### Romania's Health at Work

Mihai Costescu,

Director of the National Institute of Labour Protection, Bucharest, Romania The transition to the capitalist-type economy and integration in the European Union demand and have prompted big changes in the way the workers' health and safety are protected. HSW legislation has been aligned with EU law, and responsibility for prevention now lies entirely with employers, with the role of the unions and employee involvement have been expanded. New institutions have been set up, and existing ones further developed to implement specific regulations.

Economic, demographic and labour market developments have made it hard to achieve appropriate levels of health and safety at work, and this is reflected in performance indicator trends: the rate, severity and frequency of work accidents, occupational disease figures, etc.

To address these issues, Romania has adopted a national policy and strategy to develop an organizational culture in which the stakeholders can be proactive and assume their role in developing the best possible work environment.

# The legal framework of health and safety at work

The key legal provisions that protect Romania's working population against occupational risks are to be found in the Constitution, Labour Code, health and safety at work law and work accident and occupational disease insurance legislation. The Romanian Constitution gives all citizens the right to life and protection from physical and psychological harm. All workers have the right to protection at work.

Clothing factory Steilmann, Craiova, 2004  $\ensuremath{\mathbb{C}}$  AFP Photos

The main protective measures relate to safety and hygiene at work, work by women and young people, weekly rest time, paid holidays, and work in difficult conditions as well as other specific situations.

As a member of the European Union, Romania's health and safety at work legislation transposes the relevant European directives.

The key body of laws – health and safety at work law – lays down the general principles on prevention of occupational risks, protection of workers' health and safety, elimination of accident and occupational disease risk factors, information, consultation, balanced participation, training for workers and their representatives, and the general guidelines for putting the principles into practice.

The law gives the employer sole responsibility for protecting workers' health and safety in all aspects related to work. It expressly governs:

- the employer's duties, including:
- assessment of accident and occupational disease risks,
- organization of preventive actions,
- identification of preventive and protective measures,
- actual development of measures,
- actions in emergencies,
- information, training and consultation of workers,
- provision of first aid, fire-fighting and evacuation of workers;
- the duties of workers, who must see to their own health and safety as well as that of other persons who may be affected by their acts or omissions in the course of their employment, in accordance with



their training and their employer's instructions;

- health surveillance;
- at-risk groups pregnant workers, young people under 16, etc.

Romanian Government Orders enacted under the fundamental legislation lay down the minimum requirements on organization of workplaces, use of work equipment, protection of workers exposed to chemical or biological agents, noise, vibrations and other work-related hazards.

The regulation and development of prevention against work accidents and occupational diseases is long-established. As a signatory of the Versailles Treaty (1919), Romania is a founding member of the International Labour Organization (ILO) and has ratified and implemented major Conventions in the matter.

Nevertheless, key developments have occurred on the back of economic and political changes. The new legislation lays down minimum requirements for health and safety at work, irrespective of the work activity or type of premises. It is results – rather than "best efforts"-based. Prior to this, prevention was included in detailed templates for all jobs in the Romanian economy in the form of health and safety at work measures which the employer had a duty to apply.

The legislation on insurance against work accidents and occupational diseases also has a preventive function intended to improve health and safety at work for every insured person.

### Organization of preventive activity

#### First level

There are three tiers of preventive activity. At one level are the bodies that make the laws and oversee enforcement of the specific health and safety at work legislation: the Parliament and Government of Romania (legislative branch) and specific government agencies.

Also on the same level stand the bodies that substantiate and develop national policy objectives: the Ministry of Labour, Family and Equal Opportunities (MMFES) and Ministry of Public Health (MSP), as well as various institutions with jurisdiction in particular sectors – defence, justice, etc.

Added to them are bodies that make a direct contribution to delivering national policy objectives: the work accident and occupational disease insurer, the Ministry of Education and Research, the General Inspectorate for Emergency Situations, and so on.

MMFES in cooperation with MSP frames health and safety at work strategy, provides the necessary regulatory and institutional framework to deliver the strategic objectives and polices consistent enforcement of and compliance with the legal requirements.

