The National Occupational Safety and Health Profile

Of

The Hashemite Kingdom of Jordan

Ministry of Labour

Directorate of Occupational Safety and Health

In Collaboration with

International Labour Organization

Amman
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The Hashemite Kingdom of Jordan

Ministry of Labour

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List of Abbreviations

**OSH**: Occupational Safety and Health  
**GDP**: Gross Domestic Product  
**DOSH**: Directorate of Occupational Safety and Health  
**JLL**: Jordan labour Law  
**MOL**: Ministry of Labour  
**SSC**: Social Security Corporation  
**SSL**: Social Security Law  
**OSHMS**: Occupational Safety and Health management Systems  
**OHSAS 18001**: Occupational Health and Safety Assessment specification 18001  
**SMEs**: Small and Medium-sized Enterprises  
**QIZ**: Qualifying Industrial Zones  
**JDs**: Jordanian Dinars  
**PPE**: personal Protective Equipment  
**RSS**: Royal Scientific Society  
**OSHI**: Occupational Safety and Health Institute  
**MOH**: Ministry of Health  
**CEO**: Chief Executive Officer  
**P.T**: Part Time  
**F.T**: Full Time  
**VTC**: Vocational Training Corporation  
**JICA**: Japan International Cooperation Agency  
**TLVs**: Threshold Limit values  
**ASEZA**: Aqaba Special Economic Zone Authority
Dedication

This work is dedicated to the Jordanian workers, in the workplaces of all sizes and all sectors, who sacrifice and suffer to build up the "Modern Jordan" and whose endless efforts continue to achieve more progress and more development for this precious country.
Acknowledgement

Their excellencies, Basem Khalil Al-Salem, the Minister of labour, and Majed Habashneh, the Secretary General, are the first to deserve thanks and gratitude for their continuous support to all occupational safety and health activities in Jordan, and for according this issue one of the highest of their priorities. Praying for their success and prosperity in serving our precious "Jordan", led by his majesty,

King Abdulla II Bin Al-Hussein

I would also like to express extreme thanks to Felix Martin, The activity Manager at the International Training Centre of the ILO, Turin, who is clearly interested in, and sincerely works for, promoting occupational safety and health in Jordan.
Introduction

The industrial sector, in Jordan, has grown rapidly during the last few decades introducing, along with the economic growth, new types and patterns of risks and hazards, which increased the worries and the suffering of workers and made their way of bread earning full of pain and danger.

The government and the other concerned agencies in Jordan save no effort and do their best to ensure that adequate measures and precautions are taken in order to reduce work-related hazards and to make workplaces, in all sectors of the economy, as safe and as healthy as possible, but, with all what has been achieved in this field, so far, we are still too far from realizing our objectives and from reaching the lower limit of our hopes and ambitions.

Occupational accidents and injuries occur everyday, leading to great human and economic losses, which not only slow down the wheels of the national economic progress, but pulls them backwards as well. Those losses appear to be small, seen through the statistics and various reports issued by concerned agencies, such as the Ministry of Labour, Social Security Corporation, the Department of Public Statistics…etc, but the limited resources of our country make them a huge burden on our economy. Additionally, lack of a good and updated data base and the absence of a clear and reliable mechanism for collecting, documenting and analyzing data, make the real size of work-related injuries and losses much more than what is published in our official reports, as what comes to our knowledge of them, is merely the tip of the iceberg.

It is regretful that most of those accidents, injuries and losses can be prevented with more efforts and more spending on occupational safety and health which, although seen by some employers as a loss or as an unnecessary
expenditure, is rather an investment which pays back many folds at the long run.

Our OSH objectives and ambitions can never be realized by merely passing more regulations and trying to enforce them by force or by sanctions, but those objectives may remain as unrealized dreams unless all efforts of all production partners, are put together and directed in the right way for building and maintenance of a preventive safety and health culture so that OSH principles and measures are taken into account at all operational levels, and safety becomes an integrated part of every step in our life. This can only be achieved by formulating a national OSH strategy through which campaigns for raising awareness of OSH are organized among all classes of our society, including students, employees and employers, revising the OSH legislation in force, to ensure that they fulfill our needs and fit our local situation, then finding the best way or mechanism for enforcing them, so that they don’t remain mere ink on paper.

The issue of Occupational Safety and Health, in Jordan, continue to be one of the main problems that forms a big burden on our national economy and requires a prompt serious action.

This profile is not a proposed solution for this problem, but rather a trial for diagnosing this problem through pinpointing the weak points, and locating and evaluating our resources, as a beginning for remedy and as a positive step in the right direction.

Dr. Amin Al-Wreidat
Chapter (1)

The Hashemite Kingdom of Jordan

Jordan is an Asian Arab country located in the heart of the Middle East with an approximate area of 89,340 square kilometers and a total population of about 5.35 million.

It lies north west of Saudi Arabia, south of Syria, south west of Iraq, and east of the occupied West Bank. Jordan has access to the Red Sea via the port city of Aqaba, located at the northern end of the Gulf of Aqaba.

In spite of being located in an oil rich region, Jordan is not an oil producing country, but it has some other mineral resources, such as phosphates and potash.

Being highly educated, and known to be distinguished and well qualified at the scientific and practical levels, Jordanians working abroad, in general, and in the Arab Gulf states, in particular, form one of the main sources of the national income.

Climate:
Jordan has the characteristics of the climate of the Mediterranean region, being warm and dry in summer, and moderate and rainy in winter.

Major exports:
Phosphates, potash, fertilizers, chemicals, pharmaceutical products and textiles and garments form the main exports of the country.
**Major imports:**
The main imports of Jordan are crude oil, wheat, sugar, meat, machinery, transport equipment, and spare parts.

**Demographic Indicators:**
- Total population: 5,350,000
- Population Density (in 2004): 60.3 person/km²
- Population 15–64 years: 59.1%
- Average size of household: 5.4 persons
- Total fertility Rate (Live births per woman): 3.7
- Crude Birth Rate (per 1000): 29
- Crude Death Rate (per 1000): 7
- Population Growth Rate: 2.6%
- Infant Mortality Rate (per 1000 live births): 22
- Life Expectancy at Birth (for both sexes): 71.5 years

**Economic Indicators:**
- GDP Per Capita: 1515.6 JDs
- Total Exports of Goods and Services (Million JD): 3955.1
- Total Imports of Goods and Services (Million JD): 6518.3
- Inflation rate: 3.4%

**Health Indicators**
- Number of Hospitals: 97
- Number of Beds: 9820
- Population/Bed Ratio: 545
- Number of physicians: 12999
- Population/Physician Ratio: 412
Labour and Wages:
- The employed Jordanians in all sectors: 1,073,300
- Workers in the public sector: 242,293
- Workers in the Private Sector: 459,606
- Establishments under the purview of MOL: 68517
- Average No. of workers per establishment: 5.4
- Establishments Engaged in Social Security: 9951
- Workers Covered by Social Security: 519,000
- Female workers: 21%
- Non-Jordanian workers: 7.3%
- Unemployment rate in 2004: 12.5%
  - Males: 11.8%
  - Females: 16.5%
- Average monthly wage
  - Male: JD 250
  - Female: JD 226

The Workforce:
The workforce in Jordan is estimated to be about 1,273,000 (about 23.8% of the total population), The employed Jordanians are about 1,073,300 (estimations of 2005), including the Armed Forces and Civil Defense.

The percentage distribution of the employed Jordanians, by the current economic activity is shown in table (1).
Table (1) Jordanians employed, of 15 years or more, by gender and current economic activity (Percentage Distribution)

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>Male</th>
<th>Female</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Hunting and Forestry</td>
<td>3.8</td>
<td>2</td>
<td>3.6</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>1.3</td>
<td>0.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>13</td>
<td>10.4</td>
<td>12.7</td>
</tr>
<tr>
<td>Electricity, gas and Water supplies</td>
<td>1.9</td>
<td>0.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Construction</td>
<td>8</td>
<td>1.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Wholesale, Retail Trade and Motor vehicles maintenance</td>
<td>19.7</td>
<td>6.3</td>
<td>17.9</td>
</tr>
<tr>
<td>Hotels and Restaurants</td>
<td>2.4</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Transport, Storage and Communications</td>
<td>10.5</td>
<td>3.2</td>
<td>9.6</td>
</tr>
<tr>
<td>Financial Intermediation</td>
<td>1.4</td>
<td>3.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Real Estate, Renting and Business activities</td>
<td>3.6</td>
<td>5.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Public Administration and Civil Defense</td>
<td>18.3</td>
<td>5.3</td>
<td>16.6</td>
</tr>
<tr>
<td>Education</td>
<td>6.8</td>
<td>38.4</td>
<td>11</td>
</tr>
<tr>
<td>Community and Social Service Activities</td>
<td>5.5</td>
<td>5.3</td>
<td>5.4</td>
</tr>
<tr>
<td>Health and Other Social Work</td>
<td>3.3</td>
<td>16.1</td>
<td>4.9</td>
</tr>
<tr>
<td>Household Employees</td>
<td>0.2</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Extra-Territorial Organizations</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
<td><strong>100 %</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

