

Occupational Safety and Health in EGYPT

A National Profile

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Foreword

The magnitude of the global impact of occupational accidents and diseases in terms of human suffering and related economic costs has been a long-standing source of concern at workplace, national and international levels. The International Labour Organization (ILO) estimates that over 2 million workers die each year from work-related accidents and diseases, and that globally this figure is on the increase. Occupational Safety and Health (OSH) has been a central issue for the ILO ever since its creation in 1919 and continues to be a fundamental requirement for achieving the objectives of the Decent Work Agenda.

Significant action has already been undertaken to come to terms with this problem. However, although effective legal and technical tools, methodologies and measures to prevent occupational accidents and diseases exist, there is a need to give higher priority to OSH at international, national and enterprise levels and to engage all social partners in initiating and sustaining mechanisms for a continued improvement of national OSH systems. Efforts to tackle OSH problems, whether at international or national levels, are often scattered and fragmented and as a result do not have the level of coherence necessary to produce effective impact. Given its tripartite structure and its mandate in the field of OSH, the ILO has a leading role to play in the implementation of such a global strategy.

Another actor which also has crucial role to play in the field of OSH is the World Health Organization (WHO), which has been involved in workers' health since its foundation in 1948. WHO has a strong working relationship with the health sector. It is guided in this field by its Global Strategy on Occupational Health. In order to energize their potential to improve the safety and health of workers, the two organizations have developed the ILO/WHO Joint Effort on Occupational Safety and Health. In this context a specific initiative for the African continent, the African Joint Effort has been launched with leadership from ILO and WHO to create a common agenda to protect the workforce and ensure safety and health at work in this geographical area.

Both organizations aim for an OSH Global Strategy. For the ILO such a strategy includes the building and maintenance of a preventive safety and health culture and the introduction of a systematic approach to OSH management. A national preventive safety and health culture is one in which the right to a safe and healthy working environment is respected at all levels; where governments, employers and workers actively participate in securing a safe and healthy working environment through a system of defined rights, responsibilities and duties; and where the principle of prevention is accorded the highest priority. It is a fundamental basis for improving OSH in the long term.

In order to achieve this goal at national levels, the ILO encourages the highest government authorities to launch a national OSH programme. An important step in establishing such programmes is to prepare an inventory of all the tools and resources available in a country to implement and manage OSH. The present National profile on OSH in Egypt represents this inventory. It was first established as an ILO document. WHO on its side was also preparing a similar document with focus on the health at work aspects. In order to avoid duplication of efforts, have a better global overview and provide ownership to as many partners as possible, the two profiles were merged to become a joint OSH profile for Egypt. For their valuable input, we would like to thank the Ministry of Manpower and Migration, the National Institute of Occupational Safety and Health and the Ministry of Health and Population. We should not forget to mention also the active participation in the drafting of this document by the Federation of Egyptian Industries and of the Egyptian Trade Union Federation. Led by an eminent academic, the authors and contributors have thoroughly

described and analysed the present system as well as the latest developments in national OSH policy. Finalized under the guidance of the Senior Occupational Safety and Health Specialist of the ILO Sub-Regional Office in Cairo, and translated by the WHO, this profile was submitted to and approved by the Ministry of Manpower and Migration as well as by the Ministry of Health and Population.

This Joint National Profile is the first to be prepared within the framework of the African Joint Effort. The experience obtained in its establishment will hopefully benefit all actors involved and we hope it will successfully contribute to the development of a common agenda between the ILO and the WHO towards the improvement of occupational safety and health in Egypt.

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Introduction

The preparation of a national OSH Profile is an essential step in the process of building a good national OSH programme. The profile is an inventory of all the tools and resources available in a country to implement and manage OSH and is designed to promote the data necessary for setting national priorities for action aimed at the progressive and continual improvement of workplace safety and health. The profile is to be used not only as a basis for identifying priorities for action but also as a tool for measuring progress over time through its periodic updating. It could also become a key management tool for the continual improvement of national OSH systems.

The main elements of a national OSH profile have already been proposed in Report IV (1) on the Promotional Framework for Occupational Safety and Health to be presented to the 93rd session of the International Labour Conference, 2005. The present National Profile for Egypt moves along the same lines. It has been drafted through a process of consultation involving all the national designated authorities concerned with the different aspects of OSH, mainly the Ministry of Manpower and Migration, the National Institute of Occupational Safety and Health, the Ministry of Health and Population, the Ministry of Environment; and, of equal importance, the most representative Organizations of Employers and Workers, i.e. the Federation of Egyptian Industries and the Egyptian Trade Union Federation.

In Egypt, the safety and health of workers has been a legal matter of concern since the beginning of the last century. The earliest legislation pertaining to occupational health in Egypt dates back to July 1909. It concerned the employment of children in cotton ginning factories. A number of Acts including sections dealing with health and welfare of factory workers followed. Employment of workers, employment conditions and agencies competent with occupational safety and health as well as penalty clauses were covered by Act No. 91, the first comprehensive Labour Law, adopted on 5 April 1959.

Regulations developed and expanded gradually in order to cover all hazards and economic sectors. It should be noted that the Egyptian legislation relating to OSH was extensively up-dated in July 2003, as described in chapter II. It now covers a great part of the requirements and provisions entailed in major ILO Conventions related to occupational safety and health.

Implementation bodies are thoroughly dealt with in chapter III. Their strengthening should be analysed in the light of the best possible use of already existing structures and of feasible ways to improve their functioning on a sustainable basis.

Education, training and information mechanisms and institutions play a vital role in the progressive construction of a national OSH system. These are essential tools in the process of awareness-raising on hazards and preventive action at all levels and, considering the needs of the country in this respect, they should be given top priority.

The active involvement and participation of employers and workers in the development of a strong safety culture should never be forgotten. Special activities aimed at these target groups could be envisaged. In addition, Egypt being a country where micro and small and medium sized enterprises, together with agriculture, employ a very large percentage of the working population, identification of priorities for the development of a national OSH action programme is crucial. The ILO and WHO are ready to provide assistance to their respective constituents in this endeavour.

1. GENERAL DATA

1.1 Basic Demographic data

The population of Egypt has more than tripled since 1955, and despite the declining rate of population growth from 2.8% the 1980s1 to 1.9% in the 1990s2, the domestic rate slowed slightly in 2002, to 1.99%, compared with 2.04% in 2001, as a result of a fall in the birth rate according to the Central Agency for Public Mobilisation and Statistics (CAPMAS).3 The population stood at 58.7 million in 1996, 63.9m in 2000 and 69.2m in January 2003, according to the latest official estimates.4

Total Population (in millions)

Year	CAPMAS Figures
2002	66.6
2001	65.3

Source: CAPMAS. The Statistical Year Book 1995-2002. June 2003. P. 15
Note: figures exclude Egyptians abroad.

According to the 1996 census by CAPMAS, nearly 20% of the total urban population (43%) lived in Cairo and Alexandria. Meanwhile, the rural population reached 57%. In this context it should be also noted that only 6% of the total area of Egypt, which covers approx. 1 million sq km, is inhabited and cultivated.

Estimates of population by rural / urban areas in Jan. 2003

year	Total	Rural	%	Urban	%
1996	58 755	33 736	57.4	25 019	42.6
2002	66 668	38 433	57.6	28 235	42.4

Source: CAMPS. The Statistical Year Book 1004-2001, June 2002 and the Statistical Year Book 1995 - 2002, June 2003

Estimates of population distribution by age groups

Jan. 2002	%	Total	Male	Female
Population		67.313.045	34.444.473	32.868.572
Under 15	49%	33.116.179	17.138.507	15.977.672
15-60	47%	31.908.862	16.101.566	15.807.296
65+	3%	2.288.004	1.204.400	1.083.604

Source : CAPMAS, the Statistical Year Book 1995-2002, June 2003.

Adult literacy rate and Gross enrolment ratio (in %)

Age 15 and above	2001	56.1
Combined primary, secondary and tertiary gross enrolment ratio	2000 / 01	2000 / 01

Source: UNDP. Human Development Report: Human development Index. 2003.

1.2 Basic economic data

GDP

GDP and growth Rates for Egypt (in US\$ & %)

GDP 1998	GDP 2001	GDP 2002	Average growth 1991-94	Average growth 1998	Average growth 2001	Average growth 2002
82.1bn	98.5bn	89.8bn	1.1	4.1	3.5	3.0

Source: IMF. World Development Indicators database, 2003.

It is also important to state that the GDP per capita (in international \$) was 3,901 in 2001.⁵

Labour force and employment

At the end of 2002, the estimated labour force reached 17.790 million, according to the CAPMAS report of June 2003.

Estimated percentage of economically active population in Egypt

Total 2001	28.7
Urban 2001	30.8
Rural 2001	27.2

Source: UNDP. Human development report, 2003

In addition to these figures, about 2.8 million subjects are working in the different Arab, African, Asian and other countries.

Distribution of new entrants by educational status, according to areas and sex in 1996 and 1998 (%)

Educational status	1996	1998
Illiterate	2.4	0.5
Read and write	1.5	0.9
Primary		1.3
Below intermediate and Intermediate	76	70.4
Above intermediate	6.9	8.8
University and above	13	18
Total	100	100
Urban	43.8	41.7
Rural	56.2	58.3
Male	63.7	48.6
Female	36.2	51.4

Source: CAPMAS, General Population census, 1976, 1986 and 1996, and Labour Force Sample Survey, 1998.

Distribution and Rates of growth of employed
(15 - 64 years) by branches of Economic Activity and Gender
(in %)

Branches of economic activity	1995 Distribution		2002 Distribution		Average annual rates of growth %	
	Males	Females	Males	Females	Males	Females
Agriculture	31.4	41.8	26.7	27.6	-0.033	-3.8
Fishing			0.8	0.0		
Mining	0.3	0.1	0.3	0.1	3.9	-16.7
Manufacturing	15.7	8.1	12.3	8.6	-0.13	5.7
Construction	7.7	0.5	8.8	1.1	6.6	5.5
Trade	11.2	7.1	14.1	7.6	7.9	9.1
Hotels & Restaurants			2.0	1.5		
Transportation, Storage & Communications	6.7	1.5	7.3	2.2	3.5	-1.8
Real Estate	23.7	38.8	2.0	1.6	2.5	4.2
Public Administration			10.5	12.8		
Education			8.1	23.7		
Health & Social Work			2.1	8.9		
Social Services			2.3	1.3		
Household Services			0.2	0.5		
Others	0.0	0.0	0.0	0.0	-	-
Total	100.0	100.0	100.0	100.0	2.3	1.6

Source: Calculated from CAPMAS, LFSS 1995, Table (10) and LFSS, 2002, Table (10)

Number of Workers by Economic activity (in hundreds)

Number of Workers by Economic activity (in hundred)

Branches of economic activity	2003
Agriculture	49149
Fishing	
Mining	23567
Manufacturing	
Construction	13222
Retail and Trade	23119
Hotels & Restaurants	3371
Transportation, Storage & Communications	11349
Education	19247
Health & Social Work	5802
Social Services	7962
Others	21386
Total	177905

Source: CAPMAS, the Statistical Year Book 1995-2002, June 2003. P. 11

Unemployment Rate by Educational Attainment and Gender in 1990 - 2002 (%)

Educational Attainment	1990			1995			2002		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Illiterate	0.4	1.9	1.0	0.5	0.1	0.4	0.2	0.4	0.2
Read & Write	0.9	5.2	1.2	0.6	2.1	0.6	0.2	2.6	0.3
Below Intermediate	5.5	22.9	7.4	2.2	10.8	0.8	0.8	3.3	0.9
Intermediate	18.8	41.2	26.4	24.1	52.0	14.7	14.7	38.8	22.1
Above Intermediate	17.7	26.7	21.1	16.5	24.9	6.1	6.1	13.1	8.4
University and Above	11.7	21.0	14.2	9.7	17.5	11.2	11.2	22.0	14.4
Total	5.6	14.4	8.0	7.5	24.1	6.3	6.3	23.9	10.2

Source: El Ehwany, Naglaa. 'Policies and Incentives for Increasing Employment and Raising Productivity in Egypt.' Paper presented to the Tripartite National Symposium on Employment Policy in Egypt, 2004. Calculated from: CAPMAS, LFSSs, Several Issues.

Child labour

Different sources reported the number of working children (below 15 years) ranging between 1.9 - 2.2 million at the end of 1999 (Central Agency for Public Mobilization and Statistics, 2001; National Institute for Social Studies, 2000). However, Egypt has ratified Convention No. 138 on Minimum Age (1973), and No.182 on the Elimination of the Worst Forms of Child Labour (1999). A special committee on child labour has been established at the Ministry of Manpower and Migration.

Informal sector

The informal sector plays an important role in the Egyptian economy, as it has been absorbing large and increasing numbers of workers since the mid-seventies.

Employment in the informal sector was estimated at 2.4 million workers in 1976, against a mere 170 thousand in the formal private sector. This implies that employment in the informal sector represented 93% of the total non-agricultural private sector. In the nineties, the labour market witnessed a substantially high growth of the informal private sector. In the Country Profile on Poverty, Employment and Policy-making in Egypt, (ILO Cairo, Oct. 2001) it is estimated that workers in this sector represent 31% of the total workforce in the Egyptian economy, 46,9% of the private sector workers, and 85,9% of the private sector workers excluding those in agriculture, fishing and hunting, in this period.

1.3 Health indicators

Estimates of health personnel

Life expectancy at birth m/f (years)	68.3 / 69.0
Healthy life expectancy at birth m/f (years)	57.8 / 60.2
Child mortality m/f (per 1000)	38 / 39
Adult mortality m/f (per 1000)	240 / 157
Total health expenditure per capita (Intl \$, 2001)	153
Total health expenditure as % of GDP (2001)	3.9

Source: WHO. World Health Report. 'Core Health Indicators: Egypt. 2003
Note: Figures are for the year 2002.

Estimates of health personnel

Rate per 100.000 population/year		
Physicians	1996	202.0
Nurses	1996	233.0
Dentists	1996	25.0
Pharmacists	1996	56.0

Source: WHO-EMRO Regional Office, 1998.

Profile for Human development

Population with access to:		
Health services %	Urban 2001	100.1
	Rural 2001	99.0
Doctors per 10000 people (MOH)*	2001	6.0
Nurses per 10000 people (MOH)*	2001	13.5
Nurse/doctor ratio (%) (MOH)*	2001	224.4
Maternal mortality rate (per 100000 live births)	2001	60.7
Beds per 10000 people	Total 2001	20.0
	MOH* 2001	16.7
Health units per 100000 persons	2001	2.4

Source: UNDP. Human Development Report,2003.

HIV/AIDS

The first HIV/AIDS case was diagnosed in Egypt in 1986 and according to the latest surveillance report of NAP (National AIDS Control Program, Quarterly Surveillance Report, 1,1/2003) there are 1,711 known HIV-positive persons detected in Egypt while UNAIDS/WHO estimate the figure to be 8,100 cases. The prevalence rate of the country remains low (0.01%); however, there is a serious lack of representative in-depth information on the risk factors of HIV/AIDS due to difficulties in understanding the dynamics of the epidemic in Egypt.

Tuberculosis, % of the population affected (2000): tuberculosis cases per 100,000 people: 16.6

2. LEGISLATIVE FRAMEWORK

General

In Egypt, the earliest legislation on occupational health was enacted on 5th July 1909. It concerned the employment of children in cotton ginning factories. Since then, a number of Acts have been issued at varying intervals all of which included sections dealing with the health and welfare of factory workers. Employment of workers, employment conditions and agencies competent in occupational safety and health as well as penalty clauses are covered by the Act No. 91 (5 April 1959) (**Labour Code**).

The first comprehensive Labour Law, numbered 91, issued on 5 April 1959 replaced: Act No. 48 (1933) governing the employment of juvenile workers of both sexes in industry; Act No. 80 (1933)

concerning the employment of women in industry; Act No 147 (1935) fixing the number of hours of work in certain industries; Act No. 317 (1952) on individual contracts of employment; Act No. 46 (1958) organizing work in mines and quarries; and Act No.14 (1959) governing vocational rehabilitation and employment of disabled persons.