The MMFES' policing function is performed through the labour inspection body which:

- controls compliance with the minimum health and safety at work requirements;
- controls compliance with the requirements on explosive materials and plant health products;
- controls compliance with essential health and safety requirements for marketing and using low voltage electrical equipment, personal protective equipment, industrial machinery, protective equipment and devices for use in potentially explosive atmospheres, explosives for non-military use; also controls noise emission limits for outdoor equipment;
- provides technical assistance to employers in drawing up occupational risk prevention plans and controls their performance;
- makes or requires measurements and surveys, examines product and material samples on- or off-site;
- orders work or work equipment to be stopped in case of imminent danger of work accidents or occupational diseases;
- issues and if relevant withdraws work authorizations to employers on safety at work grounds;
- investigates work accidents;
- coordinates health and safety at work training and information for workers and monitors training for specialists in the field.

**MMFES** coordinates the activity of the National Institute for Research and Development on Labour Protection (INCDPM) which develops fundamental and applied scientific research to:

- develop the theoretical and conceptual basis of health and safety at work;
- study work accident and occupational disease risks and their impact on workers' health and safety, and design preventive measures to control them;
- devise instruments for risk identification, analysis and assessment, work systems auditing, work accident and occupational disease cost assessments.

**INCDPM** (National Institute of Labour Protection) is very active in training workers who have or will have health and safety at work duties through training courses, developing and disseminating HSW training materials and information.

**MSP** is responsible for health at work policy.

The work accident and occupational disease insurance body has a legal duty to support the preventive activities developed by employers. It also reports to the MMFES particular health and safety at work situations in need of better regulation.

#### The second tier of preventive action

It is the company level: employers, employees and their health and safety reps.

The **employers** have the central role in implementing HSW legislation and providing a safe and healthy work environment.

Employers must fulfill their legal duties by organizing preventive activity appropriate to the size of the firm and the specific risks of the work activity, for which a range of solutions are available: assuming the function themselves, appointing a person to do the job, developing in-house provision or using external health and safety at work services.

To satisfy the legal requirements, an employer must make an assessment of the risks of accidents and occupational diseases and use it to develop and implement preventive and protective measures.

The employer must provide workers with detailed health and safety at work instructions and ensure that they understand and apply them. He must provide appropriate information and training, and involve workers in all relevant aspects of health and safety at work.

**Employees:** the entire body of Romanian preventive legislation is intended to create a new organizational culture in which workers are aware of the need to protect their and other workers' health and safety at work. The legal duty to provide information, training, consultation and participation of workers in matters concerning the development of optimum working conditions was therefore further reinforced.

Workers' representatives: depending on the size and specific risks of an undertaking, the legislation allows and requires workers to be involved in defining and applying company health and safety at work policy. This is done through the health and safety committee which is compulsory in undertakings with more than 50 workers. The committee comprises equal numbers of workers' representatives elected from among workers' health and safety reps and employer's representatives, and the occupational doctor. The committee's role is to provide health and safety information to workers and consult them on HSW matters.

### The third tier of preventive activity

It is bodies that monitor the framing and implementation of national HSW policies: national trade unions, employers' and professional organizations.

## **Economic influences on the work environment**

The transition to a free market economy and integration into the globalizing world economy created added difficulties for Romania that impacted on health and safety at work. Some of these are reviewed below.

The **economy** was long inefficiently structured. Slow privatization kept the state sector predominant until recent years. Business, especially large companies with no market or capital to replace technology, were unable to adapt to the new conditions. This was one reason why Romania was late in develop-

ing a working market economy. The private sector now predominates.

After 1990, an ongoing shift occurred in the importance of different sectors to the national economy. The construction and service industries expanded, while traditional sectors like mining and machine-building declined.

Other significant developments were shrinkage in the number of big firms, growth of small and medium-sized enterprises, and the spread of subcontracting.

The **labour market** has been and still is in continuous flux, influenced by a series of factors that create particular problems for prevention.