The Enterprises in Jordan:
There are (68517) Enterprises under the purview of MOL, in Jordan. The geographical distribution of those Enterprises, and the number of employees, is shown in table (2).
Table (2), Geographical Distribution of the Jordanian Establishments and Workers

<table>
<thead>
<tr>
<th>Governorate</th>
<th>No. of Establishments</th>
<th>No. of workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amman</td>
<td>25160</td>
<td>204769</td>
</tr>
<tr>
<td>Zarka</td>
<td>9821</td>
<td>66346</td>
</tr>
<tr>
<td>Balqa</td>
<td>9235</td>
<td>31182</td>
</tr>
<tr>
<td>Madaba</td>
<td>4085</td>
<td>14664</td>
</tr>
<tr>
<td>Irbid</td>
<td>9175</td>
<td>58059</td>
</tr>
<tr>
<td>Mafraq</td>
<td>3817</td>
<td>16930</td>
</tr>
<tr>
<td>Jerash</td>
<td>1261</td>
<td>4877</td>
</tr>
<tr>
<td>Ajloun</td>
<td>783</td>
<td>2202</td>
</tr>
<tr>
<td>Karak</td>
<td>3444</td>
<td>18175</td>
</tr>
<tr>
<td>Tafiela</td>
<td>1073</td>
<td>5783</td>
</tr>
<tr>
<td>Ma’an</td>
<td>1592</td>
<td>10473</td>
</tr>
<tr>
<td>Aqaba</td>
<td>2154</td>
<td>23706</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68517</strong></td>
<td><strong>445965</strong></td>
</tr>
</tbody>
</table>

The establishments engaged in the social security are (9951), as shown in table (3), distributed by the economic activity. But the number of establishments in the agriculture and construction sectors, or the other informal sectors is underestimated, in the records of the Social Security Corporation, because the establishment of these sectors, in Jordan, do not usually contribute to the Social Security. The records of the SSC, state that about 40%, only, of the employed Jordanians are socially insured.
Table (3), The number and percentage of Jordanian establishments engaged in Social Security

<table>
<thead>
<tr>
<th>Economic Activity</th>
<th>No. of Establishments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>102</td>
<td>1 %</td>
</tr>
<tr>
<td>Industry</td>
<td>1903</td>
<td>19.1 %</td>
</tr>
<tr>
<td>Commerce</td>
<td>2031</td>
<td>20.4 %</td>
</tr>
<tr>
<td>Construction</td>
<td>514</td>
<td>5.2 %</td>
</tr>
<tr>
<td>Transport</td>
<td>257</td>
<td>2.6 %</td>
</tr>
<tr>
<td>Finance and banking</td>
<td>112</td>
<td>1.1 %</td>
</tr>
<tr>
<td>Tourism</td>
<td>365</td>
<td>3.7 %</td>
</tr>
<tr>
<td>Other Services</td>
<td>4644</td>
<td>46.7 %</td>
</tr>
<tr>
<td>Unspecified</td>
<td>23</td>
<td>0.2 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9951</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>
Chapter (2)
Occupational Safety and Health in Jordan

The protection of workers’ health and safety, and promoting their working conditions, became of an increasing interest in Jordan as the awareness of industrial hazards and dangers increased during the recent years.

Occupational safety and health became one of the main concerns of the Jordanian government, whose commitment to this issue is expressed at the highest political levels, especially in the speeches of his majesty, King Abdullah the second, who emphasized, in his speech on the labour day, 2005, on the necessity for enhancing the formulation of a national labour strategy to ensure adequate protection and security for workers, including a proper system to compensate all those who die or sustain injuries at work. His majesty also called the private sector to accord this matter the top highest priorities.

His excellency, the Minister of Labour, also assured, during the opening ceremony of the second national OSH week in 2005, that making every workplace safe, healthy and free from diseases and hazards is one of the main objectives of MOL.

Occupational Safety and Health problems
The recent OSH situation in Jordan, in general, does not fulfill our needs and ambitions and the degree of compliance with the existing legislation tends to be low, due to the following reasons:

1- Absence of adequate and effective OSH inspection services by DOSH of the Ministry of labour, which is the main enforcing site of occupational safety
and health legislation in Jordan, due to lack of resources and other reasons which are detailed in an other chapter of this profile.

2- Defects in the OSH legislation in Jordan Labour Law (JLL), such as the following:

a. Some legal requirements are unnecessarily exaggerated and over-demanding, especially those of the By-laws of curative and preventive medical care for workers, and the OSH committees and supervisors in the enterprises, which require the enterprises to employ a large number of health and safety specialists in accordance with the number of their employees, e.g. an enterprise with 1000, or more, employees is required to appoint 3 physicians, 4 nurses, 3 OSH specialists and 4 OSH technicians, all of whom should be qualified and work on full time basis, and one of the physicians should be specialist in Occupational Medicine. The cost of employing those specialists exceeds 8000 JDs per month, with no real need for them.

b. Some of the legislation can not be practically applied, e.g. the number of enterprises with more than one thousand employees, who are required to employ a full-time Occupational Medicine specialist, exceeds 60, while the number of those specialists in Jordan does not exceed 15.

c. The inspection of boilers, cranes, lifts and elevators, which cause many accidents and result in fatalities and many injuries each year in Jordan, is not clearly included in the law.

d. OSH legislation in JLL exclude agriculture sector, although workers in this sectors are exposed to all types of hazards, being chemical
form pesticides, herbicides or motor emissions, biological from microorganisms, snakes, scorpions and other forms of life, mechanical from loading, unloading, cutting trees, driving…etc, or any other type of hazards.

e. The law does not clearly authorize the inspectors to enter and inspect workers dormitories, which may be a source of all forms of hazards. This matter became of a special importance after the introduction of QIZs, which employ tens of thousands of foreign employees who live in company-provided dormitories.

f. JLL also excludes domestic servants and workers in the public service and municipalities, who are exposed to similar hazards as those in the other sectors.

3- Public awareness of OSH, in general, and among employers and workers, in particular, tends to be low. Some times the employer does not take adequate safety measures, including providing personal protective equipment (PPE), for his workers to protect them, and other times those equipment are provided by the employer, but neglected by the workers in spite of the intense need for them.

4- Uncooperation of employers, either due to financial problems, or due to lack of knowledge, as in QIZ enterprises in which the decision makers always complain of lack of information. All governmental organizations communicate with them in Arabic only.

5- Absence of a clear national OSH policy for the proper direction of OSH activities and making better use of the available resources.
6- SSC pays all the expenses of work injuries, even if investigations reveal that the negligence of the employer in taking adequate safety precautions in the workplace contributed to the occurrence or to the severity of the injury. The percentage of contribution is the same for all enterprises regardless of their risk level, the degree of hazards or OSH record. With the existing SSL, the employers will have less motives to adapt better OSH measures or programs.

7- Absence of proper coordination among different agencies working on OSH. Some of those agencies have the human and technical resources, but do not have the law which authorizes them to use those resources, and others have the power of the law, but do not have the resources.

**OSH Human Resources in Jordan**

Occupational safety and Health human resources in Jordan are not considered to be adequate for providing effective OSH inspection services. There is a quantitative and qualitative shortage in those resources, but the integration of all efforts and the proper coordination among all concerned agencies, may help solve the major part of this problem and will result in much more effective and efficient OSH inspection services than what already exist.

The OSH inspectorate of the MOL, the main enforcing site of OSH legislation in Jordan, comprises 12 inspectors. Assuming that an inspector can make 3 inspection visits per working day, we can draw the following information regarding OSH services in Jordan:

a- There is only one OSH inspector per (6229) enterprise.

b- There is only one OSH inspector per (97573) workers.
c- If all enterprises are to be inspected, any enterprise will be inspected once every (9.65) years.

d- If all small enterprises are left for general labour inspectors to visit and only enterprises covered by social security are to be visited by OSH inspectors, every enterprise will have one OSH inspection every (1.4) years.

e- There is one general labour inspector per (788) enterprise.

f- There is one general labour inspector per (12334) workers.

g- There is only one occupational physician per (89442) workers.

The Award of Excellence in Occupational Safety and Health:
This is a special award for enterprises and individuals with a distinguished OSH performance. It is awarded by SSC every year to encourage the enterprises to undertake health and safety promotion measures, to create and sustain a safe and healthy working environment, provide more protection for workers and minimize work-related injuries and losses.

International cooperation:
Jordan cooperates with the concerned international agencies, mainly the ILO, WHO and JICA, in organizing national and international OSH activities for the promotion of the capacities of MOL in this field.

Jordan has ratified the following OSH conventions, of the ILO, and is considering the ratification of convention 155 (Occupational Safety and Health Convention, 1981):

1- C119 Guarding of Machinery Convention, 1963, Ratified by Jordan on 04:05:1964
2- C120 Hygiene (Commerce and Offices) Convention, 1964, Ratified by Jordan on 11:03:1965

3- C124 Medical Examination of Young Persons (Underground Work) Convention, 1965, Ratified by Jordan on 06:06:1966
A **QIZ** is any area that has been specified as such by the United States government, and which has been designated by Jordanian authorities as an enclave where products may enter the U.S markets without payment of duty or excise taxes, and without the requirement of any reciprocal benefits.