2.1 References to OSH requirements in the Egyptian Constitution

Although there is no direct reference to OSH requirements in the country's Constitution, reference is made to gender equality in political, social, cultural and economic fields (art. 11) and to everybody's right to work. The Constitution forbids forced labour (art. 13), mentions the duty of the state to protect employees (art. 14) and its obligation to provide cultural, social and health services (art. 15).

2.2 Major Occupational safety and health laws and regulations

2.2.1 Law No. 12 (2003), Book V: Occupational safety and health (OSH) and Assurance of the adequacy of the Working Environment

Law 12 (2003) is the Code. Its revised version issued and published in the Official Gazette No. 14 (rep.) on 7th April 2003, entered into force on 7th July 2003.

Law 12 (2003) replaced Law 137 (1981) as well as ministerial decrees No. 33/1982, 119/1982, 105/1987, 142/1988, 145/1988 and 10/1991.

The objective of **Law 12/ 2003** is to organize employment relations, clarify the duties and rights of the parties to the employment agreement, and to ensure safety and health at the workplace. It devotes a **specific section (Book V) to occupational safety and health and assurance of the adequacy of the working environment.** It is supplemented by Ministerial decrees which elaborate more specific technical provisions, the most important ones being:

- **Decree No. 126 (2003) replacing No. 75 (1993)** defining procedures and forms for the notification of work-related accidents, injuries, fatalities and diseases,
- **Decree No. 211 (2003) replacing No.55 (1983)** specifying conditions and precautions essential for the provision of OSH measures at the workplace,
- **Decree No. 134 (2003) replacing No. 116 (1991)** defining the types of establishments covered, OSH services and committees, and related OSH training institutions.

Objective and scope of Book V of Law 12/ 2003 on OSH:

The objective of Book V is to ensure safety and health of workers in all areas of work and production. It provides the necessary elements for such an objective to be met at the enterprise level and at the national level in particular in relation to the implementation of its requirements. These elements mainly consist in:

- Requirements for the selection and establishment of sites
- Responsibilities of employers to ensure safety and health at workplaces
- Establishment of the administrative authority to enforce its provision (OSH inspection)
- Organization of OSH at the enterprise level (OSH Committees)
- Obligation of employers to report accidents at work and provide related statistics
- Setting-up of consultative bodies at national and provincial levels (governorates)

Scope of Book V

The safety and health provisions of the law apply to all establishments in the private and public sectors, civilian government units, local (municipal) government services and public authorities (article 203). It requires prior authorization and licensing to set up and operate an industrial, commercial or other establishment (art. 204 - 215) defined as a business or undertaking in the public or private sector (art. 203). Nevertheless, it does not apply to household servants and family members who are direct dependants of the employer.

Book V of Law 12/ 2003 applies to all branches of industry, including the construction industry, commercial establishments, and agriculture. It applies to all working sites and establishments, once authorized, whatever the number of workers employed. Specific provisions apply to establishments with more than 15 to more than 50 workers.

OSH in mining and quarrying activities is regulated by law No. 27 (1981) and chemicals as well as major hazard installations are partly covered by Law No. 12/ 2003, decree No. 211 (2003) and also by Law No. 4 (1994) on the protection of the environment with its executive regulations.

Role and responsibilities of employers:

Law 12/ 2003 stipulates that the employer takes all necessary measures to **ensure safety and health at the workplace** in particular with regard to mechanical, physical, chemical and biological hazards (art. 208). The law also requires the **medical examination** of the worker before employment, i.e. pre-placement (art. 216), first aid measures, medical attention and treatment depending on the number of workers employed (art. 220), and also periodic medical examination of those workers who are exposed to the risk of any occupational diseases (art.219) listed in Decree No. 3 Annex I (2004) of Law 79 (see under section 2.3.3).

Employers shall **inform workers** of the dangers they are exposed to in case of non-observance of protective measures and shall provide them with personal protective equipment (art. 208 - 215).

It also lays down the principle of establishing an **OSH Committee**. The composition and function of the OSH Committee is precisely defined in Decree No. 134 described under section 2.2.2.

Role and responsibilities of workers:

Every worker is required to follow protective measures and observe safety precautions set by the employer. The establishment is authorized to take disciplinary action against a worker who does not follow the safety precautions as prescribed (article 218 of the law, article 57 of Law 79/1975, and Decree No. 48/1967).

Workers are represented within OSH Committees in establishments employing more than 50 workers (Decree 134/2003 replacing 116/1991). The law stipulates that this committee shall study working conditions and causes of accidents and diseases. It shall also specify preventive measures (art. 227). The employer shall be responsible to execute these recommendations. However, the law does not stipulate precisely that the employer should make a risk assessment of work processes, machines, equipment, etc. used in the enterprise. Decree No. 134 also stipulates that appropriate training shall be provided to members of the OSH Committee. However the quality of training provided under the law has never been evaluated. In addition, employers do not send OSH Committee members systematically to compulsory training. Only labour or OSH inspectors can remind them of their obligations if necessary.

Role and responsibilities of the government:

The role of public authorities as defined in Law 12/ 2003 is:

1- To ensure that national OSH legislation is implemented, and

2- To formulate national OSH policy and coordinate with all parties involved through consultative bodies (at national and provincial level as elaborated in Decree No. 114/84).

Book V of law 12/ 2003 stipulates the setting-up of a **Supreme Advisory Council on OSH** (art. 230) which is described under section 3 “National policy review mechanism”.

Supervision of compliance:

According to Book V of law 12/ 2003, the Ministry of Manpower and local council authorities responsible for manpower shall have the sole competence to inspect establishments. The enforcement of OSH legislation is supervised by an inspection system precisely defined in Book V, and in section 3 of the present profile.

2.2.2 Executive Ministerial decrees

In addition to Law 12/ 2003, protection of workers against hazardous processes, machinery and equipment, hazardous chemical, physical and biological agents are regulated by 3 major decrees, No. 126, No. 211 and No. 134.

Decree No. 126/2003 (replacing MD 75/1993) defines procedures and forms for **notification of accidents and diseases** at work. It also specifies the type of **statistics** on major injuries and accidents that should be collected and notified.

Decree No. 211/2003 (replacing MD 55/1983) specifies the necessary conditions required for a **safe working environment** with respect to physical, mechanical, electrical, chemical, biological and other hazards. Special chapters provide “Maximum Allowable Concentrations” for more than 600 chemical agents in the working environment, safe levels of physical parameters (heat and cold stress, noise, vibration, illumination, radiation, static electrical fields, classification of jobs according to physical workload, etc.), and a list of suspected chemical carcinogens (86 agents). Specifications are equally provided for construction works (ladders, scaffolds, etc).

Decree No. 134/2003 (replacing MD 116/1991) defines the **type of industrial and non-industrial enterprises which should have an OSH department and a joint OSH Committee. It also regulates training in occupational safety and health** for workers/managers involved with OSH in the enterprise.

The decree stipulates that every establishment or a branch thereof, at which 50 or more workers are employed, shall assign the industrial safety task to an OSH department and to a joint OSH committee, where some technicians and specialists are working as full-time OSH controllers and supervisors. The main functions of OSH technicians and specialists are: 1) periodic inspection of the workplace; 2) to investigate accidents and determine its causative factors; 3) to investigate the incidence of occupational diseases and determine their causative factors; 4) to maintain statistical information; 5) to check fire fighting equipment and follow up protective measures; 6) to participate in safety committee meetings, 7) to specify preventive measures (art. 227).

The OSH committee consists of:

- Facility owner, his representative or the general director,
- Heads of main production sections/ departments,
- Representative of Civil Defence,
- Facility physician (if present)
- The person in charge of occupational safety and health at the facility,
- A number equal to above members, from local trade union members, and selected from the same production sections/ departments

In case of separate workplaces belonging to the same establishment, a central committee is to be established at headquarters.

Composition of OSH staff within the OSH department at Different Facilities, according to Economic Activity and Number of Workers

Economic Activity	OS&H Technical Members			Number of workers / Shift
	Specialist	Technicians	Workers	
Industrial	-	1	-	50 - 200
	1	2	-	200 - 500
	2	3	-	500 - 1000
	1	2	-	for every 1000 above mentioned
Non-industrial	-	-	1	50 - 200
	-	1	-	200 - 500
	-	1	-	for every 500 above mentioned

Specialist: is one having a university degree in accordance with the working condition in an economic establishment (facility): in medicine, engineering, science, agriculture, or pharmacy.

Technician: is one having a degree, less than a university degree, i.e. from industrial institutes, vocational training institutes and centres, health institute, high industrial or agricultural schools, vocational military training institutes, preparatory industrial school graduates equivalent to those graduated from high industrial schools, and graduates of the general secondary school certificate (scientific section).

Workers: This is a new addition by the recently issued decree no. 134/2003.

In addition, the decree urges employers to provide **training to OSH committee members**, to be organized and carried out by 2 major institutions (detailed under section 4).

2.2.3 *Infringements and Sanctions*

Infringements of OSH provisions incur heavier penalties compared to infringements of other provisions. These are incorporated in Book VI of Law 12/ 2003. Their two major distinctive features are: a) imprisonment; and b) a higher minimum level of pecuniary fine. There is also a provision to double the penalty in the case that the infringement is repeated (art. 256).

- 1- Imprisonment for a term not less than 3 months and a fine not less than a thousand Egyptian pounds or any of these penalties for infringement of Articles 202 - 231,
- 2- A fine not less than five hundred Egyptian Pounds and not exceeding 10 000 EGP for infringement of Articles 234 and 235,
- 3- The only exception is infringement of articles 135 - 138 concerning declaration of a lockout without permission where imprisonment is also foreseen.

2.2.4 *Latest development on OSH legislation*

A new set of ministerial decrees have now updated provisions. There are new TLVs for 645 chemicals instead of previously 134 in Decree No. 211. In addition a new list of 180 chemicals has been issued. These chemicals are clearly identified as hazardous substances with associated threshold quantities. The Social Insurance Law No. 79 (see 2.3.3) also contained a list of 29 occupational diseases to which 6 new diseases have been added by Decree no. 3/ 2004 (Ministry of Insurance and Social Affairs) (under 2.3.3).

2.3 Other laws and regulations covering aspects related to OSH

2.3.1 *Mines*

Law No. 27 (1981) concerning “Employment of Workers in Mining and Quarrying Activities”: Title 4 of part II (Work Organization and Regulation) requires pre-placement examination and periodic medical examinations every 6 months for workers exposed to dust, including a chest X-ray. Part

It deals with working hours, sick leave, safety measures, health & social care, retirement, inspection & others. Moreover the Minister of Health issued 3 Decrees (59/ 1997, 283/ 1997 & 215/1998) and designated a committee of 5 members for reading, and diagnosing radiographs of workers exposed to dust & fibrous minerals in mines, quarries and specific remote areas. Out of more than 12.000 radiographs, 5.000 cases of pneumoconiosis were diagnosed and workers were accordingly compensated for disability.

Additional decrees specify special allowances and housing facilities, to which workers in mining and quarrying activities are entitled.

2.3.2 Ionizing Radiation

Decree No. 59 (1960), on protection against ionizing radiation regulates licensing and use of radiation sources. Open sources are the responsibility of the Atomic Energy Organization. The Ministry of Health and Population is responsible for closed sources and X-ray machines and specifies qualifications and training of personnel using them. Both bodies (AEA and MOHP) inspect places with radiation sources and keep radiation and medical records of all exposed workers.

2.3.3 Compensation: Health Insurance Legislation & Organizations

Law 79 (1975), the Social (and Health) Insurance Law as amended by Law No. 25 (1977) is implemented by the Ministry of Insurance and Social Affairs.

Its objective is to provide benefits for old age (including disability and death), illness, unemployment, work-related injuries (victims of occupational accidents and diseases or overexertion at the workplace) and social care (covering maternity).

Its scope:

The social insurance scheme, Law 79, applies to all civil servants in government and public sector services, with no age limit; workers in public institutions and public sector units, regardless of age; and workers with regular employment in the private sector, who are over 18 years of age. Its coverage was extended in 1976 to small employers and the self-employed (Law 108/1976); to Egyptian workers abroad (Law 50/1978); and to temporary workers (Law 112/1980).

Employees in the Government and public sectors aged 16 and over, and in the private sector, aged 18 and over, are insurable against the consequences of employment-related injuries or occupational diseases. Domestic servants are not covered; in addition, agricultural workers and artisans in practice fall outside the scope of the law. Compensation occurs for diseases listed in the schedule of occupational diseases, in case of injury resulting from accident at work, or because of work, or due to a commuting accident.

Schedule of Occupational diseases:

The schedule, which is annexed to Law No. 79, contained 29 types of diseases to which 6 new types were added in Feb. 2004. (Decree No. 3, 2004, Annexed to Law No. 79). Workers exposed to conditions with possible development of diseases listed in the schedule are subject to periodic medical examination. MD No. 218/1977 amended by MD No. 78/1978 regulates the periodicity and procedures of such examinations.

Diseases contained in the list (Annex I) give right to compensation. In addition, diseases caused by overexertion are also compensated under certain circumstances (MD No. 239/1977 as amended by MD No. 136/1980, 36/1982 and 161/1982, Ministry of Insurance and Social Affairs).

Compensation mechanism: decision by the Health Insurance Organization (HIO):

Workers can apply personally or through the facility/enterprise physician to the nearest Health Insurance Organization (see below) Centre/office to claim for compensation on their occupational injury/illness. The HIO centre/office will then investigate the case; analyze its relation to occupation; decide and define the rating for physical and/or functional impairment; and determine the degree of disability giving right to compensation according to table (2) appended to Law 79 of 1975. The HIO also starts treatment of such health impairments.

In case of death due to a work-related accident (at work + commuting) the compensation provided to the victim's family is equal to his/her salary/wages for 6 000 days. For information, 121 such fatal cases were compensated in 2001 (more details see table 6 in section 6).

Decisions regarding diagnosis of an occupational disease or injury and matters related to compensation of benefits can be appealed to a special committee of referees, the decisions of which are final but can be brought to the general court. The committee membership and procedures are organized according to Ministerial Decree 215 (1997).

In addition to evaluation of disability, the HIO is also responsible, according to Law 79/ 1975 and Law 12/ 2003 (art. 216), to carry out both pre-placement and periodic medical examinations. (see also 3.2.2)

Financial Resources:

The system is administered by two separate schemes:

- One for civil servants administered by the **National Organization for Social Insurance (NOSI)** Government Sector Fund, under the Ministry of Insurance and Social Affairs, and
- The other relates to workers in public and private enterprises, the self-employed, Egyptian workers abroad and temporary workers. This Fund is administered by the "**General Organization for Social Insurance**" also under the Ministry of Insurance and Social Affairs.

"The General Organization for Social Insurance" will pay for: (1) treatment; (2) rehabilitation; (3) compensation according to the disease/ impairment at stake.

Alternative schemes:

There are also other alternative schemes for specific enterprises, such as banks and a great number of complementary schemes covering 4m workers. The Arab Contractors, for instance, a huge construction company, covered 55,000 contributors and 18,000 pensioners in 1998. These schemes collect contribution from employers and workers.

The above mentioned types of insurance are elaborated as such: about 11% of the employee's wages/ salaries/ payment contributed by the employee, plus about 22% of the employee's wages/ salaries/ payment contributed by the employer (government, public or private employers). These contributions are put into five separate funds, one for each type/ kind of insurance:

- Fund for old age
- Fund for illness (chronic diseases)
- Fund for unemployment
- Fund for work-related injuries (accidents, diseases and overexertion)
- Fund for social care

Fund for work-related injuries (administered by the General Organization for Social Insurance):

Article 46: Insurance against work injuries is funded by:

1. monthly contributions/ payments of: 1% of wages and salaries of government and public

administration employees, 2% of wages and salaries of employees in economic units related to government and public administration agencies, and 3% of wages and salaries of other employees,
2. investment profits of the above mentioned resources

Fund for illness (chronic diseases):

Article 72: Insurance against Chronic Disease (Illness) is funded by:

1. monthly contributions/payments of: 3% of wages and salaries paid by the employer, and 1% of wages and salaries paid by the employee
2. investment profits of the above mentioned resources

Within the Fund for work-related injuries, a special sub-fund for the treatment of diseases and occupational injuries has been established, which uses the resources of the 2 above-mentioned funds as follows:

Article 83: Resources of the Fund for work-related injuries (accidents, diseases, overexertion);

1. Contributions/ payments by the concerned authority (i.e. the National Organization for Social Insurance), from contributions/ payments collected for Insurance against work injuries, as follows:
 - 0.5% of wages and salaries of public and governmental administration, public agencies and public sector employees, plus
 - 1% of wages and salaries of all other employees.
2. Contributions/ payments by the concerned authority (i.e. the National Organization for Social Insurance), from contributions/ payments collected for Insurance against chronic diseases, as follows:
 - 4% of wages and salaries of insured persons, plus
 - 1% of pensions of retired persons.
3. A nominal fee of LE 0.2, paid by every patient, each time he/she seeks medical advice
4. Investment profits of fund resources
5. Other resources due to fund activities
6. Donations, gifts and other accepted resources, in money or in kind.