**Demographic evolution**: labour force trends have been impacted by demographic and social factors like steadily decreasing fertility coupled with high mortality, increased emigration, and a declining quality of medical provision and health assistance. As a result, the population aged 60 and over has increased and the dependency ratio has remained high, especially in rural areas. The steady decline in the total population can be seen from Table 1.

This, combined with the financial collapse of state companies and diminished new job creation abilities, has produced a sharp drop in the labour force (Table 2) and employed population (Table 3). Although the total population has decreased, unemployment has remained low (Table 4). Along with shrinkage in the employed population, big changes have taken place in sectors, areas of activity, regions, forms of property, age and occupational status.

**Changes in forms of employment**: patterns of employment have diversified in favour of short-term forms of employment. New forms have appeared: seasonal work, part-time work and most important, undeclared work.

Shortages in the work force: emigration losses and increased employment opportunities in other EU member states have led to a shortage of workers in various occupations. One solution adopted by Romanian employers in common with other countries is to employ foreign labour.

Table 1 Population development, Romania

•	•
Year	Persons (thousand)
1990	23 207
1993	22 755
1996	22 608
1999	22 458
2003	21 734

Source: Romanian Statistical Yearbook 2004

Table 2 **Labour force**, thousands of persons

	<del>-</del>				
Labour force	1996	1999	2002	2005	
Total	11 726	11 566	10 079	9 851	
By sex					
male	5 933	6 262	5 525	5 431	
female	5 793	5 304	4 554	4 420	
By area					
urban	6 378	5 685	5 188	5 361	
rural	5 348	5 881	4 891	4 490	

Table 3 Employment, thousands of persons

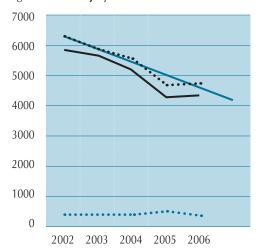
Employment	1996	2002	2005		
Total	10 935	9 234	9 147		
By sex					
male	5 390	5 031	5 011		
female	5 545	4 203	4 136		
By area					
urban	5 979	4 607	4 889		
rural	4 956	4 627	4 258		

Table 4 Unemployment, thousands of persons

• '		•	
Unemployment (ILO)	1996	2002	2005
Total	791	845	704
By sex			
male	543	494	420
female	248	351	284
By area			
urban	399	581	472
rural	392	264	232

Source of tables 2, 3 and 4: Romanian Statistical Yearbook 2006

Figure 1 Work injury trend



···· Injuries (total)

···· Deaths

Injury with temporary incapacity for work

Linear (Injuries total)

Source of figures 1, 2 and 3: Statistical Bulletin on Labour and Social Protection, 2002-2006

**Shortage of training**: many reports, including those monitoring Romania's integration into the EU, have pointed to a lack of initial and continuous vocational training, as well as managerial and preventive education.

# Developments in health and safety at work

The regulatory and economic context has impacted negatively on improved health and safety protection for workers.

The disjointed development of the economy between 1990 and 2007 produced a fall in investment in preventive activity, as companies strove mainly to survive.

This was compounded by unsafe, illegal work, employment in small and medium-sized firms, and employment of groups subject to discrimination and marginalization (mainly foreign workers), leading to a change in employment relationships. Workers in these categories are willing to run higher risks just to keep their jobs. Many lack the necessary training or ability to acquire the knowledge needed because of poor educational or language skills, or not being aware of their rights.

Many small and medium-sized business owners lack the necessary training and are unaware of the risks presented by dangerous and difficult work environments. They are ignorant of or flout the law, with no understanding of the economic impacts of a lack of health and safety at work.

Since the legislative principles governing HSW were changed, all Romanian employers have faced difficulties in setting up the programme of preventive and protective measures, including drawing up health and safety instructions. Previous work-related standards are no longer in use, and codes of good practice to help them in implementing measures are not yet available.

Action has been taken on several fronts to try and address the problems. Most representative are the training and information measures. There is now a regulation minimum health and safety training requirement for persons with specific responsibilities, whether appointed by the employer or from external services. The criteria have been set in line with the requirements of the European framework for the qualifications of HSW trainers and training providers.