Out of the ten QIZs in Jordan, the following are operating:

1- **Al Hassan Industrial Estate**, The world’s first **QIZ**, was designated in March 1998. It is located near Irbid, 80 km north of Amman.

2- **Al Hussein Bin Abdullah II Industrial Estate**. The second **QIZ**, Located in Al Karak, 110km south of Amman.

3- **Al Dulayl Industrial Park**, located in central Jordan, just 45 km north east of Amman.

4- **Al Tajamouat Industrial City**, an industrial estate, located 20 km from downtown Amman.

5- **Al Qastal Industrial Park**, located about 3 km from Queen Alia International Airport, and 22 km from Amman.

6- **Russeifa Qualifying Industrial Zone**, located about 20 Km to the North of Amman.

There are 107 operating enterprises, so far, in the Qualifying Industrial Zones, and many others are in the stages of licensing or under construction. All of these enterprises are involved in textile and garment industries. The number of workers in QIZs exceeds 53,000, two thirds of them are non Jordanian. Table (4) shows the number and distribution of workers in QIZ.
Peculiarities of QIZ:
QIZ enterprises are considered as a special OSH issue due to the following causes:

1- They have large workforce, an average of 500 employees per enterprise, in comparison with other enterprises in Jordan.

1- All those enterprises are involved in manufacturing readymade garments, with various production processes, such as cutting, sewing, coloring, pressing, softening and sandblasting, which form an important source of health hazards and occupational diseases.

2- Textile and garment industries are new in Jordan, and the majority of Jordanians working in QIZ enterprises, about 20,000 workers, have no previous experience in this field, this will make them more prone to accidents and injuries. They usually do not undergo pre-employment OSH training.

4- Communication between workers and administration, or among workers themselves is very poor, and sometimes absent, due to multi languages and multi cultures. Lack of communication leads to lack coordination in case of emergencies and disasters.

5- They have high work load and long working hours, interviews with some foreign workers revealed that some of them work 18 hours a day, 6 days per week. This will lead to fatigue and exhaustion, and results in more faults, more accidents and more diseases.

6- About two thirds of workers in QIZ are non Jordanian, they speak neither Arabic nor English, so they can not have access to information on their legal rights, by local law, from an official, or neutral source. and most of them ignore those rights, concerning working hours, overtime work, wages, protection from workplace hazards…etc.
7- Wages in QIZs are relatively low, compared to those in other areas. They rarely exceed the minimum wages determined by law, so most of those who accept such wages are driven by the need and poverty. Those are more likely to compromise at the cost of their health and safety.

8- Tens of thousands of foreign workers, and thousands of local workers who come from remote areas, live in company-provided dormitories. Regular inspections revealed that most of those dormitories are overcrowded, unsafe and unhygienic. DOSH of MOL investigated several outbreaks of communicable diseases in those places.

**Occupational hazards in the QIZ:**

Textile industries are diverse operations including fiber synthesis, weaving, manufacturing, dyeing and finishing, …etc. There are numerous health and safety issues associated with the textile industry. They include:

A- chemical exposure from the processing and dyeing of materials, exposure to cotton dusts and other organic dusts which is often present in the air during cotton handling and processing.

B- Mechanical and electrical hazards from the machines and equipment used in cutting, sewing, pressing, loading and unloading…etc.

C- Physical hazards, such as noise, heat, vibrations, inadequate lighting…etc.

D- Psychological hazards resulting from fatigue, long working hours, low wages, absence of career development, restriction of leave…etc.

E- Ergonomic hazards and musculoskeletal stresses, resulting from
working in uncomfortable postures, resulting in health problems, such as piles, which already started to appear among groups of workers in QIZ due to working in the standing position for very long hours, sometimes more than ten hours a day.

F- Social hazards: there about 20,000 foreign female workers in QIZ, who are either unmarried, or left their husbands thousands of miles away. The majority of them are allowed, by contract, to go home once, only, every three years. This, in addition to the differences in religion and culture and the absence of family watch, encourages illegal sexual relations and increases social problems and the risk of sexually-transmitted diseases.

G- The hazards of fire and explosion due to the highly inflammable Materials, used in textile industries, and the use of large boilers in those enterprises. Several huge fires broke out in QIZ during the last three years, some of the enterprises were completely destroyed.

H- Other hazards: e.g. biological, environmental...etc

Health problems that may be faced in textile industries due to the mentioned hazards include:

1- Chronic lung diseases, including pulmonary fibrosis and chronic obstructive pulmonary diseases.
2- Acute respiratory tract infections.
3- Bronchial asthma and other allergic disorders.
4- Cancers and malignant diseases, especially those of the lungs, skin and blood.
5- Eyes and skin infections, and irritation.
6- Back pain, arthralgia, piles and other health problems that may arise due to long working hours and poor working conditions.
7- Bodily injuries of all kinds.

Some studies, and periodic inspection of QIZ enterprises, showed that the level of compliance with OSH laws and regulations in those enterprises tend to be very low. This could be referred to the following:

1- Poor communication between OSH inspectors and the decision makers in those enterprises due to the language difference. Inspectors are usually met by an Arabic-speaking third line manager and they do not meet any of the decision makers in the enterprise. The correspondence with enterprises, including inspection reports, are always made in Arabic.

2- Ignorance of foreign employers concerning the local labour legislation which, in a way or an other, differs from those in their countries.

3- Engagement of employers in their huge production load, which is given a higher priority than OSH, leaves them no time to devote to anything other than the production.

4- Lack of awareness, of the positive effect of OSH activities on the enterprise and the production, in general, and on the health and safety of workers in particular.

Recommendations for promoting safety and health in QIZs:

1- Raising awareness of the importance of OSH, through seminars, workshops and brochures, both in Arabic and English languages, directed to employers, administrators and workers, to emphasize the positive effect of compliance with OSH laws and regulations.

2- Organizing training programs, for employers and employees, on occupational diseases and hazards in garment and textile industries, and the means of preventing them.
3- Inspection visits to QIZ enterprises are to be conducted by specialist inspectors, adequately trained on how to deal with the peculiarity of QIZ, and writing inspection reports in Arabic as well as in English languages.

4- Advising the enterprises in QIZs to translate emergency and evacuation plans and all safety instructions and warning signs to all languages spoken by the workers.
Chapter (4)

Work-related injuries in Jordan

The Jordan Labour Law (JLL) No. 8 of 1996, and the Social Security Law (SSL) No. 19 of 2001, define a work injury as ‘Any injury sustained by the worker as a result of performing his job, or because of it, including what happens to him on the way to, or from, the workplace.

Occupational accidents and injuries occur every day in different workplaces in Jordan, costing the country huge human and economic losses, and leaving behind unknown number of disables and sufferers.

Although several governmental agencies publish yearly statistics on the number and costs of occupational injuries, the real relevant statistics, and the resultant losses in Jordan, remain unknown, and can not be accurately predicted. All those statistics are based on the reports of the SSC, which are limited to the insured workers, but, no doubt, the real figures are much more than the published ones. It is believed that the real magnitude of the problem is greatly underestimated, due to the following reasons:

1- The enterprises contributing to the Social Security Corporation are usually the large and formal ones with better resources, better working conditions and more spending on safety and health, while those out of the social security coverage are the small or informal ones, with less investment in OSH, more hazards and more accidents and injuries.

2- The large enterprises usually report the serious and costly injuries and don’t report the other injuries, if their compensations is not worth the
effort and the time spent for them. Moreover, many of those enterprises would prefer to bear the costs of mild injuries, and sometimes the moderate ones, in order to keep their injuries’ record clean.

3- The SSL allows enterprises to exclude the coverage of the costs of the work injuries from their contributions, by reducing the contribution to 15.5 %, instead of 16.5 %, of the workers’ wages. In this case the employer would pay the costs of the injuries, so there will be no motive to report them.

4- The reports and the statistics of the SSC exclude the work injuries, which are not recognized as such by the SSC investigators.

5- The SSC reports and statistics are limited to the insured workers who do not include the following groups:
   a- The members of the Armed Forces and Civil Defense, who contribute to the Military Pension System.
   b- The civil servants, who contribute to the Civil Pension System.
   c- The employees of the small enterprises, of less than 5 employees, who are excluded from SSL.
   d- The employees of the large enterprises which violate SSL by not contributing to it.
   e- All employees over the age of 60 years.

The employees of groups (a) and (b) are covered by the military or the civil health insurance systems, but their injuries are not reported, and no relevant data exist.
The majority of employees of the other four groups, belong to SMEs, or informal sectors, such as construction and agriculture. Those are highly exposed to occupational hazards, and they are not covered by any type of insurance. They usually do not report their injuries, because they have no motive to do so, due to any of the following reasons:

1- They are not required, by any law, to report their injuries.
2- Their ignorance of their the employers’ responsibility towards them, concerning their injuries.
3- No employer to bear the costs of the injury, self-employed.
4- Direct compensation by the employer. No dispute and no complaints.
5- Compensation by external sites, such as the insurance companies, military or civil health insurance systems...etc.