Theoretically, all employees are insured against the 5 situations.

In practice, different types of insurance cover about 8.4 million employees (at the end of 2001). Of those covered by different insurance schemes:

- 1- 46.8% are affiliated to local and public administration agencies (Law 32 for 1975),
- 2- 37.5% are affiliated to government (15.1%), public sector (9.6%) and private sector (12.8%) establishments (Law 79 for 1975),
- 3- 15.7% are retired employees (12.4%) and widows (3.3%).

However, insurance against occupational accidents and injuries is currently covering 10,213,395 beneficiaries, of whom: 4,745,695 are employees in governmental sector; 965,353 employees in public sector; and 4,502,347 employees in private sector (HIO, 2002).

In addition, health care insurance covers about 18.6 million students and 1.85 million newly born infants.

2.3.4 Protection of the Environment: Law No. 4 / 1994

Several laws, executive regulations and decrees deal with the protection of Egypt's environment. The most important are: Law No. 4 for 1994 on the Environment, Law No. 48 for 1982 on protection

of the River Nile and water ways, Law No. 52/1981 on protection against smoking hazards, Law No. 38/1967 on public cleanliness, Law No. 93/1962 on disposal of liquid wastes, Law No. 59/1960 on protection against ionizing radiation and Law No. 45/1949 regulates the use of loud speakers.

Law No. 4 was promulgated on 27 Jan. 1994, published in the official gazette (No. 5 of 3 Feb. 1994) and entered into force on 4 Feb.1994. Its executive regulation (ER) was promulgated by the Prime Minister decree No. 338 (1995).

The objective of the Law is to protect and promote the environment.

The scope: of the law encompasses the protection of land, air and water environment from pollution, and sets controls for activities affecting them. The Law establishes the administrative structure necessary for its application and enforcement supervision. i.e. the Egyptian Environmental Affairs Agency (EEAA). EEAA is responsible for the formulation of the general policy and plans for the protection and promotion of the environment. Representatives of 6 Ministries, NGOs, employers and university representatives are members of its board.

Relation to Occupational Safety and Health at the workplace:

One major objective of the law is to ensure that industrial establishments, public or private, do not pollute the environment. This is done through an environmental impact assessment of establishments requiring licenses to operate. However, for currently established facilities, auditing and monitoring mechanisms are operating under the Ministry of Environment. Emissions or air pollutants or exhaust fumes are subject to permissible limits, which were originally under Decree No. 55 and have been updated by Executive Regulation (ER) of Law No.4. These limit values apply to indoor as well as to outdoor premises. This covers chemicals, mineral dusts (crystalline and non crystalline), limits for carcinogens, a list of carcinogens workers are not allowed to deal with, limits for physical exposure such as to noise, temperature, heat stress, etc.

Hazardous chemicals:

Law No.4 (chapter two, section 1, art. 29 to 33) and its Executive Regulations (art.25) regulate the handling of hazardous substances and wastes, which require special authorization. The law and its ER set the procedures and conditions to obtain the necessary license for handling hazardous substances. Application for such a license involves among others to provide the competent authority with a description of the substance and of its intended use, of its means of transportation and storage. It requires maintenance of a register, proper packaging, an emergency plan and adequate training of the staff. Lists of hazardous substances are to be established under Law No. 4 by the ministers in their fields of competence. The Unified lists of hazardous substances include:

List (A): banned chemicals

List (B): hazardous substances subject to permitting procedure

List (C): non-restricted substances

In addition, Law No. 4 also regulates contingency plans for environmental disasters (defined as accidents due to natural or man-made actions that lead to severe damage to the environment). It regulates the import of hazardous substances.

Infringements and sanctions:

The Law is enforced through a wide scope of penalties for violations. Penalties extend from fines to imprisonment, closing down the establishment or its operation. Implementation of the law is enforced through a corps of inspectors directly under the Ministry of Environment, or under the governorate.

2.4 Laws and regulations indirectly related to OSH

2.4.1 Related to health

A certain number of decrees regulate medical examination, identification of diseases giving right to compensation, etc. They are listed in Annex (2). (Also see section 3.2.2 on occupational health services).

2.4.2 Related to conditions of work

Book II (Title VI) of the Labour Law 12/ 2003: Organization of work

This title already establishes the principle of specific working hours for special categories of workers or specifically arduous jobs. Employment of young persons and women are generally covered under the same title; however juveniles, women workers, night work and hard labour/working conditions are regulated under separate distinctive decrees.

Ministerial Decree No. 185/2003: Model regulations for Penalties and work organization, which determines general rules with regard to penalties with respect to work related violations and also regulations with respect to work organization matters such as retirement age, working hours, work break, working days per week, leaves and probation period.

Special working hours

Decree No. 112/2003: Fields of work, which can be continuously operating without breaks, identification of hard labour/ working conditions, deserving additional break hours

Decree No. 34/1982: Means insuring inspection during night shifts as well as during unofficial working times.

2.4.3 Related to women and children

Child labour and Young workers:

Law No. 12/1996 enacts the Child Law

According to Law No. 12, children shall not be employed before attaining 14 complete calendar years of age, nor shall they be provided with training before they attain 12 calendar years of age.

List of hazardous jobs:

- Law No.12 stipulates that children between 12 and 14 years of age may work as trainees. Specific regulations have to be established with regard to conditions of work, jobs and industries where such young workers may be employed (12 to 18).
- Decree 118/2003 identifies works, occupations and industries prohibited to young workers below 18 years. The same decree provides regulations, specifications and conditions of employment of young labourers (juveniles)
- The new labour law adjusts the minimum age of employment to the child law and international labour standards. Since ratification by Egypt of ILO Convention No. 182, the age limits suggested in the new labour law and in Decree 118 (2003) for hazardous occupations is 18 (44 occupations listed in which they cannot be employed) and 16 (in addition to the previous 44, children cannot be occupied in jobs or occupations having an impact on their mental, physical or moral health, neither can they be occupied in activities exposing them to mechanical, biological, physical or chemical hazards).

Women workers

Law No. 12/ 2003 indicates that no woman may be employed in work harmful to her health or morals or in arduous or other types of work to be determined by order of the Minister.

Decree No. 155/2003 identifies works, occupations and industries prohibited for women workers. The same decree organizes and regulates night work for women.

2.4.4 Special categories of workers

Temporary workers are covered by Law 12/2003. However, there are no OSH regulations specifically applied to seasonal workers, migrant workers, disabled workers, workers in co-operatives, self-employed workers. Nonetheless, some provisions on OSH concerning these categories are to be found in legislation in general, noting that according to article 1 of decree no. 211 , owners of new or already established facilities should undertake the necessary measures or introduce the necessary amendments to facilitate the mobility of the handicapped during work.

2.5 Correspondence with ILO instruments

Egypt has ratified 63 Conventions, including the eight fundamental ones.

Convention 182 on the Worst forms of Child Labour, 1999 has been ratified in 2002 and a new list of hazardous jobs is being developed. (Convention 138 on minimum age, 1973 was previously ratified in 1999)

Convention 129 on Labour Inspection (Agriculture) was ratified in June 2003.

Among the most important OSH instruments, i.e:

Convention 129, Labour Inspection in Agriculture, 1969

Convention 136, Benzene, 1971

Convention 139, Occupational Cancer, 1974

Convention 148, Working Environment, 1977

Convention 155, Occupational Safety and Health, 1981

Convention 161, Occupational Health Services, 1985

Convention 162, Asbestos, 1986

Convention 167, Safety and Health in Construction, 1988

Convention 170, Safety in the Use of Chemicals, 1990

Convention 174, Major Industrial Hazards, 1993

Convention 176, Safety and Health in Mines, 1995

Convention 184, Safety and Health in Agriculture, 2001

Convention 81 on Labour Inspection, 1947

Convention 129, 139 and 81 were ratified, in 2003, 1982 and 1956 respectively. However, Egyptian legislation covers most of the requirements and provisions entailed in the above-listed instruments.

Other instruments which have been ratified are:

C 115 Radiation Protection Convention, 1960 (ratified in 1964),

C134 Prevention of Accidents (Seafarers), 1970 (ratified in 1982),

C 152 OSH (Dock Work), 1979 (ratified in 1988)

C 89 Night Work (Women), 1948 (ratified in 1960)

Occupational diseases contained in Recommendation No. 194, 2002, are partly covered by the new schedule of occupational diseases. (see Annex 1).

3. POLICY, STRUCTURE AND RESPONSIBILITIES

3.1 National Policy Review Mechanism

The tripartite body responsible for the formulation and review process of the national policy and

programmes is the **Supreme Advisory Council on OSH**. Its setting-up is defined by Law 12/2003. It is chaired by the Minister of Manpower and consists of 25 members, including representatives of workers and employers organizations and of several Ministries such as: agriculture, industry, environment, etc. and agencies concerned with OSH issues.

The council is responsible for a) drawing-up a general OSH policy and b) coordinating work and organizing cooperation between all parties interested in OSH, in particular those involved in research, training, legislation and implementation of OSH programs.

At the governorate (province) level, Law no.12/2003 also provides for the setting-up of a similar joint advisory Committee, headed by the Governor, with the same composition as at the national level. Such committees decide on OSH policies and programmes for the Governorate.

It should be noted that since its establishment by decree No. 114, 1984, implementing law no. 137/1981, the Supreme Council was only revitalized during 2001-2003. However, its efficiency could be improved by:

- assigning a permanent secretariat to convene meetings, follow-up on decisions and prepare reports
- agreeing upon well-defined plans and tools/mechanisms and following up their implementation

Decree no. 985/2003, implementing law no.22/2003 was issued by the prime minister to replace decree No 114, 1984, implementing law no. 137/1981. Decree no. 985/2003 established the Supreme Consultative Council for Occupational Safety and Health.

3.2 OSH system: implementation means and tools

The institutional structures with OSH related activities and powers are mainly:

The Ministry of Manpower and Migration (MOMM),

NIOSH (National Institute for Occupational Safety and Health) (see section 4),

The Ministry of Health and Population (MOHP),

The Health Insurance Organization (HIO see section 2.3.3).

The Ministry of Insurance and Social Affairs with related organizations (See under Section 2.3.3)

The Ministry of Environment is also entrusted, according to Law No 4 with inspection duties related to the pollution of the environment by factories, and has therefore an indirect impact on the work place. (See under section 2.3.4, sections 5.2 and 5.3),

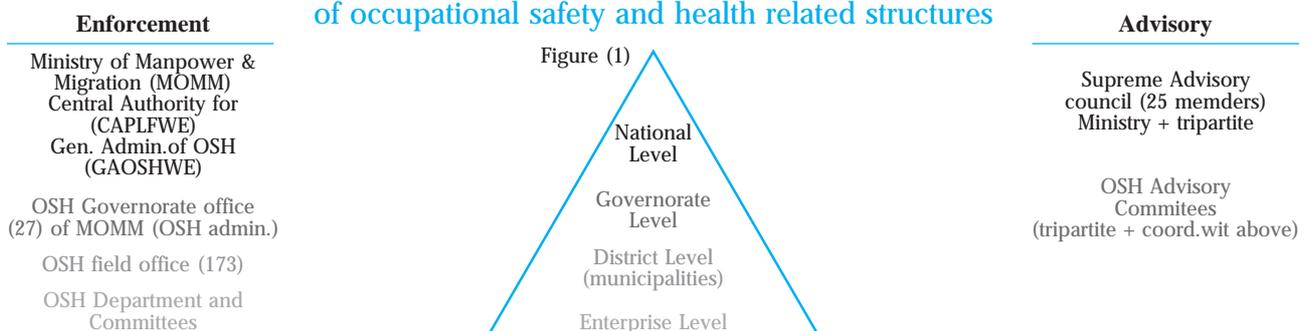
The Ministry of Interior is in charge of fire protection licenses of enterprises, (Civil defense Authority)

The Ministry of Industry, is the standardization institution (see section 5.1),

The Ministry of Construction, delivers planning permits and building specifications.

Enforcement of legislation within the enterprise is supervised by two types of inspectors: the labour legislation related to employment conditions falls under the Labour Inspectorate, while that of OSH legislation proper is supervised by a distinctive corps of safety inspectors working within the MOMM structure at governorate level, i.e. at district and field levels. Inspectors under the Ministry of Environment may also intervene at the workplace.

Organization scheme of occupational safety and health related structures

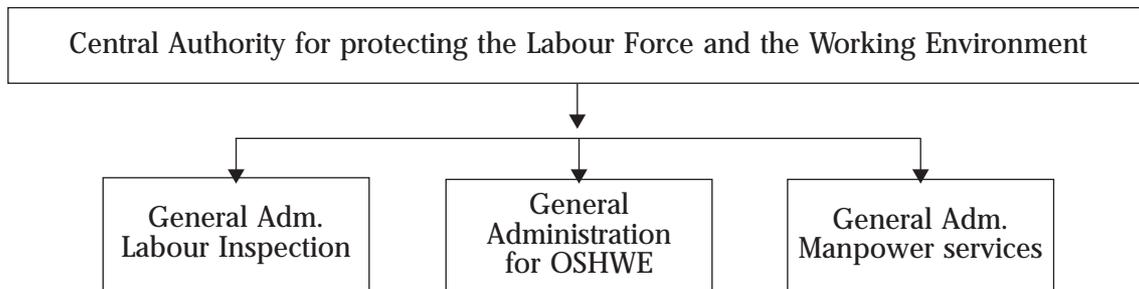


3.2.1 Structure and Responsibilities under the Ministry of Manpower and Migration (MOMM),

The management of OSH falls under the jurisdiction of the MOMM. It is exercised through the Central Authority for Protecting the Labour force and the Working Environment (CAPLFW), which is divided into three General Administrations:

- the General Administration for Labour Inspection, dealing with the enforcement of the labour legislation related to employment conditions in general,
- the General Administration for Occupational Safety and Health and the Protection of the Working Environment (GAOSHWE),
- The General Administration for Manpower Services.

Figure (2): **Structure/ organization of the CAPLFW**



Structure and responsibilities of the central level

The **GAOSHWE**, is responsible for drafting safety and health policy and programmes, procedures, guidelines and legal requirements. Its main functions are set out in the Manpower and Migration Minister's Decree no. 120 (1996), currently under revision. The GAOSHWE supervises the implementation of OSH labour legislation through MOMM structures at governorate and district (municipal) levels.

The work of the GAOSHWE is divided according to the qualifications of OSH specialists who are physicians, chemists or engineers.

At the Central level, OSH specialists visit enterprises if they consider it necessary, or upon request by MOMM offices in the governorates. There are 15 staff members at GAOSHWE at the central level. Their role is to provide technical advice to governorates and supervise implementation of the governorates' annual plans to visit plants located in their geographical area.

The main functions of the GAOSHWE at central level are to:

- Define the general policies and programmes ensuring the protection of manpower as well as the procedures for their implementation,
- Participate and follow-up the activities of the technical secretariat of the Supreme Council for OSH and its affiliated Committees at governorate level,
- Examine, approve and follow-up the annual plan of the OSH Dpt. at governorate level,
- Define specifications for licensing of enterprises including those of the public sector,
- Adapt national legislation to Arab and International Labour OSH Conventions,
- Provide technical assistance to OSH Dept. at governorate level in particular on the implementation of the new Labour code and its decrees,
- Investigate complaints, upon request of the governorates' OSH Dept.,
- Coordinate with NIOSH for the establishment of its annual research plan,
- Set up the general policy for the adoption of governorates research plans,
- Establish the budget of all equipment of inspectorates,
- Examine reports resulting from major accidents, occupational diseases and prepare preventive action,
- Participate with governorates' inspectorates in the analysis of field samples,
- Implement the cooperation protocol signed between MOMM and the Ministry of Environment,

- Participate with the Ministry of Industry in defining safety specifications for PPE,
- Follow-up the training plan of OSH specialists at MOMM or at governorate levels,
- Participate in committees dealing with medical arbitration and vocational rehabilitation,
- Produce awareness material,
- Organize follow-up exhibitions and competitions at all levels, including enterprise level.

