# CONSIDERATIONS REGARDING THE SURVEILLANCE OF THE WORKERS' HEALTH STATE

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#### **Abstract**

Work hygiene studies the work conditions and their influence on the health state recommending the measures of normalization of the work environment (2). Hence the apparition of occupational diseases is prevented leading to the decrease of the work capacity and the productivity simultaneously with the increase of absenteeism and the increase of costs with the treatment of the professional diseases. The Department of Work Medicine within the Bihor Public Health Department, monitors the cases of occupational diseases in the relation with the work conditions. It was observed that there is a tendency of decrease of this diseases since 2007. The monitoring of the employees health state by registering, researching the declaring a occupational disease is useful for the national health and work safety programs for the instruction and communication of the professional risk by the employers and the workers in the field of work health and safety.

**Keywords**: public health, occupational diseases, risk factors

## INTRODUCTION

The public health assistance represents the organized effort of the company in order to protect and promote the population's health state. The public health assistance is achieved through all the political and legislative measures, of the programs and strategies addressed to the key factors of the health state as well as through the organization of the institutions for the supply of all the necessary services. The purpose of the public health assistance is represented by the health promotion, the prevention of diseases and the improvement of the life quality. The strategy of the public health system aims at the assurance of the population's health within healthy communities(Legea nr. 95/2006). Work hygiene studies the work conditions and their influence on the health state recommending the measures of normalization of the work environment (Hotărâre de Guvern nr. 355/2007). Hence the apparition of occupational diseases is prevented leading to the decrease of the work capacity and the productivity simultaneously with the increase of absenteeism and the increase of costs with the treatment of this diseases(Legea nr. 319/2006, Hunter D.,1994, Landrigan P.J., Baker D.D., 1991). In the sanitary system, the

professions risks are extremely numerous. Their variability is given by the multitude of the medical specialization, various modes of organizing of the work places and the staff categories: Physicians, nurses, sisters and caregivers, administrative staff, maintenance workers, volunteers(Jakubowski M.,Trzcinka-Ochocka M.,2005, Lauwerys R., 1993).

### MATERIAL AND METHODS

Though the National Program of monitoring the determining factors in the life environment having as an object the protection of the public health through the prevention of the diseases associated to the risk factors included in the Order of the Health Ministry, the Department of Work Medicine within the Bihor Public Health Department, monitors the cases of occupational diseases in the relation with the work conditions (Ordinul ministrului sănătății nr. 422/2013). The data are supplied by physicians specialized in work medicine in private practices, interpreted by the Specialists of the Bihor Public Health Department and sent by the National Health Institute from Bucharest for performing the national synthesis (Ordinul ministrului sănătății nr. 1078/2010, Hotărârea de Guvern nr. 1414/2009). In the meaning of the Work Protection Law, the occupational diseases are the conditions produced as a consequence of developing a tasks or a profession caused by physical, chemical, biological or psychosocial factors characteristic to the work place, as well as the over solicitation of various devices and systems of the body within the work process, regardless of the type of work contract existing between employer and employee (Legea nr. 90/1996, Legea nr. 194/2005).

## RESULTS AND DISCUSSION

During the year 2012, in the Bihor country there were 5 cases of occupational diseases declared of which 3 cases of silicosis, 1 case of silicotuberculosis and 5 bilateral neurosensitive hearing loss cases. It was observed that there is a tendency of decrease of the occupational diseases since 2007 with a peak in 2009 (figure 1).

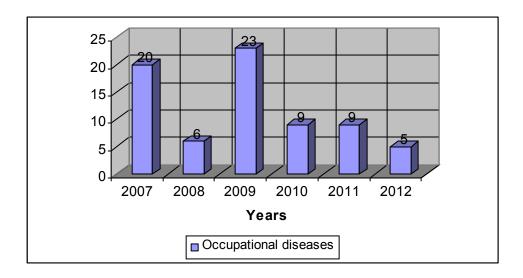


Figure 1. Yearly distribution on cases of the occupational diseases

In what regards the occupational disease diagnostic, during 2007-2012, we could observe that the most frequent ones are the bilateral neurosensitive hearing loss, followed by sulphur monoxide intoxications(figure 2).