Tables (5) to (8) show the number of injuries among the socially insured workers by their outcome, body site, type and cause respectively, during the years 2000 to 2004, and table (9) shows the costs of injuries during the same period.

According to those tables, the average human losses, due to occupational injuries, during the last five years were (71.2) fatalities, (1290.6) disabilities below 30%, and (81) disabilities of 30% or more, per year, or (4.2) fatalities, (76.1) disabilities, below 30%, and (4.8) disabilities, of 30% or more, per 1000 injuries. The majority of those injuries involve hands and feet, and most of them result from falling persons, hand tools, falling objects and machines.

Table (5) Work-related injuries 2000-2004 by their outcome
### Table (6) Work-related injuries 2000-2004 by their body site

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
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<tbody>
<tr>
<td>Cured</td>
<td>10723</td>
<td>10204</td>
<td>11115</td>
<td>9621</td>
<td>8791</td>
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<tr>
<td>Disability less than 30%</td>
<td>1367</td>
<td>1503</td>
<td>1473</td>
<td>1453</td>
<td>657</td>
</tr>
<tr>
<td>Disability 30%, or more</td>
<td>118</td>
<td>92</td>
<td>92</td>
<td>86</td>
<td>17</td>
</tr>
<tr>
<td>Death</td>
<td>75</td>
<td>67</td>
<td>70</td>
<td>86</td>
<td>58</td>
</tr>
<tr>
<td>Not Recognized as a Work injury</td>
<td>1713</td>
<td>2358</td>
<td>2427</td>
<td>1821</td>
<td>1389</td>
</tr>
<tr>
<td>Not Followed up</td>
<td>2887</td>
<td>2273</td>
<td>2266</td>
<td>2978</td>
<td>2627</td>
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<tr>
<td>Not Entered (No procedures)</td>
<td>15</td>
<td>260</td>
<td>30</td>
<td>270</td>
<td>3854</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16898</strong></td>
<td><strong>16757</strong></td>
<td><strong>17473</strong></td>
<td><strong>16315</strong></td>
<td><strong>17393</strong></td>
</tr>
</tbody>
</table>

### Table (7) Work-related injuries 2000-2004 by their type

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>534</td>
<td>514</td>
<td>605</td>
<td>676</td>
<td>622</td>
<td></td>
<td>Head and Ears</td>
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<tr>
<td>686</td>
<td>419</td>
<td>506</td>
<td>500</td>
<td>548</td>
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<td>Face, nose and cheeks</td>
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<tr>
<td>1085</td>
<td>1184</td>
<td>1463</td>
<td>1496</td>
<td>1518</td>
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<td>Eyes</td>
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<td>1274</td>
<td>1386</td>
<td>1529</td>
<td>1439</td>
<td></td>
<td>Back, chest and Belly</td>
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<tr>
<td>212</td>
<td>191</td>
<td>279</td>
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<td>309</td>
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<td>Pelvis and thighs</td>
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<td>913</td>
<td>932</td>
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<td></td>
<td>Legs and Knees</td>
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<td>3055</td>
<td>3099</td>
<td>3028</td>
<td>2961</td>
<td>3078</td>
<td></td>
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<tr>
<td>225</td>
<td>226</td>
<td>271</td>
<td>331</td>
<td>344</td>
<td></td>
<td>Toes</td>
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<tr>
<td>757</td>
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<td>904</td>
<td>1016</td>
<td>900</td>
<td></td>
<td>Shoulders and arms</td>
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<tr>
<td>2987</td>
<td>3127</td>
<td>3653</td>
<td>2847</td>
<td>2945</td>
<td></td>
<td>Palm and wrist</td>
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<tr>
<td>3280</td>
<td>3935</td>
<td>3382</td>
<td>2933</td>
<td>3021</td>
<td></td>
<td>Fingers (Hand)</td>
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<tr>
<td>782</td>
<td>879</td>
<td>16</td>
<td>8</td>
<td>9</td>
<td></td>
<td>The whole body</td>
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<tr>
<td>1112</td>
<td>1005</td>
<td>1110</td>
<td>1083</td>
<td>1111</td>
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<tr>
<td>16</td>
<td>4</td>
<td>19</td>
<td>4</td>
<td>16</td>
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<td><strong>16315</strong></td>
<td><strong>17473</strong></td>
<td><strong>16757</strong></td>
<td><strong>16898</strong></td>
<td><strong>Total</strong></td>
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</tr>
<tr>
<td>Type of injury</td>
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<td>2002</td>
<td>2003</td>
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<td>-------</td>
<td>-------</td>
<td>-------</td>
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<td></td>
</tr>
<tr>
<td>Wounds</td>
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<td>4725</td>
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<td>Bruises</td>
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<td>6507</td>
<td>5929</td>
<td>4797</td>
<td>5193</td>
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<td>Fractures</td>
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<td>14389</td>
<td>1339</td>
<td>1088</td>
<td>1119</td>
<td></td>
</tr>
<tr>
<td>Sprains</td>
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<td>1258</td>
<td>1224</td>
<td>862</td>
<td>913</td>
<td></td>
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<td>Amputations</td>
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<td>180</td>
<td>177</td>
<td>121</td>
<td>114</td>
<td></td>
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<td>Coma</td>
<td>35</td>
<td>45</td>
<td>22</td>
<td>23</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Burns</td>
<td>664</td>
<td>699</td>
<td>643</td>
<td>613</td>
<td>525</td>
<td></td>
</tr>
<tr>
<td>Poisoning</td>
<td>23</td>
<td>23</td>
<td>31</td>
<td>14</td>
<td>149</td>
<td></td>
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<tr>
<td>Electrical Shock</td>
<td>16</td>
<td>23</td>
<td>10</td>
<td>17</td>
<td>14</td>
<td></td>
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<td>Bleeding</td>
<td>64</td>
<td>52</td>
<td>53</td>
<td>59</td>
<td>73</td>
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<td>Occupational Diseases</td>
<td>11</td>
<td>7</td>
<td>22</td>
<td>4</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Foreign Bodies</td>
<td>1297</td>
<td>1433</td>
<td>1266</td>
<td>1034</td>
<td>792</td>
<td></td>
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<tr>
<td>Others</td>
<td>1315</td>
<td>156</td>
<td>532</td>
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<td>879</td>
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<td>18</td>
<td>238</td>
<td>2295</td>
<td>3551</td>
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<td><strong>Total</strong></td>
<td><strong>16898</strong></td>
<td><strong>16757</strong></td>
<td><strong>17473</strong></td>
<td><strong>16315</strong></td>
<td><strong>17393</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table (8) Work-related injuries 2000-2004 by their cause

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>2045</td>
<td>1933</td>
<td>1874</td>
<td>2025</td>
<td>2013</td>
<td>Machines and Equipment</td>
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<td>2452</td>
<td>3082</td>
<td>3713</td>
<td>3325</td>
<td>3248</td>
<td>Hand Tools</td>
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<tr>
<td>750</td>
<td>853</td>
<td>1086</td>
<td>982</td>
<td>1119</td>
<td>Walking on things or collision</td>
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<td>3861</td>
<td>4172</td>
<td>4773</td>
<td>4418</td>
<td>4625</td>
<td>Falling Persons</td>
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<td>2012</td>
<td>2178</td>
<td>2574</td>
<td>2195</td>
<td>2453</td>
<td>Falling objects</td>
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<td>259</td>
<td>272</td>
<td>257</td>
<td>294</td>
<td>316</td>
<td>Chemical Materials</td>
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<td>440</td>
<td>484</td>
<td>539</td>
<td>517</td>
<td>615</td>
<td>Loading and Unloading Goods</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>Explosions and Fire Breaks</td>
</tr>
<tr>
<td>84</td>
<td>78</td>
<td>64</td>
<td>79</td>
<td>82</td>
<td>Collapses</td>
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<td>50</td>
<td>89</td>
<td>119</td>
<td>82</td>
<td>95</td>
<td>Electricity</td>
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<tr>
<td>796</td>
<td>1089</td>
<td>1047</td>
<td>1003</td>
<td>972</td>
<td>Road Traffic Accidents</td>
</tr>
<tr>
<td>1721</td>
<td>1922</td>
<td>1416</td>
<td>1806</td>
<td>1384</td>
<td>Others</td>
</tr>
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</table>
Table (9), Costs of work-related injuries 2000-2004

<table>
<thead>
<tr>
<th>Item</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of injuries</td>
<td>16898</td>
<td>16757</td>
<td>17473</td>
<td>16315</td>
<td>17393</td>
</tr>
<tr>
<td>No. of workers</td>
<td>366330</td>
<td>381896</td>
<td>416374</td>
<td>467044</td>
<td>519372</td>
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<tr>
<td>Cost of injuries in JDs</td>
<td>2788144</td>
<td>2611600</td>
<td>2380055</td>
<td>2190643</td>
<td>1794035</td>
</tr>
<tr>
<td>Absence days</td>
<td>147568</td>
<td>153066</td>
<td>140024</td>
<td>132745</td>
<td>141002</td>
</tr>
</tbody>
</table>

Compensation for work related injuries in JLL:

a- If a work injury results in death, or total disability, the injured will be entitled to a compensation, to be paid by the employer, the amount of which is equivalent to his /her wages for 1200 working days, with an upper limit of 5000 JDs.

b- If the injury results in a permanent partial disability, the injured worker will be entitled to a compensation, the amount of which would be determined on the basis of the proportion of such disability to the the compensation determined for the total disability.

b- The injured will be entitled, while being prevented from performing his work upon medical advice, to (65%) of his wage while being treated at a hospital, or (75%) of that wage while being treated out of hospitals.

