



TURKEY



OCCUPATIONAL SAFETY and HEALTH PROFILE

TURKEY

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Preface (ILO)

This Occupational Safety and Health Profile is a further step in Turkey's ongoing efforts to improve its national occupational safety and health (OSH) system in line with international OSH standards. These standards include the ILO Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187), which entered into force for Turkey on 16 January 2015. This profile follows up on Paragraph 13 of the Promotional Framework for Occupational Safety and Health Recommendation No. 197 which supplements Convention No. 187 and provides that Member states should prepare and regularly update a national profile which summarizes the existing situation on OSH and the progress made towards achieving a safe and healthy working environment.

This profile was commissioned by the ILO as part of a Technical Assistance Program on Occupational Safety and Health carried out at the ILO office for Turkey in Ankara. It was prepared by Mr. Nazmi Bilir, Professor of Public Health at the Hacettepe University, Institute of Public Health, in cooperation with the ILO, the Ministry of Labour and Social Security Directorate General for OSH, the social partners and other relevant stakeholders and has been veted in a tripartite context.

The purpose of this document is to serve as a baseline for a regular review and further development of policy, planning and directions adopted to enhance OSH for all. It is hoped that it will assist all stakeholders in their efforts to create a safe and healthy working environment in Turkey.

Numan Ozcan Director ILO Office for Turkey

Foreword (Author)

Occupational safety and health is a global concern. More than 3.2 million deaths occur every year due to work-related accidents and diseases. Moreover, 160 million new cases of occupational diseases and 300 million non-fatal occupational accidents are reported annually. The economic burden due to work-related diseases and deaths and loss of productivity accounts for 4% of GDP globally. Therefore, provision and promotion of a safe and healthy work environment should be a priority. The recently ratified Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) entered into force for Turkey in 16 January 2015. According to its accompanying Recommendation No. 197, members should prepare and regularly update a national profile which summarizes the existing situation on occupational safety and health and the progress made towards achieving a safe and healthy working environment. It is against this background and taking into account the guidance provided in Recommendation No. 197 that the present National OSH profile has been prepared.

The Profile was prepared with a tripartite approach, through a series of communications with the stakeholders in working life i.e. the Ministry of Labour and Social Security and other relevant ministries; representatives of workers and employers associations; and other relevant governmental and non-governmental organizations. The information from the relevant institutions was provided mostly by visiting the institutions, some through electronic sources. The collected information was presented as it was, without adding any comment or personal opinion, as asked by ILO officials.

The Profile includes a legislative basis and policies, inspection and enforcement mechanisms, and an infrastructure of occupational safety and health in the country in terms of organizations and human resources. Also explained are the activities of various partners in occupational safety and health in the country; communication and collaboration among them and policy review mechanisms; and international collaboration mechanisms. Moreover, general health and demographic data; provision of occupational safety and health services; occupational safety and health training for professionals and for different segments in the community; and statistics of basic indicators of occupational safety and health were summarized in the Profile, in accordance with the outline recommended by ILO. At the end of the report, significant points were highlighted in summary.

The Profile is expected to serve as an initial document to help developing a safer and healthier work environment in the country, as well as a basis for discussions in the field of occupational safety and health.

Nazmi Bilir, MD.

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Executive Summary

This Profile was prepared based on the recommendation by the International Labour Organization (ILO) in accordance with the proposed outline. The legal basis and relevant organizations in the field of occupational safety and health are presented in this document. The information from the relevant institutions was obtained mostly by visiting the institutions, while some through electronic sources. The collected information was presented as it was, without adding any comments or personal opinions, as asked by ILO officials.

Turkey has a relatively young population. The total population in 2014 was 77,695,904, with one in every four being less than 15 years of age, while people over 65 years only accounting for 7.9%. Overall, 12% of people aged 15 years and over did not complete primary education, whereas 10.8% are university graduates. Life expectancy at birth is 76.9 years, and leading causes of deaths are cardiovascular diseases (39.78%), malignant neoplasm (21.32%) and chronic respiratory diseases (9.83%). GDP per capita is \$20,188 (PPP) and \$9,680 (nominal, end of 2014). The total labour force is almost 29 million with an unemployment rate of 9.9%. One in every four of the labour force is in the industrial sector and around 60% are in the service sector.

The very first legislation on work goes back to the Ottoman period, in the late nineteenth century. The first Labour Law was enacted in 1936, which eventually became the Occupational Safety and Health Law in 2012. The other Law in force is the Labour Law, which came into force in 2003. Details of the Law are described in more than 30 Regulations, and also in some communiqués and circulars.

The Ministry of Labour and Social security is the main responsible organization in this field, in collaboration with other ministries and stakeholders, and is responsible for developing, implementing and enforcing legislation. The two most relevant units of the Ministry are the Directorate General of Occupational Safety and Health, and the Labour Inspection Board. The Directorate General develops legislation of occupational safety and health in collaboration with other stakeholders, while inspectors of the Board perform inspections in terms of compliance with occupational safety and health legislation, and also for labour relations and management issues.

A tripartite collaboration is crucial in occupational safety and health practice. There are several mechanisms for collaboration with relevant organizations, the most important of which is the Occupational Safety and Health Council. The Council is composed of 26 members; half from governmental and half from non-governmental organizations, and is chaired by the Undersecretary of the Ministry.

The occupational Safety and Health Law includes all workplaces and workers, including civil servants, workers at private enterprises and the self-employed workers; regardless of the number of employees or the kind of work. Providing occupational safety and health services is the responsibility of the employer. The employer, in accordance with legal requirements can provide the services either by establishing an occupational safety and health unit in the workplace, or through Joint Safety and Health Units (JSHU). By July 2015, a total of 1995 JSHUs were serving in the country. In addition, the Ministry of Health organizes occupational safety and health services through 81 Community Health Centres in 64 provinces, and is planning to establish at least one Centre in all 81 provinces.

The education, training and placement of occupational physicians, OSEs and other health personnel is conducted under the authority of the Ministry, whereas the performance of certification exams was delegated to the Measuring, Selection and Placement Centre (ÖSYM). By July 2015 more than 27 thousand physicians were certified as occupational physicians and almost 90 thousand engineers certified as OSEs, most of whom have a Class C certificate. Less than half of the certified physicians and only one in four of the OSEs are actively working in the field.

Laboratory services for occupational safety and health have been provided by a governmental institution (Institute of Occupational Safety and Health Research and Development, İSGÜM) for many years, and the Institute implemented the standards of their own laboratories in private laboratories, in order that those private laboratories could be authorized to serve health and safety. By July 2015 thirteen laboratories were authorized.

Social security services have a long history in Turkey and have been provided for many years by three different insurance systems. In 2006 these three systems were unified under the same social security system to cover all workers employed by governmental or private workplaces, as well as the self-employed. Premiums for occupational sickness, maternity, accidents and occupational diseases were paid by the employer only, whereas other premiums are paid on a shared basis.