Special programmes have been initiated for SMEs with the emphasis on getting employers and workers to understand and apply the concept of risk assessment for work accidents and occupational diseases.

Codes of good practice are being developed and disseminated for various activities and risks that workers may be exposed to.

Table 5 **Total injuries** 

Year		Total injuries				llective accidents		
	Total	of wh	nich:	index	Number	Total ii	njuries	
		fatal	TIW*	( ‰)		Total	of which:	
							fatal	
2002	6 209	399	5 810	0.99	32	130	41	
2003	5 799	367	5 432	0.95	26	122	29	
2004	5 543	384	5 159	0.93	38	160	27	
2005	4 714	406	4 308	0.80	42	163	43	
2006	4 764	353	4 411	0.81	37	168	36	

<sup>\*</sup> TIW: Temporary Incapacity of Work

Table 6 Contribution of economic sectors to total work injuries, top five places

Activity	Share (%) of injuries in total injuries by national economic sector				
	2002	2003	2004	2005	2006
Coal mining and preparation	21.61	17.99	12.03	7.98	7.26
Construction	9.08	10.9	11.6	13.94	13.50
Metallurgy	5.52	4.45	4.71	4.86	4.45
Furniture and related activities	4.80	4.29	5.16	4.37	4.62
Wood manufacturing – except furniture	4.25	4.95	5.72	5.39	5.16
Metal construction and metal products	3.56	4.05	4.67	4.77	5.86

Table 7 Contribution of economic sectors to total work fatalities, top five places

Activity		Share (%) of fatalities in total fatalities, by national economic sector			
	2002	2003	2004	2005	2006
Construction	16.54	22.62	19.27	24.14	18.98
Forestry, forestry operation and game	6.27	8.99	7.03	6.16	6.52
Coal mining and preparation	5.76	3.54	3.65	2.96	3.40
Food and beverages	5.76	4.51	5.01	4.26	4.51
Land transport, transport via pipelines	4.76	6.52	8.02	8.27	7.27
Wholesale trade – except motor vehicles and motorcycles	2.51	6.02	3.76	4.51	4.01
Wood manufacturing – except furniture	4.51	4.09	5.73	3.69	3.68

Source of tables 5, 6 and 7: Statistical Bulletin on Labour and Social Protection, 2002-2006

The outcomes of these actions are reflected in specific health and safety at work indicators recorded nationally in recent years.

#### Work accident trends

The last five years have seen a decline in total work injury figures (Table 5). This trend is illustrated in Figure 1. Sadly this pattern is not repeated for fatal accidents. In the first three years of the review period, fatal accidents totalled about 6%; in 2005, there was a sharp rise to 8.61%, followed by a slight fall to 7.41% in 2006.

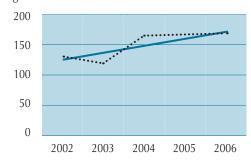
The highest injury rates in recent years are in the sectors listed in Table 6.

The figures show a sharp fall in injuries in the coal mining and preparation industry, pushing the construction industry into first place in the last two years; this is due less to improved working conditions than to industry shrinkage. Likewise the construction industry, where the rise in injured workers is not a direct consequence of worse safety conditions but industry expansion.

The sectors most affected by fatal accidents (Table 7) are noticeably different to the sectors with the worst injury performances, with the signal exception of the construction industry, which occupies the same place. Sectors like forestry, forestry operation and game have a low number of accidents but more serious ones relative to other activities, having a higher rate in the total of injuries.

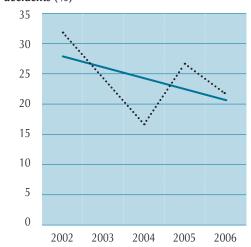
Interestingly, collective accident figures have varied little over the past five years (Table 5). The positive

Figure 2 Victims of collective accidents



Total victimsLinear (Total victims)

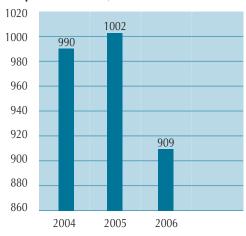
Figure 3 Share of fatalities in all collective accidents (%)



···· Share of fatalities (%)

Linear (Share of fatalities (%))

Figure 4 Number of new reported cases of occupational diseases, 2004 – 2006



Source: National Centre of Methodological Coordination and Information on Occupational Diseases

aspect lies in the declining share of fatalities in all collective accidents, barring the peak of 2005 (Figures 2 and 3).