Compensation for work related injuries in SSL No. 19 of 2001:

a- If the injury results in total disability, the insured shall be entitled to a monthly disability pension equivalent to (75%) of his wage, with a 25% increase in case of the constant need for daily assistance.

b- If the injury results in death of the insured, a survivors’ pension, equivalent to (60%) of his wage, will be decided to the beneficiaries.

c- If the injury results in a permanent partial disability of no less than (30%), the insured shall be entitled to a monthly disability pension
calculated on the basis of the proportion of such disability to the total
disability pension determined by this law.

d- If the injury results in a permanent partial disability of less than
(30%), the insured shall be entitled to a lump sum compensation
equivalent to the proportion of such disability to the amount payable for
total disability for 36 months.

e- The injured will be entitled, while being prevented by the injury and by the
approved medical reference from performing his work, to a daily
allowance equivalent to (75%) of his daily wage.

Chapter (5)
Laws and regulations concerned with occupational safety and health in Jordan are:

1- **The Constitution of Jordan, of 1952, and its amendments:**
   The state, as per article (23) of the Jordanian Constitution, protects labour, and formulates the relevant legislation, based on principles that include compensating workers in case of termination and work-related illness and disability.

2- **Labour Law No. 8, of 1996 and its amendments:**
   This is the main law, in Jordan, dealing with OSH and working conditions, it is detailed in an other chapter of this profile.

3- **The provisional Public health law No. 54, of 2002, and its amendments:**
   Article (4) of this law requires the Ministry of Health (MOH) to Coordinate with the other relevant agencies for monitoring the working environment and the workers’ health in the workplaces for ensuring the protection of all workers’ health and safety.

4- **The Standards and Specifications Law No. 22, of 2000:**
   Article (17) of this law requires all enterprises, being industrial or commercial, to fully comply with the technical baselines approved for the protection of the environment and the occupational safety and health.

5- **The Law of Organizing Professional Labour, No. 27, 1999:**
   Article (4) of this law emphasizes the necessity of setting specific
conditions, in accordance with the existing standards, that include occupational safety and health requirements, for each group of professional labour stores or workshops.

6- Nuclear and Radioactive Energy Law No. 29, 2001:

Article (16) of this law emphasizes the necessity of adherence of Enterprises, and establishments using radioactive sources, to the requirements and the precautions of nuclear safety and protection from radioactivity, including the appointment of a specialized officer for this purpose.

This article also requires the employer to arrange for workers’ health monitoring program, including periodic medical check-up, to ensure the continuity of their medical fitness and to detect any work-related health problems as early as possible.

7- Hazardous Wastes Management and Handling Instructions of 2003:

Article (7) of these instructions requires the employers to train all concerned employees on the proper and safe management, and handling, of the hazardous wastes, provide them with the appropriate personal Protective Equipment (PPE) and arrange for their relevant pre employment and periodic medical examination.

8- The Social Security Law No. (19) of 2001:

This law includes the insurance of workers against work injuries, occupational diseases, old age, disability and death, a list of the approved occupational diseases and a list showing the determined percentage for each work injury.
The other laws that are related, in a way or another, to OSH are:

1- Civil defense law.
2- The environment Protection Law
3- The Agriculture law
4- Handicrafts and Industries Law

Chapter (6)
Occupational Safety and Health Legislation in the Jordan Labour Law
The Jordan Labour Law No. (6) of 1996, is the main law concerned with the health and safety of the workers in Jordan through its OSH articles, Bylaws and regulations.

1- Chapters 9 (The Occupational Safety and Health):

This chapter deals with the following:

a- The duties and responsibilities of the employers concerning taking adequate safety measures in the workplace, including the provision of the PPE.

b- The duties of the workers concerning adherence to the OSH instructions and orders.

c- The authorities of the OSH inspectors in case of the violation of the law by the employers.

2- Chapter 10 (The work injuries):

This chapter applies, only, to the workers who are not covered by the SSL concerning occupational diseases and injuries. It clarifies the duties and the responsibilities of the employers when the workers incur such diseases and injuries, including notifying MOL, payment of the costs of the treatment, disability compensation and sick leave compensation.

3- The OSH Bylaws in JLL:

a- OSH supervisors and committees Bylaw No. (7) of 1998:

This bylaw requires the employers to appoint qualified OSH staff, on full time basis, in accordance with the number of the employees in the enterprise, as shown in table (10), to follow up the safety and health matters in the enterprise, and forming an
OSH committee, comprising the CEO as a chairman, OSH supervisor as a vice chairman and a worker and a supervisor from each section or division. The committee is required to hold regular meetings, at one month intervals, to discuss OSH issues.

Table (10), OSH staff in the enterprises, as required by JLL 8, 1996

<table>
<thead>
<tr>
<th>Employees</th>
<th>OSH Specialists</th>
<th>OSH technicians</th>
<th>OSH committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-50</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>51-200</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>201-500</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>501-1000</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

The JLL specifies OSHI as the only approved, and qualified, site for qualifying and graduating such specialists or technicians, the OSHI graduates about 60 of them each year, while the real need, if the legal requirements are to be met, is much greater than that. Table (11) shows the OSH specialists and technicians resources and needs.

Table (11) The national resources and needs of OSH specialists and technicians
<table>
<thead>
<tr>
<th>Size of the enterprise by Employees</th>
<th>Number of enterprises in the country</th>
<th>OSH Specialists</th>
<th>OSH Technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R  A  N</td>
<td>R  A  N</td>
</tr>
<tr>
<td>20-49</td>
<td>1287</td>
<td>-</td>
<td>1287</td>
</tr>
<tr>
<td>50-199</td>
<td>865</td>
<td>-</td>
<td>865</td>
</tr>
<tr>
<td>200-499</td>
<td>180</td>
<td>180</td>
<td>360</td>
</tr>
<tr>
<td>500-999</td>
<td>97</td>
<td>194</td>
<td>291</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>64</td>
<td>192</td>
<td>256</td>
</tr>
<tr>
<td>Total</td>
<td>566</td>
<td>93 473</td>
<td>3059 325 2734</td>
</tr>
</tbody>
</table>

R: Required  A: Available  N: Needed

b- Preventive and Curative Medical Care for the Workers in the Enterprises Bylaw No. (42), 1998:

This bylaw requires the employers to establish a medical unit and to appoint qualified medical staff, physicians and nurses, in the enterprises in accordance with the number of the employees, as shown in table (12), to follow up the health status of the workers and the related adverse effects of the work and taking the appropriate measures to prevent or reduce them, to treat the patients and the emergency cases and to participate in raising health and safety awareness among the workers. This system also requires the employers to have appropriate medical check ups done for the workers, to ensure their fitness, before and throughout the employment period.
The part of this bylaw, related to the occupational medicine specialists, cannot practically be applied, because the number of such specialists in Jordan is much less than what the bylaw requires, as shown in table (13).

Table (12), Medical staff in the enterprises, as required by JLL

<table>
<thead>
<tr>
<th>Employees</th>
<th>P.T physician</th>
<th>F.T physician</th>
<th>Nurse</th>
<th>Medical unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-100</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>101-500</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>501-1000</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>-</td>
<td>3*</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

*One of the physicians should be occupational medicine specialist

Table (13) The national resources and needs of occupational medicine specialists

<table>
<thead>
<tr>
<th>Size of the enterprise by Employees</th>
<th>No. of such enterprises in the country</th>
<th>Occupational Medicine specialists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R</td>
</tr>
<tr>
<td>&gt;1000</td>
<td>64</td>
<td>64</td>
</tr>
</tbody>
</table>

R: Required  A: Available  N: Needed

c- Bylaw No. (43), 1998, Protection against the industrial machineries and work environment hazards:

According to this bylaw, the employers are required to take all necessary measures and precautions for the protection from the mechanical, electrical, chemical and other hazards of the workplace and machineries as detailed in this bylaw.
4- OSH instructions in JLL:

a- Instruction of the sectors to which OSH supervisors and committees bylaw No. (7) of 1998 applies:
These instructions clarify the nature and the activity of the enterprises required to fulfill the requirements of OSH supervisors and committees bylaw No. (7) of 1998.

b- Instructions of the workers protection from environmental hazards in the workplace:
These instructions are related to the PPE needed for the workers according to the nature of their work and the type of hazards they are exposed to. They also include the specifications of the workers’ rest rooms, changing rooms and dining places and the maximum exposure limits for the physical factors in the workplaces.