There are several education and training facilities for occupational safety and health. The Ministry of National Education conducts programmes at vocational schools and occupational safety and health education and awareness programmes as part of lifelong learning programmes. At the university level, some universities, particularly medical schools and some engineering faculties have courses on occupational safety and health, and vocational high schools also conduct programmes. Some universities conduct post graduate programmes (master's and doctoral programmes) in occupational safety and health.

Education and training of occupational safety and health professionals are conducted under the authority of the Ministry of Labour and Social Security. Employers' and workers' associations organize education and training programmes for their members, while the Centre for Labour and Social Security Training and Research (ÇASGEM) of the Ministry conducts programmes for workers and employers.

Occupational accident rates have showed a steady decline during the last 20 years, but the rate for 2013 is almost three times that of the previous year's rate. The notification system was changed in 2013 and the increase may be a result of that change. On the other hand, occupational diseases are very scarce in Turkey. The rate of occupational diseases decreased from 22.1 to 3.1 per hundred thousand workers; i.e. more than 100 times less than the global average.

There are three employee and three civil servant organizations in working life. Among the employee associations, the first one was established in 1952, while the other two were established in 1967 and 1976. Almost 1.5 million employees are registered with these organizations. All three civil servants' organizations were established in the 1990's, and the number of members is more than 1.5 million. The most well-known employer organization (TİSK) was established in 1962. Some of the employers' and the workers' organizations have occupational safety and health units, conducting activities with limited numbers of staff.

The Ministry of Labour and Social Security organizes occupational safety and health week activities every year, in the form of national and international conferences alternately. The Ministry also conducted several projects on occupational safety and health aiming to increase awareness of various target groups, including professionals and the general public. These projects served to improve working conditions as well. Employers' and workers' organizations and professional

organizations also conduct several projects and scientific meetings in the field of occupational safety and health. Most of these projects and scientific meeting were organized with international collaborators, such as the ILO, EU, WHO, UNDP, UNICEF, etc.

The great majority of the workplaces are micro enterprises, making up 62.7% of a total of more than 1.6 million workplaces employing 1-3 workers. Only 290 workplaces have 1000 or more employees, while 98% of the workplaces have less than 50 employees. Almost half (48.0%) of the working group are employed under Article 4/1.a of Law No. 5510. Workers' wages are low compared to most European countries; the monthly minimum wage in July 2015 was 1000.54 TRY (€329).

1. LEGISLATIVE FRAMEWORK

Every community has laws and other legislation to regulate life and the relationships between people and institutions. Working at a safe workplace is one of the fundamental human rights. The first written regulation on occupational safety and health was during the Ottoman era, in the year 1865. That Law aimed to regulate safety and health issues specifically in the coal mines. However, this Law was not approved by the Sultan and not implemented. Some years later, in 1869, another law was published and implemented to regulate the safety and health issues in coal mines. Following the establishment of a Grand National Assembly in 1920, two other laws entered into force for the regulation of rights and benefits of the coal mine workers, as well as to regulate workplace conditions.

The two main parties of working life are the employers and the employees. Establishing a safe and productive working life is to the advantage of both groups. Therefore in this context, the interests and expectations of these two parties are parallel to each other. The community in general and the government also benefit from a productive working life. Legislation in the field of occupational safety and health mainly regulates the relationship between both sides, aiming to ensure a safe working life. Occupational safety and health legislation in Turkey is configured in line with the Constitution.

1.1. Constitution

The Constitution in Turkey has been revised several times, most recently in 1982. There are up to 20 Articles in the Constitution regulating various areas of working life; i.e., the right and responsibility to work, organizing unions, right to social security, etc. The Articles related to working life play a central role in protecting the labour force, ensuring proper placement of the workers and providing a safe working environment. Two of the Articles directly concern occupational safety and health. "No one can be employed at the workplaces not suitable for their age, gender and capacity. Children, women and the disabled are protected by Law" (Article 50). "Everyone has the right to live in a healthy and balanced environment" (Article 56). The Constitution refers to the environment in general, nevertheless based on this Article, the working environment should be "safe and healthy".

1.2. Occupational Safety and Health Law (No. 6331; 2012)

The Occupational Safety and Health Law (No. 6331; 2012 (OSH Law) was published in the Official Gazette in 2012. Before 2012, occupational safety and health issues were regulated in the Labour Law, related regulations and some other general laws. The OSH Law applies to all jobs and workplaces in both the public and private sector, regardless of their field of activities or number of workers, and covers all employees, interns, employers and their representatives. The Turkish Armed Forces, the Police Department and specific activities in civil defence services are not covered by the OSH Law. Furthermore, the OSH Law does not apply to domestic services, persons producing goods and services in their own name and on their own account, prisons and similar institutions. The OSH Law regulates the duties, authority, responsibilities, rights and obligations of employers and employees in order to ensure occupational safety and health in the workplace and to improve the existing safety and health conditions. The ultimate aim of the OSH Law is to prevent occupational diseases and accidents, and other physical and mental health problems of the workers related to work and the work environment. The OSH Law defines the main stakeholders namely employees, employers and the State, and their duties and responsibilities in working life. The Law also defines the basic terminology related to work life such as workplace, hazard, risk, occupational disease, occupational accident, prevention, safety and health unit, occupational safety and health professionals and their responsibilities. According to the OSH Law, the employer should perform risk assessment and has the responsibility of taking all necessary measures to ensure occupational safety and health. Therefore the employer shall fulfil the responsibility of avoiding risks, evaluating risks which cannot be avoided, combating the risk at its source, adapting the work and working conditions to the individual, adapting to technical progress, substituting dangerous substances or procedures with a non-dangerous or less dangerous ones, provide appropriate training and instructions to the workers, etc.

Article 4 of the Law defines the duties, authority and responsibilities of the employer and workers. As per Article 4, the employer has a duty to ensure the safety and health of workers in every aspect related to work. In this respect the employer shall take the measures necessary for safety and health protection of workers, including provision of necessary organization, designating safety and health staff, informing and training of workers, carrying out risk assessment, implementing measures related to occupational safety and health in accordance with the legislation, etc. In case an employer enlists competent external services or persons, this shall not discharge him from his responsibilities in this area. Also the workers' obligations in the field of safety and health at work shall not affect the principle of the responsibility of the employer.

As indicated in Article 6 of the Law, in order to provide occupational safety and health services the employer shall designate workers as occupational safety expert, occupational physician and other health staff, meet the need for means of space and time to help designated people or organizations fulfil their duties, ensure cooperation and coordination among the occupational safety and health staff, etc.

The OSH Law also regulates workers' right to abstain from work in cases of serious or imminent danger. The OSH Law refers to secondary legislation to for a description of further details to ensure an effective implementation of the Law.

Although the OSH Law covers civil servants as well; the obligation of recruiting occupational physicians and occupational safety experts in the public sector was postponed to 01/07/2016 in accordance with the Law no. 6495 dated 12/07/2013.