Structures and responsibilities at the governorate (province) level

The OSH Dept. within the governorate offices of the MOMM supervises the functioning of field offices located at the district level (municipalities). The governorate offices are chaired either by undersecretaries or by Director Generals. The importance given to OSH by the governorate is indicated by the number of field offices and by the establishment of such field offices in as many districts as possible.

The OSH governorate offices perform the same types of duties as the GAOSHWE at central level.

Structures and responsibilities at the district (municipality) level

Inspections of enterprises are done at the district level. Safety inspectors participate in issuing licenses for the setting-up of establishments and in checking that the OSH standards of such licenses are applied; they carry out engineering control of work premises, measurements of physical, chemical factors, etc.; and they verify that pre-placement and periodic medical examinations have been duly executed by HIO. The number of OSH offices at district level depends on the number of undertakings. However, the main obstacle to enforcement of legislation is the shortage of staff and non-coverage of all districts by OSH services (173 offices for 80 districts).

In case of major accidents or hazards, inspection may be carried out with the participation of MOMM staff from the three levels.

Occupational accident and diseases statistics are compiled at governorate level according to forms set by Ministerial Decree 126 (2003) filled in by safety specialists of the enterprise and checked and collected by safety inspectors. They are sent to MOMM Central Administration for Statistics.

Level of Human resources

The CAPLFWWE and all related structures at governorate or district levels amounts to 2500 civil servants for the whole country, among which **1300 work within the OSH structure** and 1200 within the Labour inspection administration. The figure of 1300 OSH staff covers managers, inspectors and technical support staff, including those on unpaid leave. The actual number of safety inspectors in the field amounts to **583**; they are mainly engineers (1/3) and chemists (2/3) with a nominal number of physicians. They perform their functions through 173 field (district) offices. These offices are located in Cairo (56 OSH inspectors), Dakahleya (56), Gharbeya (67), Kafr El Sheikh (20), Alexandria (42), Giza (10), Menia (62), Ismailia (13), Port-Said (20), Menoufeya (54), Kaliobeya (20), Sharkeya (24), Demietta (10), Behira (12), Assiut (13), Aswan (8), Suez (7), New-Valley (4), South Sinai (3), Beni-Sweif (22), Qena (25), Matrouh (2), Luxor (9), Fayoum (2), Red Sea (5), and North Sinai (3). The total number of OSH inspectors visiting sites amounts to 583. Besides the field offices, there are 12 research units, carrying out some research activities. (Figures provided by MOMM in Feb. 2004)

Scope of coverage

All sectors of the economy are covered by labour and OSH inspectorates, apart from the informal sector. Some difficulties arise in economic sectors which employ informal workers, such as open cast mines, construction , agriculture , fishing and diving.

Power of inspectors

Inspectors are empowered:

- to initiate legal procedure in case of non-compliance with obligations laid down by the law,
- to close down an enterprise, wholly or partly, or stop the operation of one or more machines in case of imminent danger threatening the health or safety of workers.

Frequency of visits to companies with more than 50 workers is 91.2%,
To companies less than 50 workers is 34.5%.

Training of inspectors

The MOMM organizes a limited number of seminars, two or three times a year, in order to upgrade the inspectors' capacity; however, it feels that there is a need to upgrade the capabilities of the MOMM staff, especially those concerned with enforcement of OSH legislation. Considering that resources are limited, it is recommended that a training programme be established, with objectives defined with respect to identified priority fields.

3.2.2 Structure & responsibilities at the Ministry of Health and Population (MOHP):

As stated in the Law 79 for 1975 (see section 2.3.3), the Health Insurance Organization (HIO), established in 1964, has the greatest role in occupational health services provided to the employees in every economic activity in Egypt. The HIO is responsible for the following important functions:

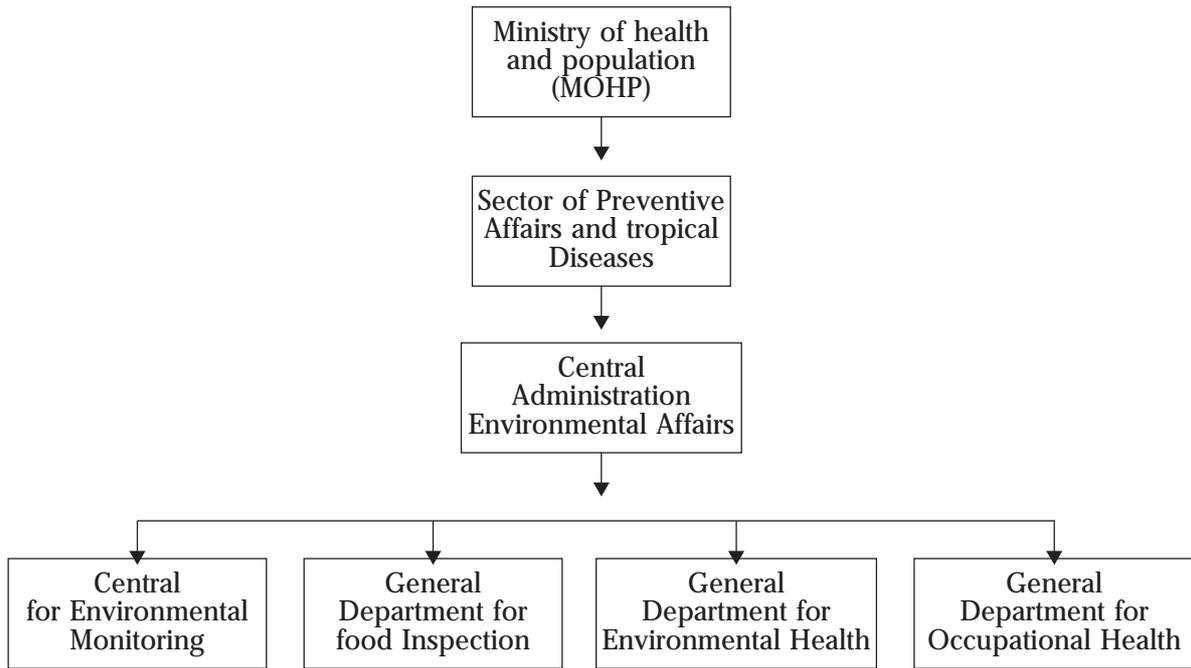
- Establishing the pre-placement medical examination (PME), to insure physical, mental and psychological fitness of the employees for the work/ occupation.
- Early detection of occupational illnesses. A specialist in occupational diseases (technical supervisor) is assigned by the HIO in order to perform a field survey at various economic activities aiming at identifying the occupational exposures, the number of exposed employees and the risk of contracting occupational diseases. Accordingly, a physician will perform the periodic medical examination (PME) on the exposed group/s of employees. Whenever, the technical supervisor or the PME physician found any lack or malfunctioning in the preventive measures at an economic activity, they will notify the OSH office to take measures. The PME physician will refer the suspected cases to the Occupational Medicine Specialist for further examination and investigations.
- Provision of therapy for the insured employees. The Occupational Physician can prescribe specific therapies for illnesses such as poisoning, dermatitis, and infection diseases. S/he decides on permanent or temporary disability and re-examine the employees before return to their duties.
- Recognition of occupational diseases. This is done through special committees formed at various HIO branches. Each committee is composed of: a consultant (usually a Professor of occupational medicine in one of the universities), a specialist in occupational Medicine, and the head of the PME Department at the HIO branch. The committee recognizes occupational diseases following relevant examination, investigation and insuring the association with the occupational exposure in each case.
- Notification and registration of occupational diseases and counting them as work injuries.
- Referring cases with various types of illnesses to the relevant Medical Committees. The committees are responsible to decide if the injury / disease is resulting from work and on the rate of disability.

In addition to the role played by the HIO, the Occupational Health Department of the MOHP performs some inspection duties, especially when receiving public complaints or inquiries related to pollution, noise or other dangers to health and the environment. However, its main function is to study and analyse the cases of occupational diseases reported by the Health Insurance

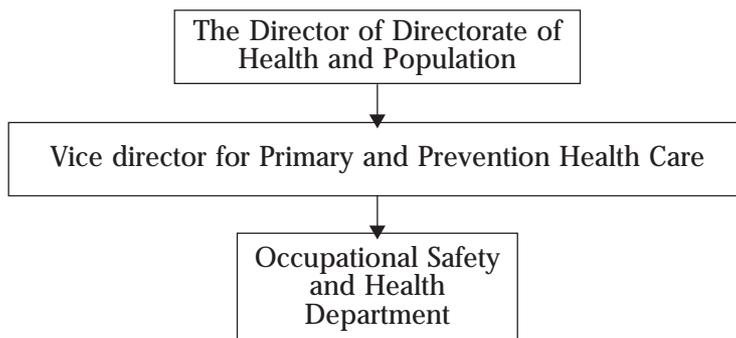
Organization (HIO) (section 2.3.3) and from OSH offices of MOMM at governorate levels. It keeps a specific register and produces annual statistics on the prevalence of occupational diseases due to occupational exposures. It also supervises the functions of HIO related to pre-employment and periodic medical examinations as well as compensation and rehabilitation. It should be noted that the inspection power of work premises in terms of sanctions in case of non-appliance of legal requirements only remains with OSH inspection under MOMM.

The Occupational Health Department (OHD) in the Organizational chart of the MOHP:

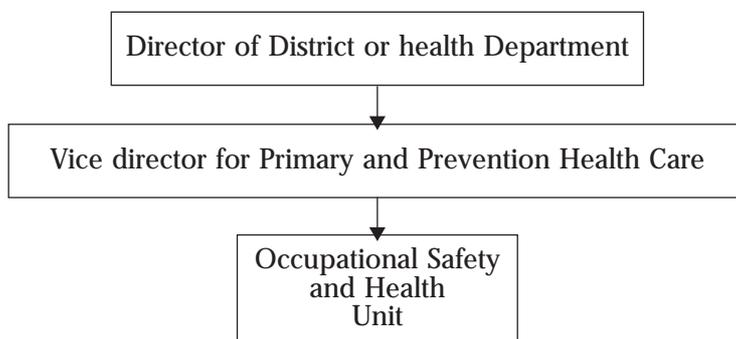
At the Central level:



At the Governorate level:



At the District level (Health Administration):



Level of human resources at the MOHP:

- At the MOHP- OHD, there are about 40 physicians (7 at the central level and about 30 at the governorate and peripheral level),
- At the Health Insurance Organization (HIO), there are 29 physicians qualified in Occupational Medicine (each has a Diploma, Master or Doctorate degree). In addition, there are 914 specialist physicians from outside the HIO working as consultants and technical supervisors at 12 occupational health committees. Some of those specialist physicians are qualified in occupational health,

Activities of the OHD at MOHP

- (1) Prevention and protection from exposure to occupational hazards and promotion of workers' health;
- (2) Provision of safe working conditions at workplaces, through following activities:

- Periodic follow-up of occupational health conditions; epidemiological study of work-related diseases;
- Study occupational and environmental health problems caused by industries and suggest control measures;
- Conduct health surveys for specific problems in industrial establishments especially in heavily industrialized areas;
- Keep records of cases of pesticide poisoning, and suggest control measures;
- Co-operation with the Centre for Environmental Monitoring and Workplace Environmental Studies;
- Counselling for recommendations on preventive aspects concerning the work environment and workers' conditions;
- Environmental and health impact assessment of different enterprises;
- Training of primary health care staff and occupational health workers;
- Health education for different occupational groups, emphasizing: health care workers, agricultural workers, working children, new industrial workers, and employers in small-scale enterprises;
- Early detection of occupational diseases and injuries and planning for preventive measures necessary for reducing injuries, disabilities and deaths resulting from these hazards;
- Identification and monitoring of workers' health problems, and follow-up of corrective actions taken by the employer;
- Participation in meetings and activities of the Supreme Advisory Council for OSH;
- Participation with relevant ministries and universities concerning:
 - Legislation and Regulations
 - Risk assessment procedures
 - Establishment of national strategies for OSH action programs;
 - Data collection from health districts for accidents, periodic medical examination, child labour, poisoning cases and chemicals;
 - Investigating public complaints, especially those received from occupational groups or the public related to hazardous industrial exposures, and proposing solutions.

The MOHP has issued a directive to the directorates of health in various governorates to set up a section for occupational health in each governorate and to set up an occupational health office in each district in order to ensure the fulfilment of various functions. The directive emphasized that physicians employed at the proposed sections or offices, either on full-time or part-time basis, should be qualified in occupational health. The directive outlined the functions of the sections and offices as well as the managing physicians and stressed the importance of staff training and cooperation with the various agencies working in the field of occupational health. The system is currently working in 22 governorates. Between 1994 and 1997, the occupational health department at the MOHP headquarters succeeded in establishing a chemical unit, and an injury control and prevention unit, respectively; as follows:

Injury Prevention and Control unit:

- A ministerial decree was issued to form a national injury control and prevention committee in cooperation with the concerned agencies; transport, interior, local administration, road agency, education, environment, poisoning control centres, housing, and NGO's. The committee aims at following up and implementing a national program for injury control and prevention with:
 - Standardization of registration of injuries;
 - Training medical professionals and health workers on biostatistics registration, and data management;
 - Training health workers at emergency departments and ambulance services (life saving centres) on secondary and tertiary prevention programs;
 - National campaign on injury control with concerned agencies;
- Registration of injury cases reported to OHD from health directorates in different governorates;
- Data entry, analysis and presentation, followed by reporting results to the responsible health officials and decision makers at the directorate and the governorate levels, along with recommended solutions, and plans for control and prevention aimed at reducing accidents and injuries;
- Collaboration with the WHO on a programme for safety promotion with the target of establishing a national plan on safety promotion, through elaborating an information system on surveillance of injuries and accidents, and developing human resources through training and provision of personal computers.

Chemical Safety Unit:

- Provision of tools and mechanisms for safe handling of chemicals throughout the following steps: importation, transportation, storage, use and waste management;
- National chemical registry, for all used chemicals (imported or locally manufactured);
- Evaluating chemical substances, utilizing preventive measures for the whole process and reporting to authorized agencies on the avoidance of exposure of citizens to these hazards;
- Establishment of 6 poison management and information centres in six governorates and providing the centres with suitable equipment and laboratory facilities;
- Implementation of toxico-vigilance programme for the different levels of health care facilities in different governorates;
- Supply the unit with audiovisual materials on chemical safety for professional training;
- Participation in the EMRO plan for preparedness to chemical accidents.

3.3 Coordination and Collaboration including Collective Bargaining Agreements

Employers and workers organizations are regularly consulted on OSH issues within the consultative bodies in the enterprise. However, a strong commitment on both parts would significantly improve safety and health at the workplace.

3.3.1 At government level

The Supreme Advisory Council on OSH

Apart from elaborating the general OSH policy and programmes, the Council is to coordinate the work of and organize cooperation among all parties interested in OSH, in particular those involved in research, training, legislation and implementation of occupational safety and health programmes.

At the governorate level

The same type of institution exists with the same composition and function. It is however, totally under the authority of the governor of the province, which makes its mechanism slightly more flexible.

NIOSH : its governing body

The governing body of NIOSH (the National Institute for Occupational Safety and Health) is chaired by the Minister of Manpower. It is a tripartite body where employers and workers organizations have an important say in the programme of the Institute.

The General administration for OSH of the Ministry of Manpower

This authority is empowered by decree No. 134/2003 to establish a tripartite committee to formulate and review the training policy on OSH organized at the enterprise level.

The Egyptian Environmental Affairs Agency

Under the Ministry of Environment, EEAA has developed an Information and Management System for Hazardous Substances (EHSIMS). This system operates within a network of 7 Ministries (Agriculture, Health, Industry, Manpower and Migration, Electricity, Petroleum and Interior) as well as the Customs Authority and Civil Defence.