Instructions of the Pre Employment Medical Examinations for the Workers:
These instructions show the sectors required to have those examinations carried out as well as the form designed for this purpose.

c- The Instructions of Periodic Medical Examination for the Workers:
These instructions show the sectors required to have the periodic medical examinations carried out for their workers, their intervals and the required form.

5- OSH decisions in JLL:
a- The decision of the minister of labour concerning first aid kits in the enterprises:

This decision emphasizes the responsibility of the employer in providing the enterprise with first aid equipment and the materials need to be available in the first aid kits.

b- The decision of the minister of labour concerning the levels of training needed for the OSH supervisors in the enterprises and the approved sites for such training:

This decision specifies the academic qualification and the training needed for OSH supervisors in the enterprises in order to be approved by MOL as OSH specialists or technicians.

c- The decision of the minister of labour concerning the approved medical reference:

This decision specifies the sites approved as medical references concerning occupational diseases and injuries.

d- The decision of the minister of labour concerning the notification form to be filled up by the employer in case of presence, or suspicion, of occupational diseases.

6- Other OSH contents of JLL:

a- Notification form for the occupational injuries that are not covered by the SLL:

This form is to be submitted, by the employer, to MOL within 48 hours of the occurrence of the injury.

b- Tables of TLVs for chemicals in the working environment.
c- Tables of the percentage determined for each work injury for the purpose of compensation

d- Notification form for the fatal injuries which are not covered by the SLL:

This form is to be submitted, by the employer, to MOL within 48 hours of the occurrence of the fatality.
Chapter (7)
Governmental Agencies working on OSH

A: Ministry of Labour:
Monitoring workplaces and inspecting them to ensure their being safe and healthy, is one of the main tasks of the MOL, who continue to promote and reform OSH rules and regulations to confront the occupational risks and hazards which are increasing day by day along with the acceleration of the industrial wheel. The OSH activities of MOL are carried out through the DOSH which consists of:

1- The central OSH division.
2- The Occupational Injuries Division.
3- An OSH division in each labour directorate in the governorates all over the country.

The objectives of the DOSH:
1- Attaining the maximum degree of compliance with OSH rules and regulations in the enterprises of all sizes and all sectors of the economy.
2- Ensuring safe and healthy working environment and conditions for all workers, including those of the construction sector and SMEs.
3- Reducing work-related accidents and injuries and their resultant losses to the maximum possible level.
4- Creating and promoting an OSH culture and raising the OSH awareness among all classes of the society, especially the employers, the employees and the students.
5- Encouraging the employers to exceed the legal health and safety requirements, and to adopt voluntary OSH programs and activities, such as OHSAS- 18001.
The OSH staff of MOL:
The Ministry of Labour employs 18 OSH inspectors of different specialties, as shown in table (14), but only 11 of them are recently working in the DOSH. The rest of them are either on unpaid leave, or working as labour directors in the governorates.

Table (14), OSH staff in MOL

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Total Number</th>
<th>Inspectors in the field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Chemical Engineer</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Agricultural Engineer</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Safety Engineer</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

The OSH inspectors are distributed over the labour directorates in the different governorates of the country, but due to their small number, some of them work in more than one labour directorate at the same time. And some governorates has no OSH inspectors, but they have regular inspection visits by the joint OSH committees. Such inspections are limited to the large enterprises only.

Activities of the DOSH:
The Ministry of Labour aims to achieve the above mentioned objectives through the DOSH which carries out the following activities:
1- Inspection of the private enterprises all over the country to ensure their compliance with the OSH rules and regulations of JLL.

2- Approving the OSH specialists and technicians appointed in the private sector in accordance with the OSH supervisors and committees bylaw No. (7) of 1998.

3- Approving the physicians and the nurses appointed in the private sector in accordance with the preventive and curative medical care for workers in the private enterprises bylaw No. (42) of 1998.

4- Supervising the negotiations to solve any disrupt that may arise among the workers and the employers concerning work-related injuries and the compensations determined for them by the law.

5- Investigating the work accidents and injuries to find out their direct and indirect causes, and providing suggestion for preventing their occurrence in the future. The directorate also collects OSH data, especially those of work-related accidents and injuries, and analyzes them for the purpose of research and prevention.

6- Periodic revision of the OSH articles, bylaws and instructions of JLL, and suggesting reforms and amendments, when required, to promote them, and planning for the best means of enforcing them.

7- Raising the OSH awareness through the following:
   a- Training programs for the workers and the employers in the workplaces.
   b- Organizing OSH workshops in the industrial zones, Chambers of Industry and the centers of the Trade Union.
   c- OSH programs in radio and TV.
   d- Advertisements in the local dailies.
   e- Providing counseling to the workers and the employers, when needed and whenever asked for.

8- Representing the MOL in the committees working on OSH, such as:
a- The joint Technical OSH Committee, chaired by the MOL, with the membership of the Ministry of Health, SSC and the Vocational Training Corporation (VTC) / Occupational Safety and Health Institute (OSHI).

f- The Industrial hazards Committee, chaired by the Ministry of Industry and Commerce, with the membership of the other agencies working on the OSH and environment.

c- The committee of licensing pesticides industries, a subcommittee of the Central Licensing Committee.

9- Cooperation with VTC / OSHI in training, and graduating, OSH supervisors, through presenting lectures and organizing field training programs.

10- Organizing the activities of the National Occupational Safety and Health Week in the month of July, every year, in collaboration with Japan International Cooperation Agency (JICA), the SSC and the other public and private organizations, including the social partners. The week includes a widespread information campaign, workshops, competitions and other activities intended for raising the public awareness of the occupational safety and health.

Table No. (15) shows the activities of DOSH during the years 2001 to 2005.

Procedures of OSH directorate for implementing OSH legislations:

A- Inspection:

Each OSH inspector prepares a monthly inspection schedule for his/her region of responsibility, taking into consideration the sizes of the enterprises and the degree of their hazards, and submits it to the
DOSH at the beginning of the month, the inspection visits can be proactive or reactive and may be one of the following types:

5- Initial inspection visits, for the new establishments, or those never inspected before. A new with complete data is made. Information and advice on legal OSH requirements are provided.

6- Periodic inspection visits, for monitoring the workplaces and ensuring continuous fulfillment of OSH requirements.

7- Follow-up inspection visits, for the enterprises which were given a warning or a notice to remove violations.

4- Inspection visit upon complaints regarding existing violations, and serious hazards.

5- Inspections to investigate accidents and injuries, find out their underlying causes and study preventive measures.

B- Legal procedures and sanctions:

Upon visiting any enterprise, OSH inspector writes down his/her notes and fills up an inspection form to document the degree of compliance with the law. In case of the presence of violations, any of the following measures may be taken:

a- Writing a report of advice and direction, and a follow-up visit is planned with a time frame depending on the type and severity of the violation.

b- If the follow-up inspection visit reveals that the violations are not removed, a one week written notice (warning letter) is issued, asking the employer, or his representative, to remove the violation within the warning period.

c- If the violations still persist, a penalty, through the court, is issued, and a fine of 100 to 500 JDs is to be paid, this amount may be doubled if the violations are repeated.
d- In case of serious violations, the inspector may recommend shutting down the enterprise completely, or partially, or suspending any of its processes. Such measure requires the approval, and a decision, of the Minister of Labour.

These measures are usually, but not always, followed in the mentioned sequence, as the final decision is the inspector’s, he is authorized to issue penalties with any prior notice or advice.

**The problems of the DOSH:**

The activities of the DOSH cover a relatively small number of the enterprises in Jordan, and the promotion and the spread of those activities are faced by the following obstacles:

1- Shortage in the number, and the qualification, of OSH inspectors. The few number and the recent capacities of the inspectors do not enable them to carry out the minimum needed activities. There are no any occupational hygienists or environmental measurement specialists in the directorate.

2- Inadequate training and follow-up for the inspectors, which is necessary for updating their knowledge, and for benefiting from the experience of the other countries in this field.

3- Lack of equipment or devices for monitoring workplace environment. Heavy or costly equipment are available at other sites, such as OSHI and RSS, and may be used in case of good coordination with them, but the DOSH should have, as a minimum, portable, and easy to use, devices for measuring the noise, illumination, temperature…etc in the workplace, in addition to air sampling instruments, and training inspectors how to use them.
4- Communication difficulties, between the directorate and the regional inspectors due to lack of electronic linkage or computerization of OSH activities in the field.
5- Lack of a data base for entering, or obtaining, the real and accurate data of the enterprises, when needed.
6- Difficulties in transportation, or adherence to a pre prepared inspection schedule, as the transportation means are common for all departments of MOL, and their use depends on their availability when asked for.
7- Shortage in office employees, such as clerks, assistants or typists for doing office works. OSH specialists or inspectors waste much of their time and effort in additional works, out of their specialties.
8- Absence of career development or promotion, lack of incentives, and the large difference between the pays and allowances of OSH inspectors in MOL and those of their colleagues in the other organizations, such as MOH and SSC.