1.3. Other relevant laws

Before the enactment of the OSH law in 2012, the regulation of working life was contained in the Labour Law and in some other general laws. Soon after the establishment of Turkish Republic in 1923, laws to regulate certain aspects of working life came into force. Some of the well-known examples include the Weekly Rest Days Law (1924), the Code of Obligations (1926), and the General Health Law and Municipalities Law (1930). Workplaces and working life were regulated by these Laws until the enactment of the Labour Law.

1.3.1. Labour Law (No. 4857; 2003)

The first Labour Law came into force in 1936. Since then, it has been revised and amended several times at 25-to-30 year intervals. The most recent version was enacted in 2003 (No. 4857; 2003) (Labour Law). In the Labour Law the general conditions of working life are described such as work contract, minimum age for work, payments, etc. The Labour Law used to have a special section for occupational safety and health where, inter alia, the employers' responsibility for taking all relevant measures to ensure occupational safety and health and the workers' obligation to follow the rules and measures in this regard were clearly described. The Labour Law also regulates the inspection of workplaces and fines to be imposed in case of violations. Following the enactment of the OSH Law, all the articles of the Labour Law regarding occupational safety and health were repealed.

The Labour Law regulates other areas relevant for the employment relationship and occupational safety and health including:

• Minimum age for work: Article 71 of the Labour Law defines minimum age for work as 15 years.

- Employment contract: Articles 8-31 of the Labour Law are on the employment contract, which is
 an official agreement between the worker and the employer to define their mutual duties and
 responsibilities. Various kinds of contract (full-time or part-time contracts, contracts for definedundefined periods), termination of contract, conditions of cancellation of contract, conditions of
 employment of disabled, etc. are described in the Law.
- Wages: Employer's responsibility to pay workers is described in Articles 32-62 of the Law.
 Minimum wages, timely payment, payment for overtime work, payment during annual holiday, etc. are also regulated.
- Working hours, maternity leave: According to the Law, the weekly working period is 45 hours.
 Activities included in the working period, rest periods, night work, underground work, working
 periods during maternity are described in Articles 63-76 of the Labour Law. Article 74 defines
 maternity leave as 16 weeks; 8 weeks before and after delivery, and three hours daily leave for
 breast feeding until the baby is six months old, then one and half hours until the baby is one year
 of age.
- Excused leave: A worker has the right of 3 day-leave during his/her wedding or death of parent, spouse or sibling, and 5 day-leave for husband upon his wife's delivery.
- Annual paid holiday: All workers have the right to an annual paid holiday after completing one year of employment. The duration of paid holiday is at least 14 days for those who have worked for up to five years; at least 20 days for 5 to 15 years of work; and a minimum of 26 days for workers who have worked 15 years or more. Duration of paid holiday cannot be less than the duration granted to workers less than 18 years of age and for those 50 years and over. Duration of annual paid holiday can be increased through collective bargaining. Days of paid holiday can be divided into a maximum of 3 parts, providing one part is at least 10 days. National holidays and religious holidays are not deducted from days of annual paid holiday. Details of the implementation of annual paid holiday are regulated.

1.3.2. Law of Obligations (No. 6098; 2011)

The Law of Obligations (No. 6098; 2011) (Law of Obligations) was first enacted in 1926 to describe the obligations of people to each other. It was revised in 2011. The Law of Obligations describes specifically the mutual obligations of employers and workers. In this sense, employers have the responsibility to protect workers' health by providing for a safe working environment. In case of any harm caused to health of workers as a result of work, employers should compensate the workers' losses. On the other hand, workers should obey the rules and regulations of safe work.

1.3.3. General Health Law (No. 1593; 1930)

The General Health Law (No. 1593; 1930) (General Health Law) came into force in 1930 as a general law, covering all issues relevant to health. At that time there was no legislation regarding occupational safety and health, and the General Health Law filled this gap, until the first Labour Law was enacted. The General Health Law has a specific section on occupational safety and health (Articles 173 to 180). This section regulates the minimum age for working, duration of work, protection of workers' health and workplace health services. The Law provides for the establishment of an in-house workplace health service for workplaces employing 50 or more workers. Establishing the occupational health service is clearly defined as an employer responsibility. This article of the General Health Law remained in force for more than 70 years, until the Labour Law (No. 4857) was adopted in 2003.

1.3.4. Social Insurance and Universal Health Insurance Law (No. 5510; 2006)

Before the Social Insurance and Universal Health Insurance Law (No. 5510: 2006) was enacted, the insurance of workers was mentioned in some laws specific to certain areas of working life. The Law on Insurance of Occupational Accidents and Diseases, the Law on Insurance Institution, and the Law on Insurance of Illness and Maternity for a long time served to regulate some rights and benefits of the workers. In 1964 the Social Insurance Law was enacted, including several provisions regarding occupational accidents and diseases.

The Social Insurance and Universal Health Coverage Law came into force in 2006. It aims to provide social security coverage for workers. The Law applies to workers registered with the Social Security Institution, i.e. those with insurance premiums paid. People working in industrial establishments and services sectors, civil servants, agricultural workers and self-employed people paying insurance premiums are covered.

The Social Insurance and Universal Health Coverage Law defines an occupational accident and an occupational disease in a rather different way than the OSH Law, as its scope is compensation. The diagnostic procedure and notification of occupational diseases are described in detail in the Social Insurance Law, as well as the details of benefits and compensation of the workers in case of permanent incapacity due to occupational disease or an accident. It not only applies to occupational accidents and occupational diseases, but to all other forms of social security implementations, such as marriage, maternity, retirement and treatment of general health problems.

In terms of steps towards a national occupational safety and health system the following issues are of particular relevance:

- Employment of an occupational physician was regulated for the first time in the General Health Law in 1930.
- The establishment of Occupational Safety and Health Boards in workplaces was regulated for the first time in Labour Law (No. 1475) in 1973.
- Supervision of in mines and construction work by safety engineers was regulated for the first time in Labour law (No. 1475) in 1973.

1.4. Secondary legislation

A series of secondary legislation have been adopted to explain the details of relevant laws. Relevant Ministries and organizations took part in the preparation of this legislation, and their opinions were taken into consideration as well as relevant European Union Acquis. Some 30 Regulations have been adopted so far, including the following:

- Regulation on principles of employment of child workers and young workers (2004, 2013): A child worker is defined as a worker less than 15 years of age (completed 14 years and completed basic compulsory education) and a young worker is defined as a worker less than 18 years of age (completed 15 years). The duration of work for child workers who have completed their primary school education shall be a maximum of 7 hours daily and 35 hours weekly. For young workers as of 15 years of age, working hours can be prolonged to 8 hours daily and 40 hours weekly. Regulation lists the kinds of work in which child workers and young workers can be employed.
- Regulation on principles of employment during maternity and weaning (2013): According to the Regulation, a woman cannot be employed for night work during pregnancy or for one year after delivery. The duration of work is limited to a maximum of seven and half hours for the same period. Workplaces employing more than 100 woman workers shall establish a baby nursery for the babies of these women. A pregnant woman has the right to paid leave of 8 weeks both before and 8 weeks after the delivery. The mother has three-hours daily allocated for breast-feeding until the baby is six-months old, and then one-and-half hours until the baby is one year