3.3.2 at enterprise level

OSH Committees

The setting-up of occupational safety and health (OSH) committees is required by law for all enterprises with more than 50 workers. The committee is empowered to investigate accidents and diseases and to suggest preventive and control measures. The employer is obliged to execute the recommendations of the committee. The committee is run under the chairmanship of a director of the enterprise with equal representation of employers' and workers' representatives. (also see 2.2.2)

Collective bargaining

In the 1960s and early 1970s, the Egyptian economy was dominated by the public sector, which employed nearly 80% of wage earners. An ambitious privatization programme was launched by the government in 1990s under the Economic Reform and Structural Adjustment Programme (ERSAP). The transition from a centrally-planned to a market oriented economy which took place resulted in a drastic reduction of the staff employed in the state-owned companies which were privatized. However, a special collective bargaining agreement was reached on the issue of early retirement of those dismissed workers.

For the rest of industry, negotiation processes existed. ILO Cairo initiated in 1997 a DANIDA funded project with a view to developing the Egyptian Trade Union's capacity to defend their members basic rights and improve their conditions of work through effective participation in collective bargaining at all levels. In parallel to the DANIDA project, a new Labour Code was developed with the assistance of the ILO and was submitted to the People's Assembly (parliament). It was to constitute the framework for new labour relations which would facilitate a liberalized economic structure and introduce collective bargaining into legislation. The new Labour Code, recently adopted (Law No. 12, 2003), deals with collective bargaining and the right to strike in a number of articles, from 146 to 200. However, capacity building is still much needed in this field.

3.4 OSH Technical Standards, Guidelines and Management Systems

3.4.1 OSH Management systems at the enterprise level

According to Egyptian legislation, the OSH policy of an enterprise is to be established by the OSH

employer, who is the head of the OSH Committee. This is evidence of his commitment towards safety and health within the enterprise. In addition, all decisions of the OSH committee are discussed in cooperation with workers' representatives within the Committee. The designated responsible person for the development, implementation and performance evaluation of the OSH policy is the safety officer of the OSH Committee.

As an example of the successful implementation of OSH-MS, the OSH Committee members have the same rights (including benefits, incentives and facilities) as their colleagues working in the production sector.

The OSH committee is charged with organizing and planning activities related to OSH. They meet once a month and follow-up decisions are taken. An annual plan is issued by the Committee and approved by the employer. However in most cases, action is taken in emergency situations. The safety officer reports to the OSH Committee on performance achievements. In addition to his evaluation, safety inspectors also check that working procedures and equipment comply with OSH legal requirements. However, the possibility of an enterprise being visited once a year by a safety inspector is limited.

The principle of a safety management system exists. It relies on the willingness of the employer to have an efficient OSH Committee, on the qualification of the safety officer, who by legislation should be provided with adequate training by the employer, and on the negotiation skills of the workers' representative within this committee. ILO guidelines on OSH Management systems have not been used as a basis for action in this area. Safety inspectors, however, have repeatedly required training on this subject. ILO Sub-Regional Office (ILO-SRO) Cairo was happy to provide one-day training seminars on ILO related guidelines, as often as required.

No OSH-MS certification schemes have been yet established. However, some enterprises (especially joint ventures) voluntarily adopt such schemes and adapt them to their own needs.

3.4.2 Technical standards

Many laws, decrees and regulations refer or contain basic OSH standards related to physical and chemical hazards.

Decree No. 55/1983 and its up-dated version No. 211/2003 contain exposure limit values for chemicals (TLVs, long term and short term, including dust), for noise (sound intensity), light levels, radiation, explosion, fire, vibration and temperature.

In addition, the Egyptian Organization for Standardization and Quality Control (EOSQC), in the Ministry of Industry, Mineral Wealth and Technological Development, is the formal authority for issuing standards and specifications needed for different products and services in the Egyptian market (see section 5.1). The National Institute for Standards (NIS) is also concerned with issuing standards, provision of technical training courses and research activities.

Inspector guidelines and established technical guidance for inspection together with technical advisory services related to OSH at the OSH Directorate level of the Ministry of Manpower are defined by Decree No. 120/1996.

Law No. 4/1994 on the environment also provides exposure limits for indoor and outdoor exposures, with some additions. The recently up-dated decree (No. 211/2003) is by far more exhaustive. Its TLV list will cover more than 645 chemicals in addition to 180 hazardous materials with threshold quantities and takes as a basis the ACGIH values of 2002. A special working group to establish links between the Ministry of Manpower and the Ministry of Environment has been created and a protocol for cooperation is in progress.

Private companies, in particular joint ventures or foreign companies, such as petroleum, petrochemical, pharmaceutical companies and others apply their own standards.

3.4.3 Use of ILO Codes of practice by national authorities, Industry and Trade Unions

ILO Codes of practice are well-known, but unfortunately not systematically applied. Those translated in Arabic, are more likely to be used. However, OSH requirements are present under many laws and regulations.

Mention should be made that ILO Codes of practice on the safe use of chemicals at work and on the prevention of major industrial hazards in Arabic have been widely disseminated as well as the training manual on chemicals (IPCS). They have been extensively used and parts of them as well as parts of the ILO Major hazards training manual have been incorporated into the Egyptian Hazardous Substances Information and Management System (EHSIMS) developed under the Ministry of Environment (see section 5.3).

As a result of an ILO/SRO Cairo workshop on the promotion of Conventions No. 170 and 174 (July 2001):

- 1- a Committee involving MOMM, MOHP, MOA, MOI, MSEA, etc. has established a list of banned hazardous chemicals and a list of restricted hazardous chemicals subject to licensing;
- 2- the same Committee decided to include labelling and MSDS as an additional requirement in the up-dated form of Decree No. 55;
- 3- the General Administration on OSH of the Ministry of Manpower is participating in various committees at EEAA (Egyptian Environment Affairs Agency) and EOSQC (Egyptian Organization for Standardization and Quality Control) in order to define some OSH technical standards and specifications for industrial facilities.

4. EDUCATION, TRAINING AND INFORMATION:

4.1 University and college courses related to OSH

The major institutions providing OSH educational programs are:

- Faculties (schools) of medicine, engineering and science at 18 governmental and 6 private universities. These are present in 14 Egyptian governorates (provinces).
- High Institute of Public Health affiliated to Alexandria University.
- Institute of Graduate Studies and Research, Alexandria University.
- National Research Centre in Cairo affiliated to the Ministry of Higher Education and Scientific Researches.
- Institute for Environmental Studies and Researches affiliated to Ain Shams University.

In these institutions, educational programs are directed into 2 main levels:

- Undergraduate studies, ending in Bachelor degrees.
- Postgraduate studies in order to obtain Diploma, Master and Doctorate Degrees.

Although there is no OSH postgraduate degree as such, postgraduate degrees may be obtained in closely related disciplines, such as:

- Occupational safety, (Institute for Industrial Safety, Workers' University)
- Occupational health,
- Industrial medicine,
- Occupational hygiene,
- Environmental (and occupational) epidemiology, (in Alexandria only)
- Industrial engineering,
- Industrial chemistry, and
- Environmental studies
- For 2003: environmental medicine and toxicology

However, these educational institutes have an educational capacity far above the current use of OSH & E market. For example, the Department of Industrial Medicine and Occupational Diseases

at the Cairo University Faculty of Medicine comprises 30 staff members: 12 full professors, 6 assistant professors, 6 lecturers, 6 assistant lecturers, in addition to 4 demonstrators, 4 residents and 3 biochemistry specialists. The department is offering its educational services to about 12 postgraduate students every year: 5 for Diploma, 4 for Master and 3 for Doctorate Degrees.

The majority of postgraduate candidates come from and return to universities, research institutes, Ministry of Health and Population or other public health institutions. A minority of them become active in major production facilities.

None of these educational institutions offer an OSH technician diploma; neither do institutions conducting legally required training for OSH specialists.

4.2 Training mechanism

In Egypt, legally required training on OSH at the enterprise level is organized by Law No. 12/ 2003 and Decree No. 134 (2003). This training heavily relies on two main structures, one belonging to a workers' institution and the other one being a government agency. Legislation (Art. 227 of Law 12/ 2003) makes it mandatory for employers to provide suitable training for employees engaged in OSH services and committees, as well as those responsible for management and production, in accordance with their levels of responsibility and within the nature of activities of the establishment.

Training required by law is divided in 3 levels, i.e. basic, advanced and specialized. The basic courses are offered by the Institute for Industrial Safety (affiliated to the Workers' Education Cultural Association) and advanced and specialized courses are offered by the National Institute of Occupational Safety and Health, NIOSH, (governmental institution, with tripartite governing body). Participants in advanced and specialized OSH training must have successfully gone through the basic level.

Decree 134 urges the concerned central authority at the Ministry of Manpower and Migration to establish a committee to design and review the training policy (training courses and curricula) for OSH specialists, technicians and members of OSH committees, as well as those responsible in management and production. The committee was established by decree no. 248/2003 to put in place rules and regulations regarding the training of the members of occupational safety and health committees at the facilities. The committee consists of the director of NIOSH, the director of the training department at NIOSH, the director of the Institute for industrial safety as well as four experts, the head of the Central Authority for Protecting Labour Force and Working Environment (CAPLFWE) and the senior researcher at CAPLFWE. Ministerial Decree no. 206 dated 19/7/2004 was issued to regulate the training programmes in the fields of safety, occupational health and the protection of the working environment.

4.3 Training Agencies and types of courses

There are hundreds of training institutions in Egypt; some of them provide training on OSH. Those may be affiliated to trade unions by branch of industry; they may be provided by the industrial establishment itself; and others are linked to specific ministries. However, there are, according to legislation only two agencies responsible for training those responsible for OSH within an establishment, as described below.

Decree No. 134 (2003): types (and levels) of training courses and trainees, as well as the responsible training agencies:

Type (and level)	Training Agency	Trainees
Basic Training	Institute for industrial Safety	- Specialists and technicians in OSH - OSH committee members

Type (and level)	Training Agency	Trainees
Advanced Training	National Institute of Occupational Safety and Health	- Specialists and technicians in OSH - OSH committee members
Specific Training	National Institute of Occupational Safety and Health	- Specialists and technicians in OSH - OSH committee members according to type of industrial activity (spinning and weaving, petroleum, chemicals, etc...)
Specialized Training	-National Institute of Occupational Safety and Health -Universities, Faculties, NGOs and other private institutions	- Specialists in OSH, each in his/her speciality (medicine, engineering, science, etc...)
Management and Production jobs	-National Institute of Occupational Safety and Health	Those engaged in middle and higher management levels

4.3.1 Institutions conducting legally required training for OSH specialists

The Institute for Industrial Safety:

This Institute was established in 1963, by the Workers' Education (Cultural) Association among 7 institutes concerned with: international labour relations, population studies, trade union (syndicate) studies, labour management, social insurance, labour education, and industrial safety. The Workers' Education (Cultural) Association also has 60 local centres, distributed all over the country, and is also specialized in public awareness on various topics related to labour issues.

According to law, the Institute is responsible for basic training on OSH aspects for:

- Specialists and technicians in OSH (who are members of the OSH Committee)
- OSH committee members (apart from above specialists and technicians)

About 4,000 persons are annually trained on OSH aspects. Training takes place in periods of one, two, or five weeks, according to level and place of training, as follows:

- Two types of basic training courses take place at the Institute:
- 5 weeks training courses (25 days) for specialists and technicians in the OSH Committee,
- 2 weeks training courses (10 days) for others.
- Upon request of enterprises, one week basic training courses (5 days), may take place, outside the Institute, usually at the company's or the economic facility's premises.

The National Institute of Occupational Safety and Health (NIOSH):

Established in 1969 by *Law 932*, NIOSH is as an independent research agency for OSH. The institute is usually directed by a senior official from the Ministry of Manpower, and has a tripartite governing body chaired by the Minister of Manpower. The Organization Chart of NIOSH is shown in annex (3). Its main activities are:

- Scientific & applied research
- Training in OSH
- Advisory field services concerning OSH
- Information centre

By Law, NIOSH is responsible for basic, advanced, specific and specialized training on OSH for:

- Specialists and technicians in OSH (who are members of the OSH Committee)
- OSH committee members (apart from above specialists and technicians)
- Middle and higher management and production line officers (who participate in such training as members of the OSH committee or independently from the OSH Committee)

About 1,500 persons are trained annually on OSH aspects. Training takes place in periods of one, two, or five weeks. There are eight courses, subdivided as follows:

- Safety and fire protection: one week each, this applies to all sectors and levels of trainees
- Six types of training courses take place at the institute:
 - 5 weeks advanced training courses (25 days) for specialists & technicians in OSH,
 - 2 weeks advanced training courses (10 days) for OSH committee members,
 - 2 weeks specific training courses (10 days) for OSH committee members, according to type of industrial activity (spinning & weaving, petroleum, chemicals, etc.)
 - 2 weeks specialized training courses (10 days) specialists in OSH, each in his/ her specialty (medicine, engineering, science, etc.),
 - 1 week training courses (5 days) for higher management and production line,
 - 2 weeks training courses (10 days) for middle management and production line
- Advanced, Specific, or Specialized training courses, each lasting from one to two weeks (5 /10 days), may take place, outside NIOSH, usually at the facility's premises.

Specific training courses (2 weeks) are usually tailored according to the particular industry applying for such a course; spinning and weaving, petroleum, chemicals, plastics, electrical power stations, etc. Such courses, which represent less than 10% of the total number of implemented courses, usually comprise many general topics and few specific ones related to the type of industry/ economic activity. However, specific courses may concentrate on specific topics, e.g., first aid, fire-fighting, or industrial waste management.

Specific training courses are usually directed to:

- Specialists and technicians in OSH (who are members of the OSH Committee)
- OSH committee members, according to type of industrial activity (spinning and weaving, petroleum, chemicals, etc.).(apart from above specialists and technicians)

All participants have passed the basic curricula of the Institute for Industrial Safety.

Specialized training courses (2 weeks) upon the facility's request are usually tailored according to the particular specialty / proficiency of the trainee, e.g. engineering, medicine, chemistry, etc. Again, the specialized courses, which represent less than 5% of the total number of implemented courses, usually contain many general topics and few specific ones related to the specialty / proficiency of the attending trainee.

Courses designed to train persons holding middle and higher management jobs, which represent about 25% of the total number of implemented courses, usually address many general topics contained in the advanced courses. Courses designed for middle management jobs last 2 weeks, while those designed for higher management jobs last only one week.

4.3.2 Training structures run by employers' or workers' organizations

Training structures run by employers' organizations:

There is no national training structure run by employers. Generally, big enterprises have their own training programmes on OSH. For instance 'Arab Contractors', a construction company employing more than 50,000 workers, runs its own training courses on OSH. The same applies to bigger companies and in particular to joint ventures, where staff is also trained abroad, i.e. in one of the group's companies located in Europe or in North America.

Training structures run by Workers' organizations:

See under 4.3.1: The Institute for Industrial Safety.

4.3.3 Other Institutes and Agencies*Governmental institutions:*

- Training departments (sections) at the Ministry of Manpower, the Ministry of Health and Population, the Ministry of Industry, and the State Ministry of Environmental Affairs. At these ministries, training courses are usually funded by international or national funding agencies, and are usually executed by local experts from outside the ministries and/ or private offices.
- The National Research Centre in Cairo affiliated to the Ministry of High Education.

Universities:

- The High Institute of Public Health affiliated to Alexandria University, which is a governmental agency, related to the Ministry of High Education and Scientific Research. The institute provides many multilevel and specialized training programs on OSH as well as an environmental protection, especially at the Occupational Health Department.
- The Department of Industrial Medicine and Occupational Diseases at Cairo University Faculty of Medicine. It has offered for the past 40 years many training courses on important topics, e.g., pesticides, chemicals, petrochemicals, primary aluminium industry, disability issues, occupational asthma, health insurance for labour force, etc. In addition, the department has a permanent training program on "Fitness and Disability of cardio-pulmonary system".
- The Institute for Environmental Studies and Researches affiliated to Ain Shams University

Non governmental organizations:

- The Arab Society for Occupational Safety and the Health and Egyptian Society for Occupational Medicine. Both are examples of NGOs providing training on OSH upon request of major enterprises. As per ministerial decree no. 206/2004, the Association of Electrical Engineers was granted a license to practice sectoral and specialized training activities.
- Special training departments in many large- and medium-scale public and private enterprises, especially those engaged in building and construction, petrochemicals, pharmaceuticals, petroleum, iron and steel manufacturing.
- The National Council for Childhood and Motherhood recently started a two-year series of training courses on: "Occupational Safety and health: Emphasizing Working Children and Young Adults". Part of this training campaign is funded by the regional office of the International Labour Organization.
- Private consulting offices and companies, mainly located in Cairo and Alexandria.