B: The Ministry of Health:
The MOH is directly involved in OSH through the activities of its Directorate of Occupational Health and the Environmental Health Laboratory. Directorate of Occupational Health comprises two divisions:

a- Occupational Medicine Division:
This division has the following main functions:
1- Conducting pre employment, periodic and specific medical examinations for workers to ensure their fitness for work.
2- Participation in setting occupational health standards and specifications.
3- Conducting occupational health field studies and researches.
4- Organizing training programs in occupational health for medical
doctors, nurses and hygienists.

5- Participation in revising, promoting and updating the national OSH laws and regulations.

**b- Occupational Hygiene Division:**

The Occupational Hygiene Division of MOH performs the following functions:

1- Conducting qualitative and quantitative studies on work-related hazards in the workplaces, and the means of preventing or reducing them.

2- Conducting environmental Measurements in the workplaces to determine the pollutants and the levels of exposure.

3- Studying the health and the environmental impact of the industrial projects.

4- Education of workers, and others interested, on occupational health.

5- Participation in the activities of the joint committees monitoring the compliance of the private sector with the existing OSH laws and regulations.

The environmental measurements performed by this division include noise, lighting, gases, dust (total and respirable) and heavy metals. Table (16) shows the number of inspections and workplace environmental measurements, and table (17) shows the number of clinical examinations and various tests, conducted by the Directorate of Occupational Health during the last five years.

Table (16) inspections and workplace environmental measurements conducted by the Directorate of Occupational Health, MOH, 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspections</td>
<td>851</td>
<td>987</td>
<td>1067</td>
<td>687</td>
<td>1093</td>
</tr>
</tbody>
</table>
### Table (17) Clinical Examinations and Other Tests Conducted by the Directorate of Occupational Health, MOH, 2000-2004

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Examination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>407</td>
<td>689</td>
<td>1600</td>
<td>1118</td>
<td>791</td>
</tr>
<tr>
<td><strong>Lung Function Tests</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>265</td>
<td>593</td>
<td>2032</td>
<td>2995</td>
<td>3312</td>
</tr>
<tr>
<td><strong>Hearing Function Tests</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>480</td>
<td>702</td>
<td>1948</td>
<td>3393</td>
<td>3247</td>
</tr>
<tr>
<td><strong>Laboratory tests (blood and urine)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>35</td>
<td>43</td>
<td>372</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1170</td>
<td>2019</td>
<td>5623</td>
<td>7878</td>
<td>7540</td>
</tr>
</tbody>
</table>

The OSH staff of the Directorate of Occupational Health in The MOH consists of 17 specialists, as shown in Table (18).

### Table (18), The Staff of the Directorate of Occupational Health, MOH

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Medicine specialists</td>
<td>5</td>
</tr>
<tr>
<td>Public health specialist (Diploma)</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Health physician (G.P)</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Hygiene Technician</td>
<td>2</td>
</tr>
<tr>
<td>Safety Engineer</td>
<td>2</td>
</tr>
<tr>
<td>Public Hygiene Technician</td>
<td>1</td>
</tr>
</tbody>
</table>
C: The Social Security Corporation (SSC):
The SSC plays an important role in the occupational safety and health in Jordan by performing the following activities:
1- Insurance of the engaged workers against the work-related injuries and occupational diseases and their complications.
2- Participation in planning and designing OSH policies, and conducting researches and studies on work-related injuries.
3- Participation in monitoring the compliance of the enterprises with OSH laws and regulations through inspection within the joint committees with MOL and MOH.
4- Organizing OSH awareness-raising programs for the enterprises engaged in the social security, through coordination between the Information Department of SSC and the media.
5- Financing and supporting national OSH activities, such as the National Occupational Safety and Health Week.
6- Investigating injuries that occur in the enterprises to determine their underlying causes, for the purpose of preventing similar injuries in the future.

The SSC carries out these activities through its Department of Occupational Safety and Health Affairs, which comprises the OSH staff shown in table (19).

<table>
<thead>
<tr>
<th>Occupational Hygienist</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>
Table (19), OSH staff, SSC

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Health</td>
<td>1</td>
</tr>
<tr>
<td>Environmental and Occupational Health</td>
<td>4</td>
</tr>
<tr>
<td>Environmental Engineering</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

Table (20) shows the number of the socially ensured workers, by type of economic activity, in the last five years, during which they increased by (41.77 %).

Table (20) Socially Insured Employees by Economic Activity, 2000-2004

<table>
<thead>
<tr>
<th>Sector</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>6254</td>
<td>7146</td>
<td>8308</td>
<td>9330</td>
<td>9707</td>
</tr>
<tr>
<td>Industry</td>
<td>75231</td>
<td>77807</td>
<td>83197</td>
<td>89417</td>
<td>98100</td>
</tr>
<tr>
<td>Commerce</td>
<td>35281</td>
<td>35719</td>
<td>37092</td>
<td>40804</td>
<td>45480</td>
</tr>
<tr>
<td>Construction</td>
<td>15052</td>
<td>15052</td>
<td>15580</td>
<td>17571</td>
<td>18938</td>
</tr>
<tr>
<td>Transport</td>
<td>10010</td>
<td>9672</td>
<td>9634</td>
<td>9870</td>
<td>10286</td>
</tr>
<tr>
<td>Finance &amp; Banking</td>
<td>15870</td>
<td>15939</td>
<td>15858</td>
<td>16010</td>
<td>16565</td>
</tr>
<tr>
<td>Tourism</td>
<td>13668</td>
<td>11865</td>
<td>14074</td>
<td>15173</td>
<td>17103</td>
</tr>
<tr>
<td>Other Services</td>
<td>194522</td>
<td>208346</td>
<td>232321</td>
<td>268562</td>
<td>302826</td>
</tr>
<tr>
<td>Unspecified</td>
<td>442</td>
<td>350</td>
<td>310</td>
<td>307</td>
<td>367</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>366330</strong></td>
<td><strong>381896</strong></td>
<td><strong>416374</strong></td>
<td><strong>467044</strong></td>
<td><strong>519372</strong></td>
</tr>
</tbody>
</table>
D: Occupational Safety and Health Institute (OSHI):
The OSHI, of the Vocational Training Corporation (VTC), was established in 1983 about 10 Km from the center of the capital city of Amman. Its activities are focused on the following:
1- Training and qualifying OSH technical staff through the following programs:
   a- The program of qualifying OSH specialists and technicians, a 75 days course (240 to 280 training hours), for OSH supervisors to fulfill the requirements of OSH committees and supervisors of JLL, in order to be approved by MOL.
   b- A six months OSH training course (580 training hours), including theoretical, practical and field training, for the students and workers wishing to specialize in this subject.
   c- Basic and advanced public safety courses, for 1 to 3 weeks, directed to the technicians and workers in all sectors.
   d- Specific OSH courses, for 2 to 5 days, for workers in specific professions, such as painting, welding, labs, etc.
2- Conducting field studies to determine OSH-related problems, including the causes of work-related accidents and injuries, and suggesting proper preventing measures for them.
3- Conducting various measurements to evaluate the working environment, to ensure that the pollutants do not exceed the permissible limits, including the physical factors such as illumination, temperature, noise, vibrations and radiation, and the chemical factors, such as dusts, gases, vapors,…etc.
4- Conducting some medical tests for the workers in the workplace, such as Lung Functions Tests (spirometry) and Hearing test (Audioimetry).
5- Research in the various OSH fields, and documenting and publishing the researches at the national and the international levels.
6- Participation in setting the standards, related to safety and health, in collaboration with the Jordanian Standards and Specifications Corporation.

7- Conducting yearly studies to analyze work injuries data, and using them for research and development.

8- Assisting various enterprises in formulating, revising and updating their OSH policies, programs and systems.

9- Raising the safety and health awareness through:
   a- Holding OSH programs and lectures, and Organizing study visits to OSHI to demonstrate its different activities and functions.
   b- Production and duplication of safety and health videos.
   c- Designing and printing posters and brochures for occupational hazards, and distributing them in the work places.

10- Active participation in the OSH technical committee, chaired by MOL, which monitors the compliance of the enterprises with OSH legislations.

The OSHI comprises the following facilities:

1- Laboratories unit, which includes:
   a- The mobile equipment for measuring the physical factors in the workplaces, such as illumination, temperature, radiant heat, noise, noise dose, moisture, wind velocity and radiation.
   b- sampling devices, to collect samples from workplaces, i.e. dust collection pumps and systems for monitoring gases, such as CO2, O2, CO, H2S and explosive gases.
   c- gas detector tubes.
   d- Spirometers and Audiometers.
   e- Mobile lab unit, for sampling and measuring pollutants in the workplaces.
2- The mechanical workshop: contains machineries and equipment simulating those in the labour market, provided with all necessary safety devices, and used for the practical training.

3- Training halls, equipped with all necessary audio-visual aides.

4- The Computer lab.

5- The National Information System: OSHI became the national OSH information center in Jordan since joining the International information Center of the ILO in 1987.

6- The permanent exhibition: Shows the various types of OSH equipment, tools and devices, posters, pictures and diagrams and statistics on occupational injuries in Jordan

The OSH specialized staff in the Occupational Safety and Health Institute comprises an OSH team composed of 10 people of various specialties, as shown in table (21).