- old. Following the 8 weeks paid leave period after delivery, the mother may use unpaid vacation until the baby is one year old.
- Regulation on the occupational safety and health committee (2013): Workplaces employing 50 or more workers with permanent work performed for more than six months shall establish an occupational safety and health committee. An occupational physician, OSE and representatives of the workers take place in the committee. The OSE acts as a secretary in the committee which is chaired by the employer or their representative. The committee should meet monthly to discuss the safety and health conditions and produce solutions. The employer will implement the decisions of the board, providing that the board decision fits the occupational safety and health legislation.
- Regulation on risk assessment (2012): Regulation defines the basic terminology regarding risk
 assessment, such as hazard, risk, prevention, near miss, etc., and defines the team that will
 perform the risk assessment, the steps of risk evaluation, and the analysis and principles of risk
 control. The team is composed of the employer or their representative, an occupational
 physician, an occupational safety expert and representatives of the workers.
- Regulation on occupational safety and health services (2014): The employers' responsibilities and the rights and duties of the workers are defined in this Regulation. According to the Regulation, the employer shall provide occupational safety and health services and shall employ a sufficient number of OSEs, occupational physicians and other health staff (such as occupational nurse). Based on the number of workers and the hazard class of the workplace, in case a physician and OSE are employed on a full time basis, an occupational safety and health unit should be established in the workplace. Otherwise, these services can be provided in collaboration with a "Joint Occupational Safety and Health Unit (JSHU, OSGB)". Regulation indicates the specifications of both "in-house" occupational safety and health units and Joint Occupational Safety and Health Units (OSGB).
- Regulation on support of occupational safety and health services (2013): The regulation describes the conditions of financial support for occupational safety and health services to be provided to micro enterprises employing less than 10 workers when the workplace is in the "hazardous" or "very hazardous" group. For the workplaces with less than 10 workers in the "less hazardous class", the Council of Ministers has the authority to decide whether such enterprises will benefit from financial support.
- Regulation on duties, rights and responsibilities of occupational physicians and other health personnel (2014): This Implementing Regulation is specific for the country, to describe the roles and responsibilities of occupational physician and other health personnel. Occupational physicians and other health personnel should have specific education and training on the issue and be certified by the Ministry. Details of training and certification procedures of both physicians and other health personnel are described by the Regulation.
- Regulation on duties, rights and responsibilities of OSEs (2015): This Regulation is specific for the country to describe the roles and responsibilities of occupational safety experts. Occupational safety expert should have specific training on the issue and be certified by the Ministry. Based on the specifications of the experts, three different classes of "certificate" are described; namely class "A", "B" and "C". An occupational safety expert who has "C class" certification can only be employed at the workplaces designated on the "less hazardous class". Workplaces designated at a "high hazardous class" should employ experts holding "A class" certification only. Details of the training and certification of occupational safety experts are described by the Regulation. There has been a recent amendment for the said regulation dated 30.04.2015 (No. 29342). The requirements for regulating the working hours and the obligation of recruiting full time occupational experts were amended and this amendment will come into force by January 2016.

- Regulation on principles of occupational safety and health training of workers (2013): According
 to the Regulation, the employer shall provide occupational safety and health training to workers.
 Depending on the hazard class of the workplace, the contents, duration and frequency of
 trainings are described in the Regulation.
- Regulation on National Occupational Safety and Health Council (2013): The regulation describes the establishment, duties and principles of work of the National Occupational Safety and Health Council. According to the Regulation, the Council is composed of 26 participants; half from the government side (such as different ministries and other relevant state departments), and half from non-governmental side (such as employers' and workers' associations, engineers' association, and medical association). The Council is chaired by the Undersecretary of the Ministry. The Council meets twice a year to discuss occupational safety and health policy and to make recommendations.
- There are also more regulations such as on "noise control", "dust control" or "control of chemicals" where the permissible limits were defined, and some organizational ones such as regulation on "shift work", "occupational hygiene measurements, test and analysis" or "main functions and the responsibilities of İSGÜM" etc. A complete list of Laws and Regulations can be found and accessed via the MoLSS web site: http://www.csgb.gov.tr/mevzuat

2. NATIONAL COMPETENT AUTHORITIES

The Ministry of Labour and Social Security, in cooperation with the relevant ministries and representatives of the workforce, play a key role in improving the occupational safety and health status in the country. The Ministry of Labour and Social Security is the main body responsible for regulating and managing working life. As recommended by the International Labour Organization (ILO), a "tripartite approach" is needed; the Ministry plays a role to manage the relationships between the two major parties of working life - the employees and the employers. In addition, some other ministries and other state organizations are involved in the management of occupational safety and health issues in the country, as well as a number of non-governmental organizations.

2.1. Ministry of Labour and Social Security

The Ministry is the main body responsible for labour and social security affairs in Turkey. Initially, it was formed as the Office of Labour and Labourers within the Ministry of Economy upon Act of Parliament No. 2450, which came into force on May 27, 1934. As a governmental ministry, it was established under the name of the Ministry of Labour on June 22, 1945 with the Act of Parliament No. 4763. In 1974, the Ministry of Social Security was established and covered the Social Insurance Institution. Since 1974, in some of the governments, the Ministry of Labour and Ministry of Social Security were represented as two separate ministries in the government, while some governments had only one ministry. In 1983, the two ministries were merged into a single ministry under the title of the Ministry of Labour and Social Security.

During the restructuring of the Ministry in 2006, the Social Security Institution was established to cover all three insurance systems (Social Insurance Institution, Retirement Fund and insurance system of the self-employed; Bağ-Kur) under a single umbrella system. In 2003, the Directorate of Occupational Safety and Health was promoted to the General Directorate level.

The mission of the Ministry is defined to be "to regulate and monitor working life, establish peace in working life, take necessary measures to increase employment and social security, help to promote the wealth of the community and protect the rights of the workers employed abroad".

The Ministry has four main service units:

- Directorate General of Labour
- Directorate General of Foreign Affairs and overseas workers' services
- Directorate General of Occupational Safety and health
- Directorate of European Union and Financial Assistance

The two other most relevant bodies regarding occupational safety and health are the Labour Inspection Board (settled under "Counselling and Inspection Units") and the Social Security Institution (settled under "Associated Institutions" of the Ministry). The organizational chart of the Ministry is seen in Figure 2.1.