Most of these institutes listed above are providing OSH training courses on temporary basis to targeted groups. Those courses are not part of their long-term policy.

4.4 Information Centres**NIOSH Information Centre**

The information centre aims to serve researchers in NIOSH, universities and research centres, as well as safety officers, safety inspectors, trade unionists, on OSH issues and fire prevention by offering the following services:

Publications;

- Flyers on databases provided by CIS/ILO (see below)

- Quarterly bulletin covering latest acquisitions of the library databases on:
 - Research activities carried out by NIOSH
 - Library stock and acquisition
 - Training courses lectures

It has a library holding an extensive collection of publications, books and periodicals, microfiches and CD-ROMs on OSH mainly in Arabic and English. As the **CIS (International Occupational Safety and Health Information Centre, ILO, Geneva) national centre for Egypt**, the documentation unit of NIOSH's information Centre is continuously supplied with the most up-to-date references and publications on OSH. It receives the CIS CD-ROM collection, containing all full-text documents referred to in the bimonthly CIS abstract Bulletin. It has the ILO Encyclopaedia of Occupational Safety and health in printed and CD-ROM format. The documentation unit is linked to the Internet and has its own web-page: www.niosh.gov.eg. It is also accessible to any enterprise requiring information on topical subjects, either at the centre itself or through e-mail, at niosh@idsc1.gov.eg

The person responsible for the information centre is also in charge of the Institute's training programmes. A librarian takes care of the library. However, the limited budget and staff running the information centre do not allow NIOSH to issue many topical publications on OSH matters, or adapt those already existing to the Egyptian context. Considering the lack of OSH literature in Arabic, some cooperation with the information centre of the Ministry of Manpower might be beneficial.

Information Centre at the Ministry of Manpower

The information unit of the GAOSHWE is mainly concerned with collecting statistics on accidents and diseases. It publishes a few posters on OSH but does not have the financial means to issue any other OSH topical publications anymore. It has started to translate into Arabic selected chapters of the ILO Encyclopaedia on OSH. However, the MOMM information Department, as well as the department for statistics are not directly related to the GAOSHWE (see chart, annex 3).

Information Centre at Workers' or Employers' Organization

Although available literature on OSH in any kind, printed, audio-visual, in electronic format, etc. would be of great assistance to workers and employers, no such official information centre does yet exist. Training courses on access to OSH information were organized in 2003 by ILO SRO Cairo to initiate the establishment of a CIS Collaborating Centre within the Workers Federation.

Information Centre at the EEAA

The Egyptian Environmental Affairs Agency has a good information centre and a public library containing up-to-date references as well as a CD-ROM library. In addition, the Egyptian Hazardous Substances Information and Management System (EHSIMS) has an information centre as well as an internet web site: eeaa@idsc.gov.eg.

5. SPECIALIZED TECHNICAL, MEDICAL AND SCIENTIFIC INSTITUTIONS

5.1 Standardizing Agencies

The Egyptian Organization for Standardization and Quality Control (EOSQC), at the Ministry of Industry, Mineral Wealth and Technological Development, is the formal authority for issuing the standards and specifications needed for different products and services in the Egyptian market. The EOSQC was founded in 1957 as " an independent national reference authority for employing unified, standard specifications for all raw materials, finished products, technical processes, tools, equipment, measuring units as well as technical terms, definitions, labels and characters". Many of these standards relate to OSH, in particular, those on fire fighting, handling of hazardous substances, noise, vibration, etc.

5.2 Institutions specialized in hazard and risk assessment

Although the concept of "hazard and risk assessment" has been considered a traditional one worldwide for many decades, it is new in Egypt. However, there are a number of institutes having the potential capability to carry out hazard and risk assessment. A tentative, non-exhaustive list is to be found in Annex (4).

5.3 Emergency preparedness, warning and response services

Apart from the currently functioning Civil Defence Authority and fire brigades, there are a number of rather new initiatives concerned with emergency preparedness, warning and response services, in Egypt. These include, but are not limited to, the following:

- **Egyptian Hazardous Substances Information Management System (EHSIMS)**, established at the EEAA during the year 2000 with support from the Swiss Government. The system is carried out in collaboration with six line ministries (ministries of Agriculture, Electricity, Health, Industry, Interior and Petroleum) as well as the Customs Authority and the Civil Defence Authority. The primary aim of this system is the establishment of an on-line communication network between these ministries and authorities and the EEAA, where required information concerning hazardous substances is available and can be obtained instantaneously. Such information encompasses lists of classified and banned hazardous substances and substances that need licensing for handling and use, as well as the licensing requirements of different competent authorities. Moreover, the system includes a database of about 1800 hazardous substances with emergency response sheets detailing associated risks together with response guidelines in cases of accidents. This is in addition to safety practices for packaging, labelling, storage and transport. In this respect, plans are under consideration for transforming the continuously-growing database to a web-based application to ensure wider accessibility to it. Furthermore, efforts are underway for the periodic updating of hazardous substances lists, as well as expansion of the system to other ministries and authorities. The next phase which encompasses risk assessment for establishments handling hazardous substances, development of emergency response plans for "on-site" accidents involving hazardous substances, and a National Strategy for Chemical Safety, is underway.
- **Environmental Contingency Plan Information System (ECPIS)**, was established in the EEAA during 2000/ 2001, in collaboration with same ministries and authorities as above. Its primary aim is the establishment of an on-line communication network between these ministries and authorities and EEAA, where required information concerning environmental emergencies, e.g. spills, leakages, explosions, spread of infections, etc. is made available. This is enhanced through procedures to be carried out before, during and following major accidents. The system includes a database on major hazard situations with emergency response reports detailing the risks associated with these events/ situations as well as contingency procedures.
- **Egyptian Common Information System (ECIS)**, started operation in the EEAA during 2000/ 2001, as a functional version of the Egyptian Environmental Information System (EEIS), an initiative launched in 1997 in partnership with the Canadian Government, and the deployment of the ECIS to different users within MSEA (Ministry of State for Environmental Affairs) and EEAA. This system, currently hosting a number of maps and environmental data, is gradually being expanded with the aim of eventually housing processed EEAA and MSEA data, and allowing on-line access to this data. During the last 2 years, a number of special applications have been initiated and supported within the scope of the ECIS. These include the New Development Zones Information System, supporting the activities of MSEA and EEAA in carrying out environmental assessment of new development zones, as well as the Environmental Contingency Plan Information System (ECPIS). The Industrial Pollution Information System (IPIS), is another application, under development, to be used as a management tool by the

Environmental Inspection Unit for tracking information on industrial compliance with environmental rules and regulations. Furthermore, the development of an Executive Environmental Information System commenced in 2000/2002. It is designed to support decision makers at the executive level in MSEA and EEAA by providing an overview of key environmental information. In this context, an initial focus has been placed on air quality in Greater Cairo, with support provided from the Cairo Air Improvement monitoring network.

5.4 OSH Laboratories

The key national laboratories responsible for carrying out analytical or assessment work related to determining workers' exposure to various occupational hazards (analysis of air samples, biological samples, audiometric testing, etc.) are, without being limited to:

- National Institute of Occupational Safety and Health (NIOSH), Cairo.

Forty-Six (46) chemists, physicists, physicians and engineers, as well as about 20 technicians and laboratory assistants, are currently working at the Egyptian NIOSH. Staff members are usually performing hundreds of analyses every year, upon request of the government, enterprises or according to the Institute's annual research plans. The Egyptian NIOSH has adequate laboratories in various fields (monitoring of physical and chemical agents, stress tests for personal protective equipment, as well as other specialized workshops). In addition, it has a mobile laboratory used for field studies, which comprises an examination room, full biochemistry laboratory, a portable X-ray machine, as well as other auxiliary tools. However, the laboratory needs intensive maintenance and rehabilitation. Services provided to enterprises by NIOSH upon request, are paid according to a price list, originally established in 1969 and modified a few years ago. The main obstacles facing the Egyptian NIOSH is the progressively decreasing number of technical staff and lower wages/ salaries provided for such high calibre expertise.

- Tabbin Institute for Metallurgical Studies (Energy and Environmental Research Centre), Ministry of Industry, Mineral Wealth and Technological Development: responsible for carrying out indoor and outdoor measurements of effluents and pollution sources. The institute has special emphasis on pollution caused by industrial establishments in southern Cairo, e.g. iron and steel, coke and intermediate chemicals, etc.
- Principal Egyptian Universities
- National Research Centre, Cairo
- Central laboratory for monitoring environmental effluents and pollution sources (EEAA)
- General Administration for Occupational Safety and Health, Ministry of Manpower and Migration. Besides a central laboratory at the GAOSHWE (at Nasr City headquarters), there is at least one laboratory in each governorate as well as 12 research units, which carry out field measurements of indoor environments for research, verification and training purposes.
- OSH Department, Ministry of Health and Population;
The central laboratory for medical investigations, in the Ministry of Health and Population, is responsible for detecting poisons and contamination affecting locally produced or imported foodstuffs. The laboratory is also responsible for carrying out some medical investigations for persons referred by various medical councils or for medico-legal purposes.
- Ministry of Agriculture
The central pesticide laboratory, at the Ministry of Agriculture and Land Reclamation, is responsible for detecting pesticide residues in food commodities, locally produced or imported from other countries. Also, the laboratory is responsible for detecting the safety of different types of pesticides in the local market, and their conformity with national and international legislation.

5.5 Poison Control Centres:

The first Egyptian poison control centre was established in Ain Shams Faculty of Medicine (Department of Forensic Medicine and Toxicology) in 1982. Now, five main poison control centres

exist in Universities of Ain Shams, Cairo, Alexandria, Assiut and Zagazig. Other universities as well as the MOHP are currently preparing to establish poison control centres, starting with information centres. The existing Egyptian poison control centres commenced with information dissemination services, providing information to citizens who suspect they have been exposed to toxic substances. Over time, the centres developed a multitude of services, among which are:

- Curative and Therapeutic services:
 - Managing acute toxicity,
 - Managing chronic toxicity,
 - Provision of first aid and emergency measures, including critical/ intensive care,
 - Supportive measures,
 - Active treatment,
 - Advanced treatment.
- Preventive services
- Research (planning and implementation) and development
- Education, training and awareness
- Guiding and counseling services:
 - Issuing guidelines,
 - Issuing Codes of Practice
 - Registration (Databases) and retrieval
 - Warning services
 - Decontamination and remedial activities

6. WORK-RELATED ACCIDENTS AND DISEASES: STATISTICS

The annual follow-up statement on activities carried out by the Health Insurance Organization (HIO) , issued on June 30th 2003, reported that 57,163 new injuries and 149,571 old injuries had been managed during 2002. New cases resulted in 1,284,918 lost days; on average about 26.3 days per injury. The severity rate (= days lost per 100,000 beneficiaries) was 1.2.

The same follow-up statement analysed results of 55,342 disability claims presented to the organization during 2002, as follows:

- Disabilities due to chronic diseases	20,651
- Disabilities due to injuries and over-exertion	11,201
- Disabilities due to occupational diseases	7,888
- Cases proved to have no disabilities	6,908
- Other disability claims	8,694 (3,718 employers and 4,976 informal labour).

In addition, the statement reported the following figures on hospital stays of the workforce:

- 5,757 injuries stayed in the HIO's hospitals for 24,001 days, with an average of 4.2 days/ injury;
- 220,531 cases with acute, chronic diseases or performed surgeries stayed in hospitals for 851,322 days, with an average of 38.64 days/ injury;
- 226,288 cases with work related injuries and diseases stayed in hospitals for 875,323 days, with an average of 3.87 days/ injury.

The follow-up statement reported the following figures (table 1) on results of periodic medical examinations, performed during 2001, aiming at early detection of occupational diseases. Cases due to dusts and chemicals constitute about 64% of all positive cases elicited among about 40% of examined workers.

Table 1: Results of periodic medical examinations, performed during 2001

Occupational disease	Number Examined	Number of positive cases
Silicosis	41.154	2.001
Asbestosis	3.987	181
Occupational hearing loss	140.433	1.256
Pressure changes	40	1
Hormones	155	2
Hepatitis C virus	16.335	22
Petroleum acne	26.332	23
Occupational eczema	83.100	55
Bilharziasis	4.355	1
Ionizing radiation	8.076	1
Posterior wall cataract	71.042	6
Total	395.009*	3.549

Source: The 2003-HIO Follow up Statement

* Periodic medical examination had been performed, during 2002, on 591,710 employees with the following periodicity:

- 8,059 employees were examined every 6 months;
- 375,912 employees were examined every 12 months; and
- 207,739 employees were examined every 24 months.

The 2003 - HIO Follow-up Statement showed a general increasing trend in diagnosed occupational diseases during the last decade (1990-2001) as evident in table 2.

Table (2): Number of diagnosed occupational diseases during the last decade (1990-2001)

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
No.	460	472	372	400	690	666	597	2.026	4.784	4.010	3.293	3.549

Source: The 2003-HIO Follow up Statement

The General Administration for Information and Statistics at the MOMM, in its annual bulletin on Industrial Safety Statistics, issued on June 30th 2003, reported a decreased incidence of injuries during the last decade (1993 - 2002), as evident in table 3.

Table (3): Decreasing trend of occupational injuries during the last decade (1993-2002)

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
No. notifying facilities	3.429	3.779	3.848	3.926	3.894	4.078	4.201	4.183	4.159	4.711
No. workers at notifying facilities	1.568.649	1.704.433	1.849.931	1.721.039	1.702.172	1.711.812	1.764.692	1.693.732	1.736.463	1.659.356
No. injuries	60.859	60.861	57.545	55.540	51.091	45.343	44.370	36.143	32.649	32.839

Source: Annual Bulletin on Industrial Safety Statistics, General Administration for Information and Statistics at the MOMM (June 30th 2003)

On the other hand, the General Administration for Information and Statistics at the MOMM, in its annual bulletin on Industrial Safety Statistics, issued on June 30th 2003, reported the following differences between 2001 and 2002 figures (Table 4).

Table (4): Comparative figures on occupational injuries during 2001 and 2002

Parameters	2001	2002	Change
Number of notifying establishments	4.159	4.711	+552
Number of workers at the notifying establishments	1.736.463	1.659.356	- 77.107
Acute diseases: number	3.942.807	3.857.702	- 2.16 %
Lost days	3.975.353	3.920.709	- 1.37 %
Chronic diseases: number	295.015	284.430	- 3.59 %
Lost days	1.459.585	1.551.317	+ 6.28 %
Work- related accident: number	3.2649	32.839	+ 0.58 %
Lost days	745.673	753.291	+1.02 %
Results of accidents: under treatment	3.241	3.318	+2.38 %
Complete cure	28.739	28.884	+ 0.5 %
Disability	539	516	- 4.27 %
Death	130	121	- 6.92 %
Fatal accidents: number	97	98	+ 1.03 %
Deaths	83	77	- 7.23 %
Lost days (1 death → 6000 days)	498.000	462.000	
Occupational diseases: number	1.813	1.453	- 19.9 %
Lost days	1.730	1.581	- 8.6 %
Total lost days	6.680.341	6.688.898	+ 0.13 %

Source: Annual Bulletin on Industrial Safety Statistics, General Administration for Information and Statistics at the MOMM (June 30th 2003)
 Note on Table (5): about 16% of the labour force of the establishments reporting their accidents in Table (5) below, work in large and medium size undertakings.