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSH engineer</td>
<td>4</td>
</tr>
<tr>
<td>OSH training Officer</td>
<td>2</td>
</tr>
<tr>
<td>Environmental lab technician</td>
<td>3</td>
</tr>
<tr>
<td>OSH technician</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>
The Directorate of Civil Defense:
The activities of the Directorate of Civil Defense, both proactive and reactive, play a very important role in promoting occupational safety and health in Jordan. These activities are

1- Initial inspection of the enterprises and the establishments to Ensure that the safety and health legal requirements are met before issuing, or renewing, the license of operation.
2- Periodic inspection of the enterprises to ensure their preparedness in case of emergencies or disasters.
3- Training the workers, on site, upon the request of the management of the enterprise, on fire fighting, first-aid and evacuation in case of emergencies.
4- Raising the public awareness concerning safety and health, mainly through circulars and TV programs
5- Prompt Firefighting, evacuation and rescue operation in case of emergencies.
Chapter (8)

The role of the social partners in Occupational Safety and Health

A- The workers organizations:

The workers’ organizations in Jordan are represented, at the national and the international levels, by the Jordan Federation of General Trade Unions (JFGTU). The federation, in its last session, in 2005, approved a new position, the chairman’s assistant for occupational safety and health affairs, to reflect the importance of this issue, which is given a higher priority by the federation. The JFGTU has the following activities in the field of OSH:

1- Organizing OSH training programs for the workers, mainly those engaged in hazardous industries.

2- Representing the workers in the negotiations with the employers to solve the disputes that may arise among them concerning occupational safety and health.

3- Raising the awareness of the workers concerning occupational safety and health, through seminars, workshops and circulars.

4- Participation in the activities of OSH committees at the national, sectoral and enterprise levels.

5- Participation in setting the new legislations and revising the existing ones, including those of OSH, to ensure that the workers’ rights are
considered and protected.

6- Participation in setting the standards and specifications of PPE and labour safety devices and equipment.

7- Participation in the work injuries' committee of the SSC, which decides on work injuries and their compensation.

8- Emphasizing the workers right to a safe and healthy working environment in the collective bargaining.

**B- Employers’ Organizations:**

Employer’s organizations in Jordan are represented, at the national and the international levels, by Jordan Chamber of Industry, which comprises an OSH division within the Department of Environment. It performs the following activities in the field of occupational safety and health:

1- Organizing training courses, for the employers and the workers, on OSH and the protection of the environment. About 50 persons are benefited from such courses every year.

Jordan Chamber of Industry has signed an agreement with the Euro-Jordanian development Agency (EJADA) to establish the “Euro-Jordanian Advanced Business Institute” for advanced training on business administration and occupational safety and health.

2- Supporting various OSH activities, such as the National Occupational Safety and Health Week, financially and logistically.
3- Participation, along with the other concerned agencies, in the safety and health inspection visits conducted by the national OSH committees.

4- Organizing programs (seminars, workshops and circulars) for raising the awareness of the employers concerning occupational safety and health.

5- Representing the employers in setting, revising and reforming OSH legislation.

OSH division, of the Jordan Chamber of Industry, comprises two safety engineers and one legal advisor.
Chapter (9)
The role of Semi Governmental Agencies and the NGOs

Many of the semi governmental and the non governmental organizations are involved in the OSH activities in Jordan through their human and technical resources. The main organizations involved in such activities are:

1- The Royal Scientific Society (RSS):
RSS is a house of expertise in the major aspects related to the environmental and occupational health. It offers advanced services in environmental impact assessment, water and air quality assessment and testing of trace elements, heavy metals, organic pollutants, microbiological contaminants, noise, Radon gas and industrial air emissions.

2- The Universities:
The universities in Jordan, both public and private, have the following functions in the field of safety and health:
   a- Education and training on occupational health, occupational safety, occupational medicine and environmental health.
   b- Education and technical training on chemical and biological analysis.
   c- Conducting researches and studies in the field of environmental and occupational health and safety
   d- Contribution to raising the awareness of safety and health through the introduction of such subjects in the teaching curricula.
3- **The Media:**
The media play a key role in raising the awareness of occupational safety and health because their messages can reach to all people of all ages and all classes.

The Jordanian TV, radio and the daily newspapers have regular activities and programs in this field, most of which are organized in coordination with the other concerned agencies, mainly MOL, the Civil defense and MOH, and sometimes they involve the employers’ and the workers’ organizations.

4- **The insurance companies:**
The insurance firms usually require the enterprises to comply with the provisions of safety and health laws and regulations in force, otherwise the validity of the insurance contracts would be breached, but there is a lack of cooperation and coordination in this field between the insurance firms and MOL or the other concerned organizations.

5- **The international agencies:**
The ILO contribute effectively to the promotion of occupational safety and health in Jordan through providing information, enhancing the country to ratify the ILO OSH conventions and organizing national and international training programs for the staff of MOL and workers’ and employers’ organizations.

Other international agencies, such as WHO, JICA, ALO etc., contribute to the OSH activities in Jordan through providing technical and financial support.
6- **The private sector:**

Some of the enterprises in the private sector in Jordan, mainly the very large ones, are fully compliant with the law and adopt additional voluntary OSH programs and activities to promote their OSH situation, The Jordan Phosphate Mines Company, the Jordan petroleum refinery Company, The Arab Potash Company, the Jordan Pepsi Cola Company, Petra Engineering and Electronic Industries Firm and Nuqul Industrial Group are good examples of such enterprises. but the majority of the enterprises do not comply, unless inspected and forced by the power of the law.
Chapter (10)

Recommendations for the promotion of the Occupational Safety and Health in Jordan

Our needs for the development and the promotion of OSH activities, to reach the desired levels, may not be fulfilled in the near future, but the general OSH situation in Jordan can be improved with more planning for the optimum and efficient use of the available resources. The following are some of the suggestions that may contribute to the promotion of the OSH services in Jordan:

1- Integration of all OSH activities in the country under one national organization that works on all OSH issues, including raising awareness, enforcement of legislation, risk assessment and monitoring and of work environment, in coordination with the other concerned sites for maximum use of available resources.

2- Formulation and implementation of a national OSH strategy, including setting priorities and planning for OSH improvement and promotion to achieve the desired objectives within the given time.

3- Enforcement of the capacities of OSH directorate, Ministry of labour, by the following:

   a- Providing an adequate number of inspectors, and training and qualifying them to fit the directorates needs.

   b- Promoting and developing the skills and capacities of the present inspectors and updating their knowledge and experiences regularly through national and international training programs.

   c- Providing the directorate with the portable equipment necessary for measuring physical factors, and sampling the work environment, and training the inspectors how to use them.
d- Computerization of OSH activities all over the country, and linking them with the directorate through the net.

e- Building an OSH data base that includes the necessary data of all enterprises in the kingdom, such as size of workforce, hazards, employed physicians, nurses and OSH supervisors, OSH resources and activities, accident/incident records and other information that may contribute to the promotion of OSH activities.

f- The provision of proper and adequate transportation means, that can be used independently of other departments to facilitate conformity with the inspection schedule.

g- Providing the directorate with supportive employees and logistic support.

h- Development of an incentive scheme for the inspectors to equalize them with their colleagues in the other ministries or organizations.

4- Revision and amendment, where necessary, of the present OSH legislations, in JLL, to match the international trend in this field, become more practical and to cover all enterprises of all sizes and sectors, including agriculture.

5- Revision and amendment of SSL so that it includes financial savings and incentives for those enterprises showing to be distinguished in OSH. This can be done through increasing or decreasing the enterprises’ contributions according to their OSH and injuries records.

6- Involving the social partners in all OSH activities, including legislation, formulating, revising and implementing strategies and action plans for promoting OSH.
7- Formation of special OSH committees, to inspect and evaluate the situation in the sectors excluded from law, including the public sector, municipalities, and agriculture.

8- Involving MOL/ OSH directorate in the committees setting the standards and specifications of machineries, safety devices and PPE.

9- Involving MOL/ OSH directorate in the licensing committee of the factories and large enterprises, so that OSH is considered in the planning designing stage of any establishment.

10- Raising OSH awareness among all classes of the society (the employers, the employees, the students…etc), through the media and by introducing OSH programs in all the stages of education.
Table (4) Number of Workers in QIZ, and their Distribution

<table>
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<tr>
<th>Region Total</th>
<th>Foreign workers</th>
<th>Jordanian workers</th>
<th>No. of Enterprises</th>
<th>Region</th>
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<td>Male</td>
<td>Total</td>
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### Table (15), The activities of DOSH, 2001 - 2005

<table>
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<tr>
<th></th>
<th>Inspection Visits and sanctions</th>
<th>Inspection Visits within Joint Committees</th>
<th>Settlement of work injuries complaints</th>
<th>Approval of OSH specialists and Technicians</th>
<th>Approval of enterprises’ Physicians</th>
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<tr>
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<td>Written Advice</td>
<td>Written warning</td>
<td>Penalties</td>
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<td>8694</td>
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<td>10431</td>
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<td>1518</td>
<td>1431</td>
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<td>8589</td>
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<td>1038</td>
<td>1503</td>
<td>270</td>
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<td>5812</td>
<td>4738</td>
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