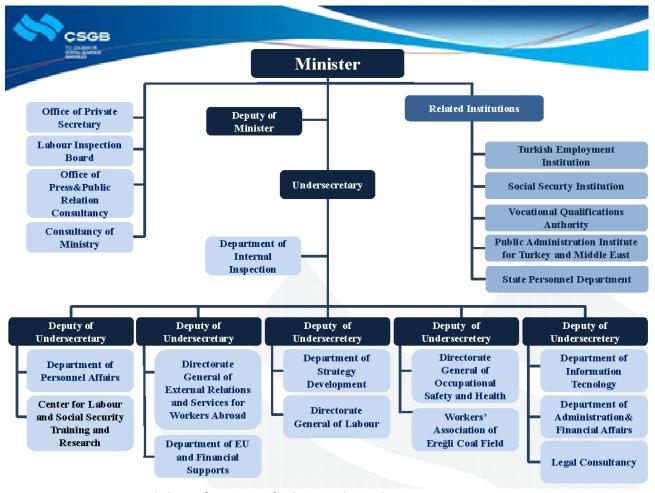


Figure 2.1. Organizational chart of Ministry of Labour and Social Security

By the year 2014 a total of 2473 personnel were working at the Ministry, and the annual budget was 32,805,482,580 TRY (Ministry of Labour and Social Security, Annual Report, 2014; http://www.csgb.gov.tr/csgbPortal/ShowProperty/WLP%20Repository/sgb/dosyalar/2014faaliyet).

The main components of the Ministry regarding occupational safety and health are as follows:

- Directorate General of Labour: This General Directorate was established in 1967. The main task
 of the General Directorate is to regulate the relationships between workers and employers and
 to create consensus between the two parties. Members of General Directorate participate in the
 legislation development procedure and Collective Bargaining meetings. By the year 2014, a total
 of 269 personnel were working at the General Directorate and the annual budget for the year
 2014 was 14,450,081 TRY.
 - (http://www.csgb.gov.tr/csgbPortal/cgm.portal?page=mudurluk&id=2).
- Directorate General of Occupational Safety and Health (DGOHS): The DGOHS was established as a "unit" of "Worker's Safety and health" in 1945, and then restructured as a Directorate General in 2003. By the end of June 2015, a total of 421 staff were working at the General Directorate,

202 of them OSH experts or OSH assistant experts, 7 physicians and 58 technical staff. The annual budget of the General Directorate for the year 2014 was 17,395,588 TRY.

The major duties of the DGOHS include to:

- Determine national policies and prepare programmes on OSH
- Ensure cooperation and coordination between national and international organizations and institutions
- Perform preparatory work for legislation and ensure implementation of legislation relevant to occupational safety and health
- Develop norms, carry out standardisation studies and activities such as measurement, evaluation, technical control, training, counselling, expertise and authorize institutions that carry out such activities
- Carry out market surveillance of personal protective equipment
- Ensure implementation of occupational safety and health to prevent occupational diseases and accidents

6 Departments and one Institute Presidency are assigned with the performance of these tasks under the supervision of the three Deputy Directors General of DGOHS:

- Occupational Safety Department
- Market Surveillance Department
- Policies and Strategies Department
- Authorization Department
- Education, Promotion and Organization Department
- Administrative Services Department
- Institute of Occupational Health and Safety Research and Development Presidency

The DGOHS is also responsible for authorizing occupational physicians, other health personnel and occupational safety experts. All the records of safety and health professionals are kept by Directorate General as well as records of those actively working. Furthermore, the Directorate General is responsible for the authorization, examination, and inspections of Joint Safety and Health Units (OSGB), which operate in the field of occupational safety and health, and other organizations active in this field. All the data about occupational safety and health professionals and units is kept under an Occupational Safety and Health Registration, Tracking and Monitoring Software named iSG KATIP. The data is also shared with the Labour Inspection Board.

- Labour Inspection Board: Labour inspection is one of the major duties and responsibilities of the Ministry to monitor workplace hazards and to ensure compliance with legislation for the prevention of workplace hazards and to protect workers' health. The Board is directly under Ministers' Office and responsible for the planning and conducting inspections. The total number of inspectors working at the Board in the year of 2014 was 1005, and the annual budget for the year 2014 was 80,304,932 TRY (Ministry of Labour and Social Security, Annual Report, 2014; http://www.csgb.gov.tr/csgbPortal/ShowProperty/WLP%20Repository/sgb/dosyalar/2014faaliyet). Detailed information about the Board can be found in Section 3.
- Social Security Institution (SSI, SGK): The Social Security Institution is an associated institution of the Ministry with financial and managerial rights. Article 60 of the Main Constitution of Turkey indicates the "right to social security for everyone". Article 60 also charges the state with the duty to take necessary measures and establish the organization

for provision of social security. In 2006, the Social Security Institution was established based on Law No. 5502. The Law combined the previous social insurance systems (Social Insurance Institution (SSK), Social Insurance Institution for Tradesmen and Craftsmen and Other Self-Employed People (Bağ-Kur) and Retirement Fund) under a single umbrella by establishing the Social Security Institution. The Social Insurance and Universal Health Insurance Law (No. 5510) indicates the details of the implementation of the Social Security System. Detailed information on SGK can be found in Section 9.

- The Institute of Occupational Health and Safety Research and Development Presidency (İSGÜM): It is an institution affiliated to DGOHS. Under its previous name the Occupational Health and Safety Centre, İSGÜM was founded in 1968 with the financial and technical support of the UNDP and ILO. It became an Institute (and changed name) in 2015. The main tasks of İSGÜM include providing laboratory support for the labour inspectorate but also to workplaces upon request. It sets the standards of OSH laboratories and authorizes them. Moreover İSGÜM provides training and consultancy to different groups. In 2010, a total of 177 personnel were working at the Institute, 121 of who were working at the central laboratory in Ankara, with the remainder at the regional laboratories of various provinces. 24 of them were professional technical staff. The annual budget of İSGÜM for the year 2014 was 7,962,438 TRY. Detailed information of the Institute can be found in Section 8.
- Labour and Social Security Training and Research Centre (ÇASGEM): As a body affiliated to the Ministry, this centre was established in 1955 under the name the "Near and Middle-East Labour Institute". Its aim was to provide education and training of the officials working in the field of occupational safety and health, social security; and to maintain relationships between workers and employers. The Institute thus organized training courses and conferences and developed training materials. In 2003, the Institute changed name. It also carries out research activities and organises seminars on working life, social security, employer-worker relations, etc. In 2013 the Centre organized 299 training programmes, half of which were institutional training programmes. The Centre has published several books on various topics, such as occupational diseases, safety and health issues in agricultural work, employment policies for disabled people, and social dialogue at workplaces. In 2013 ÇASGEM, provided occupational safety and health education for free to more than 9,000 individuals working in different sectors and various provinces all over the country. Since the responsibility of certification of education programmes for occupational physicians and safety engineers was transferred to the Ministry by Labour Law in 2003 ÇASGEM provides these programmes in collaboration with universities and relevant departments of the Ministry. In 2013, a total of 731 occupational safety and health professionals attended these certification programmes. ÇASGEM organizes various workshops in the field of occupational safety and health. Workshops organized in 2013 focused on occupational safety and health training methods; occupational diseases; graduates of vocational and technical schools; and the employment of the disabled persons. A symposium was organized by ÇASGEM on youth unemployment in 2013, and a member of ÇASGEM participated in an international symposium on social rights. ÇASGEM published several books and expert reports in 2013 on social dialogue in the workplace, prevention of occupational accidents, and disabled friendly employment policies, safe work practices in agricultural work, etc. By 2014, the Centre has 66 professional and administrative staff, mostly training experts. Its annual budget for the year 2014 was 4,441,701TRY.