Table (5): Establishments reporting accidents in 2002 with number of employees

Economic Activity	Number of Establishmen	Number of workers			Total
		Male	Female	Juvenile	
1 & 2- Agriculture and fishing	120	28.586	5.146	52	33.783
3- Mining and Quarrying	51	15.486	488	1	15.975
4- Manufacturing Activities(industry)	1.668	615.506	104.616	8.381	728.502
5- Electricity, gas and water	847	146.791	15.051	657	162.499
6- Building and constructions	312	85.218	6.393	669	92.280
7- Trade; whole sale and retail	205	28.165	6.987	60	35.211
8- Hotels and Restaurants	319	61.915	4.126	618	66.658
9- transportation and storage	352	150.313	22.511	1.043	173.867
10- Financial businesses	283	51.094	14.782	24	65.900
11- Real-estate and rental	13	4.586	1.204	45	5.834
12- Administration and Defence	22	6.980	4.182	0	11.161
13- Education	97	41.620	29.576	130	71.325
14- Health	253	54.375	65.740	290	120.404
15 & 16- Community and Personal Services	171	51.669	23.872	248	75.789
17- International organizations	1	97	73	0	170
Total	4.711	1.242.397	304.745	12.215	1.659.356

Source: Ministry of Manpower and Migration, the General Administration for Information and Statistics (2003)

Table (6): Number of injuries and their outcome in 2002 by economic activity

Economic Activity	Number of Injured workers	Number of Lost Days due to injuries	Results of Injuries			
			Under Treatme	Complete Cure	Cure with disability	Death
1 & 2) Agriculture and fishing	107	3.243	21	79	7	0
3) Mining and Quarrying	197	6.280	28	161	6	2
4) Manufacturing Activities(industry)	23.906	503.449	2.155	21.416	294	41
5) Electricity, gas and water	949	44.139	212	680	35	22
6) Building and constructions	2.265	64.113	259	1.892	100	14
7) Trade; whole sale and retail	352	9.538	46	296	10	1
8) Hotels and Restaurants	395	11.274	49	317	5	24
9) transportation and storage	3.730	87.955	397	3.265	53	15
10) Financial businesses	30	1.731	13	16	0	1
11) Real-estate and rental	21	833	5	16	0	0
12) Administration and Defence	22	523	3	19	0	0
13) Education	34	768	12	22	0	0
14) Health	412	11.129	85	322	4	1
15 &16) Community and Personal Services	418	8.216	33	383	2	0
17) International organizations	0	0	0	0	0	0
Total	32.839	753.291	3.218	28.884	516	121

Source: Ministry of Manpower and Migration, the General Administration for Information and Statistics (2003)

During 2001, the General Administration of Occupational Safety and Health (GAOSH) received 159 notifications of severe accidents, resulting in: 109 deaths and 55 injuries. These severe accidents were due to: fires (53 accidents resulted in 7 deaths and 16 injuries); Electric shock or electrocution (27 accidents resulted in 27 deaths and no injury); Collapse and explosion (7 accidents resulted in 6 deaths and 9 injuries); and others of unidentified origin- (72 accidents resulted in 69 deaths and 28 injuries). Table (7) details the number (and frequency) of severe accidents, fatalities and injuries, according to economic sectors during 2001.

Table (7): Number, Frequency and outcome of Severe Accidents in 2001 by economic activity

Economic Activity	Severe Accidents		Fatalities / death		Injuries	
	No.	%	No.	%	No.	%
1) Agriculture, hunting and fishing	3	1.9	5	4.6	3	5.45
2) Mining and Quarrying	7	4.4	6	5.5	1	1.8
3) Manufacturing Activities (industry)	87	54.7	55	50.5	42	76.4
4) Electricity, gas and water	18	11.3	18	16.5	-	-
5) Building and construction	15	9.4	14	12.8	3	5.45
6) Trade, restaurants and hotels	9	5.7	2	1.8	2	3.6
7) transportation, storage & communication	14	8.8	5	4.6	4	7.3
8) Community and Personal Services	6	3.8	4	3.7	-	-
Total	159	100.0	109	100.0	55	100.0

Source: Ministry of Manpower and Migration, the General Administration of Occupational Safety and Health - GAOSH (2003)

According to the 2003 report of GAOSH, manufacturing activities where severe accidents occurred can be ranked as follows:

- Chemical industries ranked first with a total number of severe accidents of 22 resulting in 12 deaths and 19 injuries,

- Food and beverage industries ranked second with a total number of severe accidents of 14 resulting in 12 deaths and 11 injuries,
- Spinning and weaving industries ranked third with a total number of severe accidents of 13 resulting in 11 deaths and 1 injury,
- Metal industries ranked fourth with a total number of severe accidents of 10 resulting in 7 deaths and 3 injuries,
- Petroleum industries followed with a total number of severe accidents of 4 resulting in 4 deaths and 2 injuries,
- Cement industries followed with a total number of severe accidents of 3 resulting in 3 deaths and 2 injuries,
- The remaining industries with severe accidents were: Aluminium. Refractory bricks, iron and steel, paper, flour milling, wood works, and leather.

The GAOSH reports showed, more or less, an appreciably declining trend in the numbers of severe accidents reported during the last decade (1990-2001) as evident in table 8.

Table (8): Number of Severe Accidents during 1990- 2001

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
No.	290	207	180	158	186	169	189	187	227	195	180	159

Other important details included in the 2003 GAOSH report

- The report showed that the highest number of severe accidents reported are in Alexandria (38), followed by those occurring in Cairo (23), Kaliobeya (12), Giza (12), Gharbeya (10), Qena (7), Suez (7), Red Sea (7), Behira (6), Dakahlia (4), Sharkeya (4), Sohag (4), Luxor (4), Dameitta (3), Ismailiya (3), Port Said (3).

-The report showed that the highest number of severe accidents and their consequences were reported in activities belonging to the private and investment sector (88 accidents resulted in 52 deaths and 34 injuries), followed by activities in the public sector (50 accidents resulted in 34 deaths and 14 injuries), and then activities in the governmental sector (21 accidents resulted in 14 deaths and 7 injuries).

The report also provides tables on the distribution of reported severe accidents according to their cause (table 9), agent (table 10), organ/s affected (table 11), and age of victims (table 12).

Table (9): Frequency and outcome of Severe Accidents by Cause

Cause	Severe Accidents		Fatalities / death		Injuries	
	No.	%	No.	%	No.	%
1) Subjects' Fall	18	11.3	17	15.6	3	5.4
2) Objects' Fall	14	8.8	12	11.0	3	5.4
3) Struck- by objects or Collision	20	12.8	17	15.6	9	16.4
4) Caught in between objects	12	7.5	9	8.3	3	5.4
5) Over-exertion or faulty movement	2	1.3	1	0.9	1	1.8
6) Exposure or contact with high temperature	14	8.8	11	10.1	19	34.6
7) Exposure or contact with electricity	27	17.0	27	24.8	-	-
8) Exposure or contact with hazardous substances	6	3.8	12	11.0	8	14.6
9) Explosion	4	2.5	3	2.7	9	16.4
10) Other causes	-	-	-	-	-	-
11) Accidents resulting in no deaths or injuries*	42	26.4	-	-	-	-
Total	159	100.0	109	100.0	55	100.0

*include collapse of buildings, loss of property, etc.

Source: Ministry of Manpower and Migration, the General Administration of Occupational Safety and Health - GAOSH (2003)

Table (10): Frequency and outcome of Severe Accidents by Agent

Agent	Severe Accidents		Fatalities / death		Injuries	
	No.	%	No.	%	No.	%
1) Moving mechanical machinery	27	17.0	23	21.1	6	10.9
2) Transporting and handling machinery	13	8.2	12	11.0	6	10.9
3) Dangerous tools and equipment	34	21.4	31	28.4	18	32.7
4) Dangerous substances and radiations	18	11.3	14	12.9	17	30.9
5) Work environment hazards	19	11.9	24	22.0	7	12.8
6) Dangerous microbes	-	-	-	-	-	-
7) Other Agents*	6	3.8	5	4.6	1	1.8
11) Accidents resulting in no deaths or injuries*	42	26.4	-	-	-	-
Total	159	100.0	109	100.0	55	100.0

*includes collapse of buildings, loss of property, etc.

Source: Ministry of Manpower and Migration, the General Administration of Occupational Safety and Health ñ GAOSH (2003)

Table (11): Frequency and outcome of Severe Accidents by Organ/s Affected

Agent	Severe Accidents		Fatalities / death		Injuries	
	No.	%	No.	%	No.	%
1) Head	17	10.7	15	13.7	2	3.6
2) Neck	1	0.6	1	0.9	-	-
3) Trunk	6	3.8	5	4.6	1	1.8
4) Upper extremities	30	18.9	23	21.1	7	12.7
5) Lower extremities	4	2.5	1	0.9	3	5.5
6) Multiple organs	59	37.1	64	58.8	42	76.4
7) Accidents resulting in no deaths or injuries*	42	26.4	-	-	-	-
Total	159	100.0	109	100.0	55	100.0

*includes collapse of buildings, loss of property, etc.

Source: Ministry of Manpower and Migration, the General Administration of Occupational Safety and Health ñ GAOSH (2003)

Table (12): Frequency and outcome of Severe Accidents by Age of the Victim

Age Category	Severe Accidents		Fatalities / death	
	No.	%	No.	%
1) Less than 18 years	11	10.1	4	3.7
2) 18 - 29 years	34	1.2	17	30.9
3) 30 - 39 years	28	25.7	22	40.0
4) 40 - 49 years	20	18.3	10	18.2
5) 50 years or more	16	14.7	2	3.6
Total	109	100.0	55	100.0

Source: Ministry of Manpower and Migration, the General Administration of Occupational Safety and Health ñ GAOSH (2003)

7. POLICIES & PROGRAMMES OF EMPLOYERS' AND WORKERS' ORGANIZATIONS

7.1 Employers' organizations

The organization representing Egyptian Employers at the ILO is the Federation of Egyptian Industries (FEI), which is composed of 14 chambers of industrial branches. The FEI includes in its membership

enterprises of both the public and private sectors. The Minister of Industry and Technological Development appoints one-third of the Board of Directors, and the Chairman and two Vice-Chairmen of the Federation. The present chairman, Eng. Galal El-Zorba, comes from the private sector. The government is increasingly listening to the FEI on policies affecting its interests. The FEI has set up a Labour Commission and entrusted it with relations with the ILO. The Chairman of the Commission, Engineer Samir Allam is Chairman of the Building Material Chamber and a Member of the Board of the FEI. In addition, he was the head of the delegation of Egyptian employers at the 92st session of the ILC as well as the Vice-President of the Pan-African Employers' Confederation (PEC).

Since the late 1970s, businessmen have created several other organizations, including the Egyptian Businessmen's Association (EBA), the similar Alexandria Businessmen Association (ABA) and similar associations in industrial cities. These associations have influence on policy making.

7.1.1 OSH policy statement

The FEI is a member of the Supreme Advisory Committee on OSH which is the responsible tripartite body for drawing up national OSH policy and programmes.

If the FEI has not issued any specific OSH policy statement as such, employers of large companies and in certain joint ventures are particularly aware of the importance of having a safety management system. For older and smaller premises, it is more difficult to introduce safety measures on old equipment and materials. The awareness of workers on the hazards they are facing at work is also rather low because of the general literacy level of the non-specialized working population.

7.1.2 Structure for policy implementation

Egyptian employers do not have any unit specialized in OSH matters at the Federation level. Within enterprises, the main structure to implement safety at the workplace is the Safety committee (see sections 2.2.2 and 3.3.2)

7.1.3 Programmes: training, information for members

Employers are to provide workers with appropriate training as per section 4.3. Training and information of FEI members is carried out by enterprises on individual and ad hoc basis.

7.1.4 OSH elements in collective bargaining

Negotiation processes exist within the industry; however, collective bargaining as such is a process which remains to be better assimilated by social partners. (Also see section 3.3). OSH issues are normally dealt with and defended by the OSH committee workers' union representatives of the enterprise.

7.1.5 Participation in the national tripartite dialogue

This is undertaken through being a member of the Supreme Advisory Council on OSH

7.2 Workers' organizations

The Egyptian Trade Union Federation (ETUF) represents Egyptian workers at the ILO. It is the only workers' federation in the country. The rate of unionization amounts to some 22 per cent. Mr. Sayid Rashed, the current President of ETUF, is also the Deputy Speaker of the People's Assembly. Mr. Rashed has recently been elected as President of the International Confederation of Arab Trade Unions (ICATU).

7.2.1 OSH Policy statement

The ETUF fulfils its role, as the sole representative of the Egyptian workers, in assuring that;

- the legislation, its rules and regulations are applied at the workplace,
- it takes part in any modification, adjustment of OSH regulations, and
- it negotiates with public or private enterprises over any infringements of the law.

7.2.2 Structure for policy implementation

The ETUF is composed of 21 General Syndicates, according to different economic activities. On OSH issues, there are 2 specialized Secretariats;

- the secretariat for Occupational Health and Insurance / OHI (Chairman: Mr. Ali Amer Issah),
- the secretariat for Industrial Safety (Chairman: Mr. Adel El-Sobahy).

Each General Syndicate has one or two representatives for either secretariat. The OHI secretariat is also represented in the board of directors of the HIO. The ETUF has a representative on each governorate OSH Advisory committee. In addition, the two secretariats have representatives on OSH committees at the enterprise level.

7.2.3 Programmes: training, information for members

Currently, the ETUF has an annual work plan which included for 2003:

- A number of training workshops and courses on various issues, e.g., support and development for HIO, funding difficulties of the health insurance system, etc. Some of the training courses have focused on Cement, Textile, Chemicals, Foundries, etc.
- Launching an awareness campaign on Tobacco and smoking cessation,
- Monthly meetings of secretariats concerning OSH, to decide, among other subjects, future action plans,
- Implementing a program for field visits to various economic facilities as well as to Health Insurance hospitals and centres,
- Implementing a workshop on 'Collective Bargaining in OSH- related issues, including rights of injured workers',

7.2.4 OSH elements in collective bargaining

Some workshops on "Collective Bargaining in the OSH field" have already taken place, in particular as regards victims of workplace accidents as well as those on rehabilitation.

7.2.5 Participation in the national tripartite Dialogue

The ETUF has representatives at the Supreme Advisory Council on OSH (at the central level), and others on the Governorate level. In addition, every OSH Committee, in each enterprise employing at least 50 workers, has an equal number of workers' and employers' representatives.

8. REGULAR ON-GOING ACTIVITIES RELATED TO OSH

8.1 Regular Activities at the National Level

8.1.1 National Initiatives

Ministry of Manpower

The Ministry of Manpower has a section which issues pamphlets and posters on OSH. Its resources are, however, limited. It also has a stationary exhibition of personal protective devices. It conducts some safety campaigns at the governorate level, in cooperation with its field offices.

NIOSH

NIOSH publishes reports on its activities and research work. It has a permanent exhibition of personal protective equipment and fire fighting devices.

Ministry of State for Environmental Affairs (MSEA)

The MSEA, together with its executive agency, the EEAA consider awareness as a priority, realizing the significant role public awareness can play in promoting sound environmental practices. During 2000 - 2002, the successful partnership between MSEA and EEAA on one hand, and the Media on another was carried further through programs targeting the general public, including broadcasting of several environmental television and radio programs, as well as a number of competitions. Moreover, about 28 national newspapers and magazines are now engaged in environmental awareness. In addition, various EEAA publications and brochures were prepared and disseminated through national and regional environmental exhibitions and events.

8.1.2 Industry Initiatives

Many enterprises organize awareness campaigns on OSE issues, assisted by local experts. Many enterprises, mainly joint ventures have achieved ISO 9000 certification and some of them have achieved ISO 14 000. There is a great deal of interest for ISO series 18 000. ILO NAMAT has conducted request driven workshops on the ILO OSH Management guidelines. However there is some confusion in the understanding of the respective roles of the OSH Committee within the enterprise and the purpose of a Safety Management system as such.

8.1.3 Trade Union's OSH Activities

Currently, the Workers' Education (Cultural) Association, (WEA) established in 1960 by the Egyptian General Trade Union, has a good command of awareness raising activities through more than 60 local centres scattered in many districts and provinces. They target workers in various economic facilities, who are not adequately trained on OSH& E issues. Each campaign usually lasts 2 to 4 days and highlights a number of general topics, sometimes emphasizing one or two topics related to facility activities. The most common topics currently discussed during awareness campaigns, organized by the Association, are:

- Background on legislative aspects of OSH&E
- Occupational hazards and environmental influences
- Pre-placement and periodic medical examinations
- Personal protective equipment
- First aid measures
- Fire-fighting and emergency procedures

The senior employee directing OSH&E activities at one of the 60 local centres of the WEA organizes campaigns on an ad-hoc basis.

All institutions listed under agencies providing OSH training (others than the Institute for Industrial Health and NIOSH) also carry out awareness raising activities on OSH.