Severity and average duration show a positive trend in recent years, with both steadily diminishing (Table 8), reflecting a decrease in serious accidents resulting in temporary work incapacity.

The 2006 Labour Inspection Report drawn up under International Labour Organization Conventions No. 81 and 129 reveals other relevant aspects of work accidents.

As to the age of victims, the analysis of work accidents revealed that workers 30-40 years of age account for 31.9% of all injured workers.

The workers most at risk of work accidents are those with less than 5 years' work experience, accounting for 43.3% of total injuries, while workers with 20-plus years of work experience make up 22.6%, and those with 10-20 years' experience 21.2% of all injured workers.

Analysis of the circumstances surrounding accidents reveals that most were caused by clamping, hitting, crushing by machinery and operating plant (14.7%), followed by traffic accidents (13.6%) and falls from a height (13.1%). Most fatal accidents were traffic accidents (33.7%), followed by falls from a height (16.7%) and fall/collapse of materials and objects (10.5%).

The most frequent occupation of injured persons was mechanic – 6% of all injured workers, followed by coalface workers (3.8%) and electric arc welders (2.4%).

### Occupational morbidity trend

An analysis by the National Centre of Methodological Coordination and Information on Occupational Diseases of occupational morbidity trends in Romania in 2005-2006, their relationship to exposure to occupational risk factors and the momentum of time changes in the traditional pattern reveals several key things.

The incidence of occupational diseases shown in Figure 4 is based on an analysis of general and specific aspects of occupational morbidity.

The report on morbidity showed that silicosis, noise- and poisoning-related diseases ranked highest (Table 9).

The industries with the highest incidences of occupational diseases (criterion: more than 100 cases) were: in 2004, metallurgy (202 new cases), machinery and equipment (194), and other extractive industries (252 new cases); in 2005: ore mining and preparation (137 new cases), metallurgy (277 new

Table 8 **Severity and average duration** 

	2004	2005	2006
Severity (‰) = total number of days of work incapacity reported per 1000 workers	57.1	50.4	43.6
Average duration (days of TIW/injured) = average number of lost days per injured worker	66.5	68.9	63.1

Source: Ministry of Labour, Family and Equality of Opportunities website

Table 9 Trend in occupational diseases

Disease	Number	Number of new cases re		
	2004	2005	2006	
Silicosis	104	114	266	
Noise-related diseases	166	174	153	
Poisoning	171	199	146	
Bronchial asthma	86	96	105	
Strain-related diseases	28	38	48	
Vibration-related diseases	12	16	32	
Infectious and parasitic diseases	36	42	20	
Skin diseases	23	20	10	
Asbestosis	7	11	10	
Eye disorders	0	0	5	
Allergic rhinitis	1	0	3	
Cancer	1	1	3	
Other occupational diseases	355	291	108	

cases), and road transport (150 new cases); and in 2006, metallurgy again (199 cases), followed by ore mining and preparation with 173 reported cases.

The 3-year comparison of recorded data found that specific diseases were prevalent in the extraction and metallurgical industries.

### **Perspectives**

With things as they are, and the social policy obligations that EU member states have, Romania has set a series of health and safety at work policy and strategic objectives, including:

- developing and consolidating institutions with a role in implementing the health and safety at work regulations, mainly the Labour Inspection;
- a holistic approach to wellbeing at work that puts a focus on labour market dynamics and the emergence of new risks to ensure a safe and healthy work environment;
- consolidating a culture of preventing the risk of accidents and occupational diseases by combining education, information, awareness and guidance provision and efficient policing of the health and safety at work legislation;
- improving research into new risks introduced by new technologies, and new ways of controlling them. ■