2.2. Ministry of Health (MoH)

The Ministry was established in 1920, and is responsible for organizing the provision of preventive and treatment services. The Ministry is the main government body responsible for health sector

policy-making; the implementation of national health strategies through programs; and the direct provision of health services. For a long time, occupational safety and health issues were the responsibility only of MOLSS, and the Social Insurance Institution as the related institution. The MOLSS and the Social Insurance Institution had more than 100 general hospitals and 3 hospitals for occupational diseases. In 2005, the responsibility for all the hospitals and other health institutions was transferred to the responsibility of Ministry of Health (Law on Transfer of some health institutions to Ministry of Health, No. 5283, 2005).

Until that time, there was no Ministry of Health activity in the field of safety and health issues of the working population. Following the transfer of occupational disease hospitals to the Ministry of Health, the Ministry was actively involved in occupational safety and health issues. In 2010, a Workers' Safety and Health Unit was established under the Ministry of Health. In 2011, based on Government Decision No. 663 (Organization and Function of the Ministry of Health and Related Institutions), a Workers' Health Department was established. The Department has 4 divisions:

- Control of Occupational Diseases and Accidents
- Workplace Safety and health
- Education and Projects
- Planning and Implementations

In accordance with its divisions, the Directorate organized several education programmes for Provincial Public Health Directors and other occupational safety and health professionals, and held a symposium on general occupational safety and health. In collaboration with the Ministry of Labour and Social Security, by mid-2015, the Directorate had organized workplace safety and health services through 81 Community Health Centres belonging to the Ministry in 64 provinces. The Directorate is planning to establish at least one Community Health Centre in every province to provide workplace safety and health services.

Although there was no activity of MoH regarding OSH before 2005, the Ministry always involved in the legislation procedures and has been invited to the various meeting and committees organized by MoLSS. Recently a collaborative work started between the two Ministries for diagnosis of occupational diseases and an agreement was signed.

2.3. Ministry of Science, Industry and Technology

The history of the Ministry goes back to the first Parliamentary Government in 1920. At that time the Ministry was responsible for industry, agriculture and commercial affairs. During the following years, in some governments, there were two different ministries - the Ministry of Industry and the Ministry of Commerce; some governments combined the two ministries under the name, the Ministry of Industry and Commerce. During the reforms of the governmental structure in 2011, the Ministry was responsible for science, industry and technology under the name, the Ministry of Science, Industry and Technology. Two units under the Ministry are relevant to the occupational safety and health:

• Small and Medium Enterprises Development Organization (KOSGEB): KOSGEB was established in 1990 as a related institution of Ministry of Science, Industry and Technology to support small and medium sized enterprises (SME's), by increasing their competition capacity in the global market. Small scale enterprise was defined as "an enterprise employing less than 250 workers and having annual production of less than 250 million TRY. KOSGEB has several support schemes for the SME's, such as Project Support Programme, Join the Forces Support Programme, Thematic Projects Support Programme, Research, Development, Innovation and Industrial Implementations Support Programme, Entrepreneurship Support Programme, etc. The mission of KOSGEB is defined as; "to increase SME's share in economic and social development by offering quality service and support towards developing SME's power in competition and spreading a culture of entrepreneurship".

- Turkish Standards Institute (TSE): The TSE was established in 1960 as an independent institution, with the mission to implement standardization, evaluation of fitness, and calibration activities in order to increase quality of life in the community through increased national and international trade. The main tasks of the TSE are, to prepare standards in various areas, also prepare standards on request, to adopt relevant international standards, and to encourage the implementation of standards. Among the standards, more than 900 are on occupational safety and health, such as construction safety, machinery safety, textile, personal protection, and petroleum and petroleum products. TSE has adopted various international standards, e.g. TS EN ISO 9001, (Quality Management System), TS EN ISO 14001 (Environment Management System), TS ISO 18001 (Occupational Safety and health Management System), TS EN ISO 13485:2003 (Medical Equipment Management System), TS ISO 10002 (Consumer Satisfaction Systems), TS EN 16001 (Energy Satisfaction System). The TSE certifies institutions meeting the requirements of these standards. More than 800 institutions have been certified so far. The institute provides education to public and private institutions in the industry and services sectors. Since 2001, the TSE has provided education and training to various institutions in the industrial and services sectors on TS 18001 to establish an occupational safety and health infrastructure and safety culture.
- There are huge number of standards and other data in the field of occupational safety and health which have been developed and published by various international organizations. The TSI is planning to translate more of them into Turkish, which will be helpful for the employers who would like to use them.
- A new standard (ISO 45001) is currently under development in the field of occupational safety and health management systems. The new standard aims to provide a harmonized approach to safety and health management systems, designed optimally for the enterprises' own needs in order to promote health and safety in the workplace. The new standard is being developed in collaboration with ILO, ISO and other relevant institutions. The draft version of the standard was published already is being discussed, and the ISO 45001 is expected to be published in 2016. This new approach requires the organization to consider foreseeable internal and external risks that could impact its activities and occupational safety and health performance, such as introduction of new technologies or adverse weather effects such as flooding, etc.

2.4. Ministry of Energy and Natural Resources

This Ministry was established in 1963 with the mission "to provide the highest contribution to national welfare by utilizing energy and natural resources in the most efficient, environmentally conscious manner". Some affiliated institutions under the Ministry are particularly relevant in the field of occupational safety and health.

• Directorate General of Mining Affairs (MiGEM): MiGEM was established in 1993 as an affiliated organization to the Ministry. Its mission is "to operate energy and mine resources effectively, productively, safely and in an environmentally responsible manner, to reduce dependency to external resources and provide the highest possible contribution to the welfare of the community". MiGEM attributes rights to operate mines in accordance with a mine operation plan while inspection and control of workplaces regarding the implementation of occupational safety and health legislation is the responsibility of MOLSS. Therefore, Directorate General has no direct responsibility with regard to occupational safety and health. Nevertheless, the Directorate General has the duty to undertake inspections of underground mines with 6 months

intervals to ensure compliance of the operation with the technical licensing agreement and the operation plan already submitted.