Annex (1)

Egyptian List of Occupational Diseases

(Table No.1 amended to Law 79 for 1975 and last medications issued by the Ministerial Decree #1/2004)

- Lead poisoning and sequels
- Mercury poisoning and sequels
- Arsenic poisoning and sequels
- Antimony poisoning and sequels
- Phosphorus poisoning and sequels
- Benzol (benzene) poisoning and sequels
- Manganese poisoning and sequels
- Sulphur poisoning and sequels
- Chromium ulcers and sequels
- Nickel ulcers and sequels
- Carbon monoxide poisoning
- Cyanide poisoning and sequels
- Poisoning by Halogens and sequels
- Poisoning by Petroleum and gases
- Poisoning by Chloroform and carbon tetrachloride
- Poisoning by Aliphatic hydrocarbons and other halides
- Pathological effects of Radium and other ionizing radiation.
- Primary skin cancer and chronic inflammation and ulcers to skin and eyes
- Effects on eyes due to heat and sequels
- Pulmonary Dust Diseases (Pneumoconiosis) due to silica (silicosis), asbestos (asbestosis), talc (talcosis), cotton dust (Byssinosis)
- Anthrax
- Glanders
- Tuberculosis
- Infectious disease in fever hospitals
- Beryllium poisoning and sequels
- Selenium poisoning and sequels
- Diseases and manifestations due to abnormal barometric pressure
- Diseases and manifestations due to exposure to hormones
- Occupational noise- induced hearing loss (deafness)
- Segmental body Vibrations affecting upper limbs hands and wrists
- Poisoning by nitrates, nitrites, and nitro-glycerine
- Cadmium poisoning and sequels
- Poisoning by alcohols, glycols, ketons and their different types and sequels
- Diseases resulting from non-ionizing radiations, e.g. ultraviolet and infra-red
- Poisoning by pesticides

Annex (2)

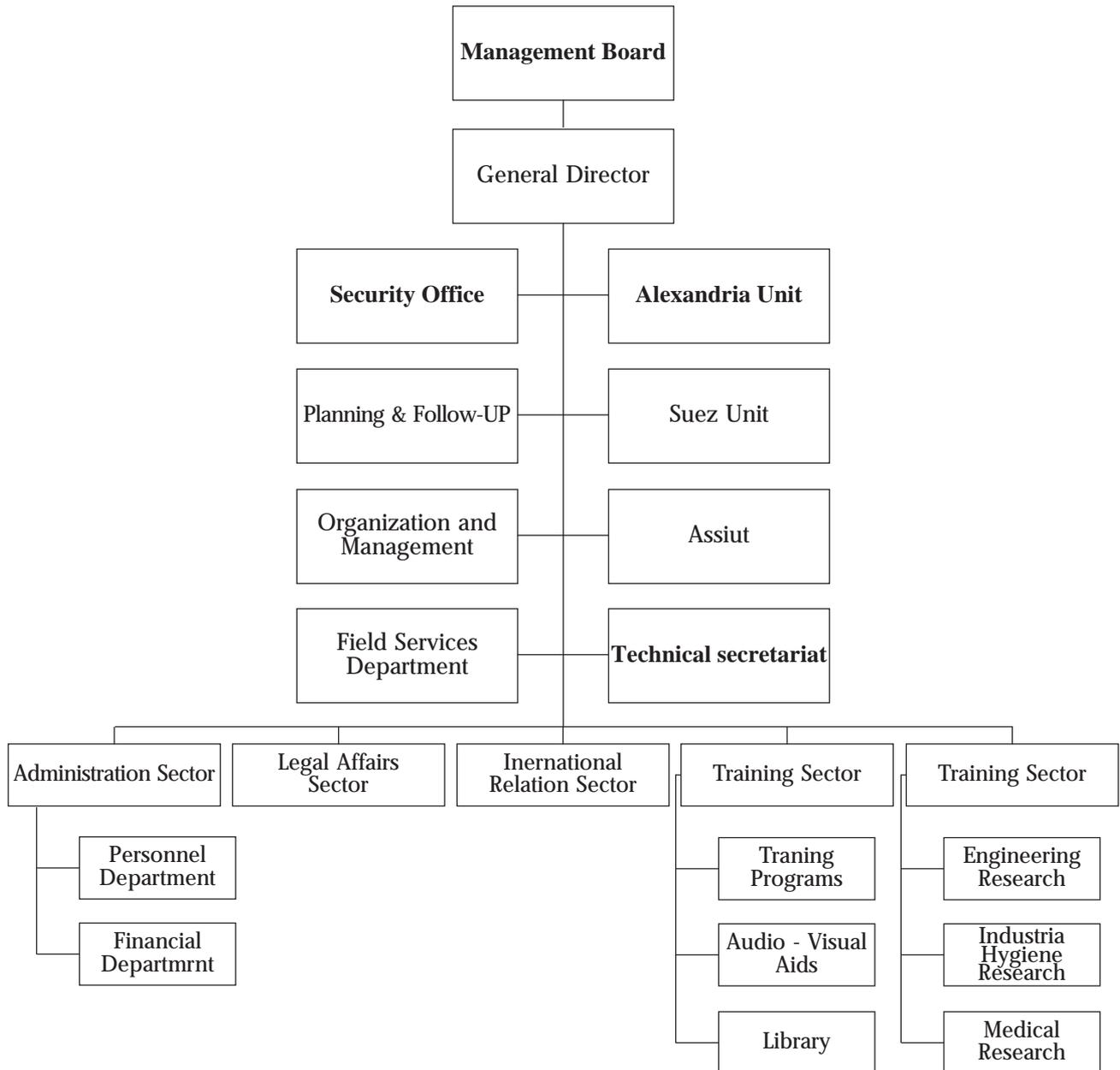
Ministerial Decrees regulating medical examination, compensation, etc.

1. Ministerial Decree No. 133 for 1983 concerning Regulations Governing Health Fitness, on Which Pre-placement Medical Examination is Carried Out.
2. Ministerial decree No. 63 for 1976; concerning specifications of chronic diseases deserving a compensation equal to full salary during the whole duration of illness. The Decree was modified by another No. 695 for 1984.
3. Ministerial decree No. 215 for 1977; concerning the provision of medical judgement (arbitration) committee and its working regulations.
4. Ministerial decree No. 218 for 1977; concerning regulations for implementation and periodicity of periodic medical examinations, and adopting pre-placement examination procedures. The decree was modified by the Decree No. 78 for 1978.
5. Ministerial decree No. 239 for 1977; for conditions and regulations concerning diseases due to exhaustion and over-work, to be considered as occupational injuries deserving compensation. The Decree was modified by another No. 136 for 1980 and further modified by the Decree No. 36 and 161 for 1982.
6. Minister of Health decree No. 259/1995 concerning identification of chronic diseases requiring exceptional vacations with full salary or compensation until the patient is cured or his condition settles.
7. Minister of Health decree No. 179/1985 concerning rules of insurance against illness, injuries and dangers at the end of medication and percentage of disability
8. Ministerial decree No. 266 for 1980 concerning Identification of Chronic and Hopeless Diseases Causing Total Disability (Handicapping).
9. Ministerial Decree No. 142 for 1967 concerning Provision of First Aid Equipment and Appliances in the Working Facilities by the Work Owner, With Their Specifications Adopted by the Health Insurance Organization.
10. Ministerial Decree No. 174 for 1986 concerning Regulations Concerned with Licensing Personnel and Establishments in fields of Pest Control.
11. Presidential Decree No. 864 for 1969 concerning Establishing a Higher Committee Concerned With Protection of Ambient Air. The Decree was modified by the Decree No. 338 for 1975.
12. Ministerial Decree No. 470 for 1971 concerning Standards for Air Pollution Inside and Outside Industrial Facilities and Related Units.
13. Ministerial Decree No. 140 for 1976 concerning Identification of Lower Limit for Quality of Provided Health Insurance Services.
14. Ministerial Decree No. 141 for 1976 concerning Conditions and Situations for Provision of Rehabilitation Services and Provision of Artificial Limbs and Other Rehabilitation Equipment.

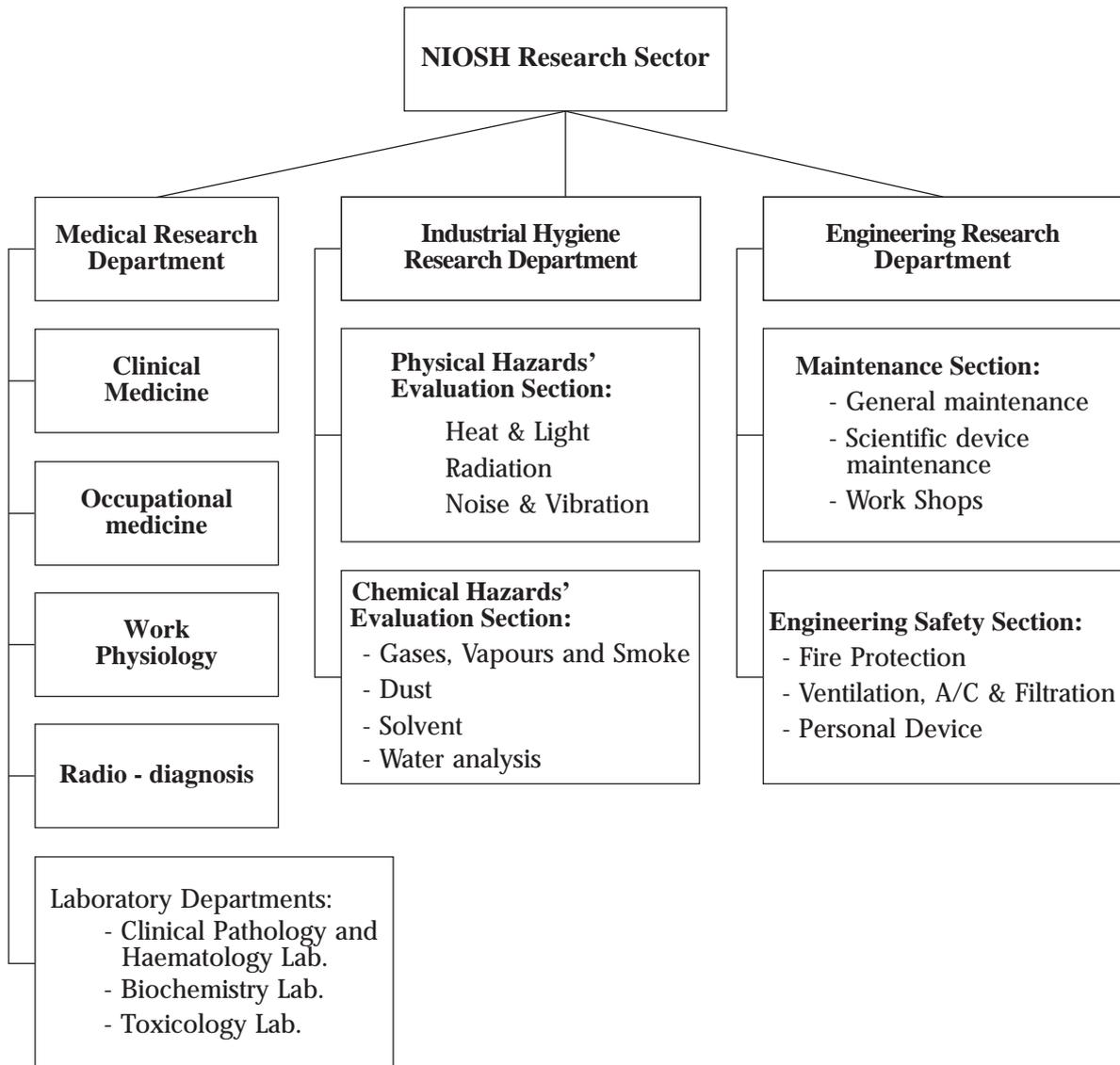
15. Ministerial Decree No. 393 for 1977 concerning Conditions and Situations Must be Adopted for Licensing Work Owners to Provide Medical Services for Their Insured Employees in Cases of Injuries and Illnesses.
16. Ministerial Decree No. 858 for 1981 concerning Adoption of Regulations Concerning Health Insurance on Workers in Private and Public Sector Facilities Employing from 5 to 499 Workers in All Governorates. The Decree was modified by another No. 160 for 1982.
17. Ministerial Decree No. 553 for 1983 concerning Adoption of Regulations Concerning Health Insurance on Workers in Private and Public Sector Facilities Employing from 1 to 4 Workers in All Governorates.
18. Ministerial Decree No. 804 for 1981 concerning Standards for Adopting Health Insurance Regulations, including Therapy and Health Care, on Families of Insured Workers as well as on Retired Workers.
19. Ministerial Decree No. 405 for 1984 concerning Standards and Limits Must be Provided for Therapeutic Systems Providing Services for Their Employees.

Annex (3)

The hierarchy/ organizational charts of the National Institute of Occupational Safety and Health (NIOSH).



Organization Chart of the Research Sector at the National Institute of Occupational Safety and Health (NIOSH)



Annex (4)

Tentative, non-exhausting list of institutions with risk assessment capabilities:

Poison Control and Toxicology Centres in many universities, faculties of medicine; in Cairo, Ain Shams, Tanta, Alexandria, Zagazig, etc.

- Departments of community medicine, public health, occupational medicine and environmental health, in various universities, faculties of medicine.

- Epidemiology departments at other educational and research institutions, e.g. the National Cancer (Oncology) Institute, the National Research Centre (NRC), the High Institute for Public Health at Alexandria University, etc.

- The standard/ reference laboratory for monitoring chemical effluents, at Ain Shams University Faculty of Science.

- The central laboratory for monitoring environmental effluents and pollution sources, at the EEAA.

- The central pesticide laboratory, at the Ministry of Agriculture and Land Reclamation.

- Various laboratories of the National Institute of Occupational Safety and Health

- The central laboratory for medical investigations, at the Ministry of Health and Population.

- Tabbin Institute for Metallurgical Studies (TIMS), at the Ministry of Industry, Mineral Wealth and Technological Development.

- The Egyptian Organization for Standardization and Quality Control (EOSQC), at the Ministry of Industry, Mineral Wealth and Technological Development.

Annex (5)

List of Abbreviations

AEA	Atomic Energy Authority
CAPLF	Central Authority for Protecting Labour Force
ECIS	Egyptian Common Information System
ECPIS	Environmental Contingency Plan Information System
EEAA	Egyptian Environment Affairs Agency
EEIS	Egyptian Environmental Information System
EFI	Egyptian Federation of Industry
EGP	Egyptian pound
EHSIMS	Egyptian Hazardous Substances Information and Management System
EMRO	Eastern Mediterranean Regional Office
EMS	Environmental Management System
EOSQC	Egyptian Organization for Standardization and Quality Control
ER	Executive Regulation
ERSAP	Economic Reform and Structural Adjustment Programme
ETUF	Egyptian Trade Union Federation
GAOSH	General Authority for Occupational Safety and Health
HIO	Health Insurance Organization
IHA	Industrial Hygiene Administration
ILO	International Labour Office (Organization)
IPCS	International Programme for Chemical Safety
IPIS	The Industrial Pollution Information System
ISA	Industrial Safety Administration
ISO	International Standardization Organization
MOA	Ministry of Agriculture
MOHP	Ministry of Health and Population
MOI	Ministry of Industry
MOMM	Ministry of Manpower and Migration
MSEA	Ministry of State for Environmental Affairs
NIOSH	National Institute of Occupational Safety and Health
NIS	National Institute for Standards
NOSI	National Organization for Social Insurance
NRC	National Research Centre
OHA	Occupational Health Administration
OHD	Occupational Health Department
OSH	Occupational Safety and Health
TIMS	Tabbin Institute for Metallurgical Studies
TLVs	Threshold Limit Values
UNDP	United Nations' Development Programme
UNEP	United Nations' Environment Programme
WHO	World Health Organization

1 CAPMAS. The Statistical Year Book 1995-2002. June 2003.

2 WHO. World Health Report. Core Health Indicators: Egypt. 2003.

3 Economist Intelligence Unit. Country Profile: Egypt. 2003. P. 17

4 Ibid.

5 WHO. World Health Report, 2003.

6 CAPMAS 2002, and Millennium Development Goals- Egypt by United Nations*, August 2002.