMPUTER RECORDS OF WORKING INJURIES

On the basis of a draft knowledge system developed in our workplace, carrying out the selected assessment methods and risk assessment was designed the separate module which applies records of working injury in accordance with the requirements defined by legislation. The aim was to create a



system for comprehensively evaluating technical and human risks arising in the workplace with the possibility of the draft provisions to allow the maintenance of risk in the range of its acceptability.

Based on the chosen development platform, it appears advantageous to use the relational database features in the design of custom forms implementing action resulting from the obligation to keep records of recorded and registered working injuries. With the knowledge system it is possible through the item menu *Working injuries* to activate the appropriate forms for keeping records of injuries in the workplace (Fig. 1).

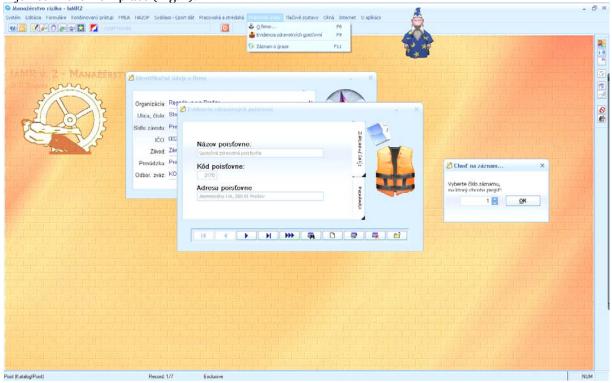


Fig.1 Identification data about the company and Evidence of health insurance

In the form *Identification data about the company* (Fig. 1), identifying information about the company is completed, in which this system is used and in which the injury occurred. This information includes data such as organization name, address and business address, registration number and other basic information. Evidence of health insurance form (Fig. 1) allows applying records and the characterization of the appropriate health insurance.

After activation of form *Records of injury at work* (Fig. 2) is initiated an item *View results on injury*, which contains two items - *View recorded injuries* and *View registered injuries*. After clicking on one of these buttons records will be filtered by selection criteria, and it initiates the environment of *Records of injury at work*.

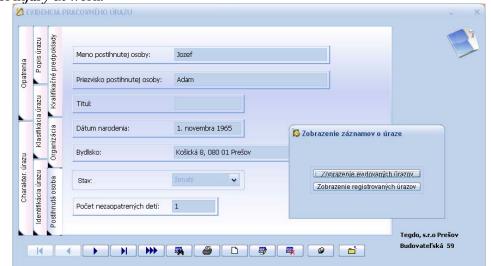


Fig.2 Dialog interface of Work-accident evidence form - information about the affected person

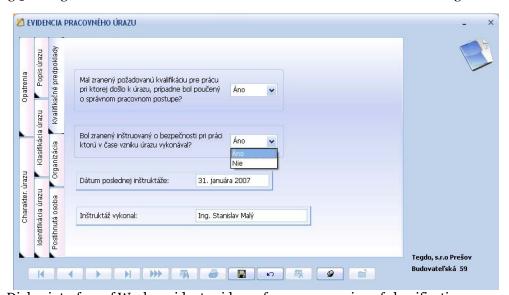




In the Affected person tab (Figure 2) the user fills out personal information about an injured person such as name, surname, and title, date of birth, residence, marital status and number of dependent children. In the tab State user can select from predefined options in the drop-down menu. Tab Organization (Figure 3) contains information concerning the relationship between employees who suffered injury, and employers or workplace, where the injury occurred. In the item Is hurt disabled the user selects from two options in the drop-down menu. If Yes is selected, one chooses an insurance, where the injured is insured. Otherwise appears the alternative Without insurance. Data in the section Eligibility (Figure 4) are designed to verify an employee, whether he had or did not have the required qualifications for the work, whether he was instructed on the proper work procedure and completes the instruction on safety at work, which he carried out at the time of the emergence of the injury. The user has available two options of type Yes / No of drop-down menu. If the injured person did not complete the instruction, the field Date of last instruction cannot be filled.



Fig. 3 Dialog interface of Work-accident evidence form - Information about organization



 $Fig. 4\ \ Dialog\ interface\ of\ Work-accident\ evidence\ form-processing\ of\ classification\ assumptions$ 

In the tab *Identification of the injury* shall be filled the basic information on the nature of any injury. In the section *Classification of the injury* (Figure 5) the resulting event is described. It is important to establish a *Classification scheme of causes of injuries*, when it is necessary because of statistics to classify injury features (sources and causes). Determining the cause is realized by selection of the appropriate class via the drop-down menu.



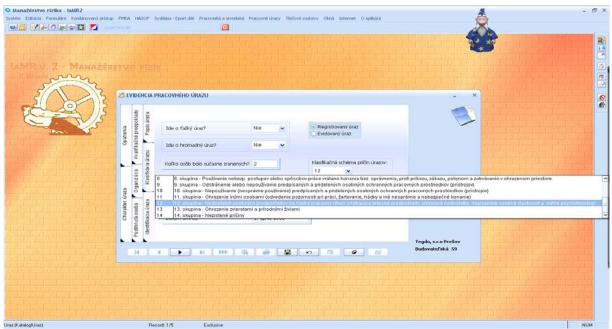


Fig. 5 Dialog interface of Work-accident evidence form – classification of the injury

One proceeds similarly with the tab *Description injury* in the determining of statistics of the injury source. The scheme of sources of injuries contains 11 fundamental groups designated for the purpose of the records of roman numerals I. - XI. Within these basic groups, the sources of injuries are divided into subgroups.

The section *Measures* provides the user with a set of technical, organizational and educational measures to eliminate the sources and causes of the emergence of work-related injuries. Output of an established record of an injury in the workplace is generated in the form of press kits, when for the registration of working injuries the structure of this record is created in accordance with the requirements resulting from the Decree of Ministry of Labor, Social Affairs and Family No. 500/2006 of Statute establishing the model for a record of a registered working injury.

### 3. CONCLUSION

Organizations must continuously identify and monitor sources, causes, frequency and severity of injuries in the workplace, because these basic data about injury action allow to perform the necessary analysis about the status and the development of the working injury; they also identify concrete arrangements for the prevention of the emergence of the working accident. These preventive measures help to reduce working injury in companies. One of the tools that helps to reduce a degree of working injuries in the workplace, is their record. For this purpose were created and decribed the form and the environment for the processing of recorded and registered working injuries with the possibility to print a record of the injury – with the use of applications knowledge system. These forms makes more effective the implementation of steps in the writing of records about working injuries. Thanks to them, up to now lengthy operation became significantly easier and clearer. It shortens the processing time of completing registration process from recording of injury to the registration into the system. Environment designed for recording and registration of working injuries may be used by any entity for their needs.

### References

- [1] HAPÁKOVÁ, A: Informačné systémy pre manažment. Fakulta manažmentu PU, Datapress Prešov 2008, 60 pages, ISBN 978-80-967289-4-7.
- [2] HAPÁKOVÁ, A.: Prediction Using a Linear Economic Model. In: The international conference applied natural sciences "APV TRNAVA 07", Trnava 2007, abstract p. 70, príspevok na CD, ISBN 978-80-89220-90-8.
- [3] Vyhláška 500/2006 Z.z. ktorou sa ustanovuje vzor záznamu o registrovanom pracovnom úraze
- [4] Zákon č. 124/2006 Z.z. o bezpečnosti a ochrane zdravia pri práci a o zmene a doplnení niektorých zákonov
- [5] Zákonom č. 311/2001 Z.z. Zákonník práce v znení neskorších predpisov.