- Directorate General of Turkish Coal Enterprises (TKİ): The TKİ was founded in 1957 with the purpose of ensuring the utilization of energy raw materials such as lignite, asphaltite, bituminous schist and peat; meeting the requirements of the country; providing maximum contribution to economy of the country; arranging and following up the plans and programmes; and determining and ensuring the realization of the application strategies (TKİ Strategic Plan, 2010-2014). 22% of total lignite reserves in Turkey and 52% of total lignite production capacity belong to the TKİ. Two establishments in operation belong to the TKİ, with a total of 5006 workers. In line with the OHS Law, risk assessment at the workplaces, emergency plans, the appointment of occupational safety and health personnel, occupational safety and health training of the workers, occupational hygiene measurements at the workplaces and health surveillance of the workers is to be regularly performed. A rescue unit belonging to one of the establishments helps other institutions in case of an emergency situation.
- Turkey Hard Coal Authority (TTK): Following the discovery of hard coal in 1829 in Ereğli (district of Zonguldak province), hard coal production was started in 1848. The first traders were various foreign companies until foundation of Republic of Turkey in 1923. In 1926 and 1927 several coal production enterprises were established in Zonguldak area, finally Turkish Coal Mine Authority was established in 1983 covering all enterprises under one institution. The mission of TTK was stated as "in line with the energy policy of the state and taking into consideration the quality policy, to produce hard coal in as cheap as possible and in a way that giving least harm to the environment". By end of 2014 a total of 10 876 people are working at the coal mines of TTK; 9 171 are employees and 1705 civil servants. Hard coal production shows a decreasing trend from 3.5 million tons in 2001 to 2 million tons in 2014. Globally, almost 40 percent of electricity production is based on coal, being more than 90 percent in South Africa and Poland and around 50 percent in Germany and USA (http://www.taskomuru.gov.tr/, Dir. General of T. Hard Coal Authority, Annual Report, May, 2015). In 2014 2 162 workers were injured in the accidents and one worker died. There are occupational safety departments at the mines and a total of 68 engineers and 228 employees are workers in the occupational safety teams. Safety inspections are done on daily basis. In addition inspectors of the Ministry of Labour and Social Security make inspections both at regular basis or incidentally. Also 100 engineers and 476 employees are responsible for evacuation in case of an emergency situation. The staffs of rescue teams are trained through at least 40 hours course, and 8 hours of refreshment courses at 6 months intervals. In case of an emergency situation, these rescue teams help other mines or other emergency conditions (TTK Occupational Safety and Health and Training Directorate, Annual Report, Sept. 2013).

2.5. Ministry of Development

The State Planning Organization which was founded in 1960 was reorganized as the Ministry of Development in June 2011 with Decree Law No. 641. The Ministry of Development of the Republic of Turkey is an expert based organization which plans and guides Turkey's development process via a macro approach and focuses on the coordination of policies and strategy development. One of the main functions of the Ministry is to carry out studies aimed at guiding the public and private sector to bring about new approaches in the economic, social and cultural areas. The Ministry of Development makes annual and medium-term development plans. The development of a country is closely related to industrial activities. Therefore the Ministry of Development is also concerned with commercial and industrial activities.

Among the major activities of the Ministry of Development is the preparation and publishing of "10-year Development Plans", and has been since its establishment in 1960. The 10-year Development Plans are prepared by a group of experts in various fields; i.e. "Employment and Working Life". The last plan on Employment and Working Life was prepared for the period of 2014 to 2018. Among the "Main Goals" of the Plan, the following directly relate to occupational safety and health:

- Goal 9: Effective implementation of promotion and fines in the field of occupational safety and health
- Goal 10: Expansion of information and education in occupational safety and health
- Goal 11: Establishment of information systems in occupational safety and health Under these 3 goals, 10 policies and more than 50 activities have been declared including the following:
- Workplaces implementing best practices will be supported
- Social security premiums of workplaces having more occupational accidents and diseases will be increased
- Media will be involved in awareness programmes on occupational safety and health
- Vocational education programmes will be increased and organized for more areas
- Occupational safety and health education will be made compulsory for university programmes and postgraduate education facilities will be increased
- Occupational safety and health courses in medical school curricula will be standardized and increased
- Occupational safety and health education will be inserted into primary and secondary school curricula
- Vocational education programmes will have occupational safety and health topics
- Trade unions and professional organizations will organize certificate programmes for occupational physicians and occupational safety experts
- Specialty programmes on occupational medicine will be improved

2.6. Ministry of National Education

The Ministry was established in 1920 as one of the first eleven Ministries of the Turkish Republic. Besides its central body, the Ministry has provincial and overseas organizations. The Ministry is responsible for the education and training of people at all levels. Several of the education and training institutions are related to occupational safety and health, such as vocational and technical education or lifelong education for the general public. Among the various institutions of the Ministry, the Directorate General of Vocational and Technical Education, which is responsible for the planning, organizing and implementation of vocational and technical education, and the Directorate General of Lifelong Learning which is responsible mainly for the education of adults, are the two most relevant institutions to occupational safety and health. University education is governed by the Higher Education Council (YÖK) under the supervision of the Ministry of National Education. All graduate and postgraduate programmes are planned and organized by this system. The Ministry operates the following directorates:

• Directorate General of Vocational and Technical Education: Vocational and technical education in Turkey has existed since the Seljuk and Ottoman ages. In the past, vocational education was carried out by tradesmen and guilds in a system based on traditional procedures. With the declaration of the Tanzimat Edict in 1839, vocational education gradually began to evolve into its current school-based structure. After the establishment of the Turkish Republic in 1923, vocational education proceeded through various forms of formal and non-formal vocational schools, put into effect by the chambers of commerce and tradesmen. In 2011, with the "Organization and Duties of the Ministry of National Education", the Directorate General of

Vocational and Technical Education was established, bringing together the several Directorate Generals under the same umbrella. The mission of the Directorate General was defined as "to meet the labour demands of economic and social sectors through vocational education, to train manpower that hold vocational qualifications in accordance with international standards, to develop and implement policies and strategies that will make the vocation valuable, and to provide everyone with a profession". Under the Directorate General, there are several Departments, such as the Department of Educational Policies, Department of Curricula and Teaching Materials, Department of Social Partners and Projects. The General Directorate has published books and reports in the field, such as Education and Business in Turkey, Activation Policies, Western Balkans and Turkey, Entrepreneurship Education at School in Europe, and Global Employment Trends. (http://mtegm.meb.gov.tr/)

• Directorate General for Lifelong Learning: This Directorate was established in 2011 with the "Organization and Duties of the Ministry of National Education". Lifelong learning is defined as "any learning activity to which an individual attends during his/her whole life with a personal, social and employment related approach for the purposes of developing his/her knowledge, skills, interests and qualifications. The aim of lifelong learning is to grant opportunity to individuals to participate actively in all stages of economic and social life in order to let individuals adapt to information and society, and better control their lives in society" (mtegm.meb.gov.tr). The Directorate General recently started a Lifelong Learning Programme for adults in collaboration with international programmes such as Erasmus, Grundtvig and the Leonardo da Vinci Programmes. Besides these general education programmes, the Directorate General also provides several programmes on occupational safety and health for adults. The programmes are in the form of 40-hour modular courses, and all adults with a primary school diploma can apply for the courses.

2.7. Ministry of Environment and Urbanization

The Ministry of Environment and Urbanization was established in 2011. Its main tasks are to prepare legislation regarding settlement and settlement planning, to protect the environment, and to implement and inspect developments in urbanization. The mission of this ministry is defined as to fulfil the works and services regarding planning, construction, transformation and environment management in order to provide cities with a high quality of life and a sustainable environment with regulatory, supervisory, participatory and solution-oriented perceptions. Although the Ministry is mostly interested in the possible harms of industrial establishments to the environment in general, it also has responsibilities to the workplaces in general.