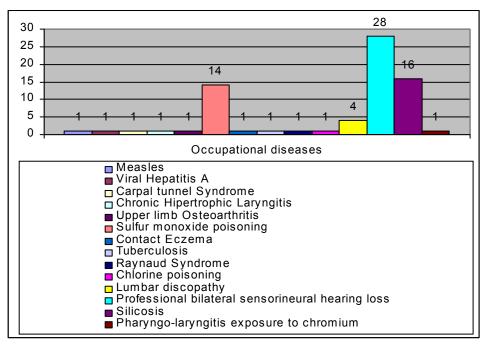


Figure 2. Occupational diseases classification declared in the period 2007-2012

From the synthesis regarding the health state of the workers between the years 2007-2012, in the production units in the county in which the toxin level at the work place were performed, the most frequent categories of diseases were analyzed.

 $Table \ 1$  The types of diseases in the production units in which the toxins were monitored

Types of diseases	Number
Cardiovascular diseases	1259
Respiratory diseases	251
Digestive diseases	261
Neuropsychiatric diseases	77
Osteoarticular diseases	512

Metabolic diseases	707
Varicose veins of the lower limbs	196
Ophthalmic diseases	1054
Renal diseases	21
Dermatological diseases	22
Allergies	12
Diseases of the ear	33

The number of employees by the end of 2012 in the Bihor county was 155.014. There are work medicine physicians who monitor thousands of employees exposed to toxins and they did not signal any case of occupational disease. A special attention was granted for the protection of maternity at the work place according to the provisions of the current legislation (Ordonanta de Urgență a Guvernului nr. 96/2003). Hence in 2012 the work conditions for 263 pregnant women were checked. 5 pregnant women were granted a risk maternity leave because of toxins in the work place could endanger the pregnancy and the foetus and the employer could not ensure another workplace without toxin exposure. 3 pregnant women underwent the measure of daily schedule reduction by 2 hours and other 11 received other work places within the same institution, which were not risky for the pregnancy and its evolution. In comparison with the year 2011, the number of pregnant women included in the maternity protection increased from 242 to 263. There is a significant difference between the number of births in the county in the year 2012 namely 5873 births and the number of reports regarding maternity protection at the work place registered at Department of public health Bihor county. This can be explained by the fact that not all pregnant women notify the employer in written about their physiological state and not all the employees respect the norms of application of that legislation. There is a preoccupation of the work medicine physicians to catch the apparition of new occupational diseases determined by other toxins than the traditional ones. The creation of a wide data base, comparable at European level, represents an important element in the European Commission strategy, in order to evaluate the efficiency of the legislation regarding health and safety at the work state. Knowing the incidence

and the prevalence of the occupational diseases, as well as their frequency of occurrence in various fields and sectors, supplies an important database for the monitoring, prioritizing and acceleration of the prevention actions; the improvement of the health and safety at the work place was underlined in the Council's Resolutions 88/C 28/011 and 95/c 168/012 (http://www.insse.ro /cms/files/publicatii/Metodologia%20bolilor%20profesionale%20%20EODS% 20Studiu%20experimental RO.pdf). There is a discussable point of view: If the profession diseases, recognized based on various social safety systems could be considered in the data base through the comparison of the risk level specific to each occupational disease(Antero A., 1994, Baselt R.C., 1980, Bernard A., Lauwerys R., 1989, Bernstein J.A., et al, 2004). In Romania, occupational diseases caused by the over solicitation of the locomotor apparatus were situated at a high level, with 263 cases, on the first place in the structure of morbidity and in concordance with the world tendencies. The silicosis registered a decrease (as total number of cases) and it is situated on the second place in the structure of morbidity, while asbestosis registers a decrease and it occupies the third place. The analysis of the numeric repartition of the cases on production fields shows that in Romania, in 2012, most cases of diseases were declared in the field of fabrication of electric equipments (99 cases) and in the fabrication of mineral products (92 cases)(http://www.insp.gov.ro/cnmrmc /images /pdf/ rapoarte /Morbiditate profesionala in Romania 2012.pdf).

## CONCLUSION

It is mandatory to have a consistent preoccupation for public health; showing up at the periodical medical exam is a way of early discovery of the diseases, of avoidance of apparition of serious forms of occupational diseases. The early identification, the monitoring and the efficient communication of the professional risks should represent the core activity of the work medicine physicians together with the increase of the access of all the workers, regardless of the workplace to their services. The monitoring of the employees health state by registering, researching the declaring a occupational disease is useful for the national health and work safety programs, for the instruction and communication of the professional risk by the employers and the workers in the field of work health and safety. We considered that it is important to introduce and to strengthen in Romania the concept of work health and safety which shall slowly replace the concept of occupational disease.

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