In conclusion, the main responsible body for occupational safety and health is the Ministry of Labour and Social Security. However, a number of governmental and non-governmental organizations are involved in field. Main partners are listed in Table 2.1.

Table 2.1. Main partners of occupational safety and health

Ministry of Labour and Social Security (Main responsible institutions)							
Institutions	Education and	Health and social	Data collection	Support			
related to legal	research	security	and assessment	institutions for			
regulation and	institutions	institutions	institutions	implementation			
implementation							
Other relevant	Higher Education	Ministry of	Ministry of	Employers'			
ministries	Council,	Health,	Health,	organization,			
(health,	Universities,	Social Security	Turkish Statistics	Confederations			

education,	Faculties,	Institution,	Institution.	of Trade Unions,
environment,	Public Health	Private health		Confederation of
industry,)	Institute,	institutions.		Civil Servants,
	Occupational			Professionals'
	Safety and health			Associations,
	Departments.			Private
				organizations.

2.8. Other organizations

There are several other institutions relevant in the field of occupational safety and health including in particular:

- Union of Chambers and Commodity Exchange of Turkey (TOBB): The Union of Chambers and Commodity Exchange of Turkey (TOBB) was established in 1950 with the aim of enhancing development of professions in conformity with general interest, facilitating professional work of members, promoting honesty and confidence in the relationships between members and preserving professional discipline and ethics. Among the publications of TOBB, the Economic Report contains health and demographic information of the general population and labour force. TOBB is the largest non-profit business organization in Turkey, covering 365 Chambers and Commodity Exchanges. Among its functions, several are relevant to occupational safety and health, including to lead and guide Turkish entrepreneurs; ensure that small and medium size enterprises (SME) which constitute the backbone of the economy receive its equitable share; carry out functions under the legislation in force for the development of apprenticeships, and vocational and technical training within the scope of raising a qualified labour force; and to participate in the formulation of vocational standards.
- Union of Chambers of Turkish Architects and Engineers (TMMOB): TMMOB was founded in 1954 as professional organization of architects and engineers. A total of 24 engineering (Chemical engineers, Mechanical engineers, Civil engineers, etc.) and architects (architects, city planners, interior architects) Chambers are organized under the umbrella organization, the TMMOB. The Total number of members was 467,344 by 2014. The TMMOB is a member of the World Federation of Engineers' Organization (WFEO). The main task of the TMMOB is to produce solutions to the professional problems of its members. As a professional organization, the TMMOB is also involved in the economic and social issues of country, particularly in the field of occupational health and safety. They take part in almost every important occupational health and safety issue, in terms of legislation procedures and investigation procedures in case of occupational accidents. TMMOB published a 60 page report on a mine accident in 2014. (http://www.tmmob.org.tr/)
- Turkish Medical Association (TMA; TTB): The Turkish Medical association was organized in 1928, and has had legal basis since 1953. The Association is an umbrella organization of the medical chambers at the provincial level. Membership to the provincial Medical Chambers is voluntary for physicians working in government institutions, but compulsory for physicians in private practice. Receiving no support from government, the Turkish Medical Association finances its activities largely on the basis of membership fees. Therefore, the Association is one of the most important "professional" Non-Governmental Organization in the field of health policies and health services, as well as in occupational safety and health. One of the most important interventions of the Turkish Medical Association in the field of occupational safety and health was its initiative to organize the first education programme for occupational physicians. Although employment of occupational physician was indicated in the General Health Law in 1930, no activity was seen until the Turkish Medical Association initiative in 1987. The By-Law on

workplace health services and employment and working conditions for occupational physician in 1980 brought about the certification of occupational physicians. Based on the legislation, the Turkish Medical Association organized and implemented these courses. According to the By-Law, provincial medical chambers had authority regarding the appointment of occupational physicians. This authorization served to protect physicians by limiting employers' role in the appointment of such physicians. However this authority was nullified by subsequent legislations in 2003. The Association is represented in number of groups and committees in the field of occupational safety and health, such as the Committee on Dust Control of Ministry of Labour and Social Security, and takes part in the legislation procedures. The Turkish Medical Association organizes symposiums and congresses, joint meetings with various institutions and agencies, and publishes expert reports on various subjects in the field of occupational safety and health. Besides, the Turkish Medical Association is in favour of the status of occupational physicians, including their rights and continuous vocational education and training to ensure that they do their job as best they can. Being the organization of physicians, safety and health issues of physicians and other health professionals has particular importance on the agenda of the Association, particularly violence against health workers. The Turkish Medical Association has published a three-monthly journal on occupational safety and health since the year 2000. (http://www.ttb.org.tr/)

3. INSPECTION AND ENFORCEMENT SYSTEMS

3.1. General information

Labour inspection and enforcement is one of the major duties and responsibilities of the MOLSS to enforce the implementation of legislation, and to monitor working life to ensure protection of workers' health. The OHS Law applies at all sectors of the economy, all kinds of work, covers all employees working in workplaces, including the public and private sector and non-governmental organizations, and the employers. Nevertheless, the OSH Law will not be applicable to military and police work, home services and specific activities in the civil protection services. Therefore, the Ministry shall inspect and enforce all workplaces, excluding the military, police, etc.

Section four of the OSH Law is on inspection and examination of workplaces and working conditions, giving right and duty to the Ministry. The responsible body for inspections and enforcement is the Labour Inspection Board. The Board is chaired by a Director (a senior occupational safety and health inspector) appointed by the Minister. The Labour Inspection Board has an executive organ which is responsible for the planning and implementation of inspections. The Board has 5 group presidencies: Adana, Ankara, Bursa, İstanbul and İzmir. Ankara is the largest group in terms of both the number of provinces served and the total number of annual inspections. The Ankara Group serves 47 out of 81 provinces, whereas the Adana Group serves 15 provinces, İzmir Group serves 9 provinces, Bursa group serves 6 provinces and İstanbul Group serves 4 provinces.

The Ministry has the authority to perform occupational safety and health measurements and take samples in the workplace. During inspections and examinations, relevant articles of the Labour Law (No. 4857) and Occupational Safety and Health Law (No.6331) are implemented. The DGOHS also has the right to check and inspect the training institutions, educating and training safety and health professionals, and the "joint safety and health units" (JSHU/OSGB).

The Labour Inspection Board performs inspections regarding both occupational safety and health, and also regarding management issues (Labour relations) such as employment status and working conditions like working hours, wages, unionization, illegal employment, and child and young labour. Labour inspectors visit workplaces based on a plan or as occasional visits. During their visit, the inspector monitors compliance of the workplace with national legislation and prepares a report regarding their visit. This report contains safety and health conditions and working status, problems detected and recommendations on measures to be taken. The Labour Inspection Board also contributes to preparation of legislation.



Fig.3.1 Groups of Labour Inspection Board (with the permission of MoLSS)

3.2. Human resources

Two kinds of inspectors work on the staff of the Labour Inspection Board: inspectors performing inspections on management issues (Labour relations), and occupational safety and health inspectors. Graduates of law school, public administration, labour economics and related faculties can apply to become inspectors of management issues. Occupational safety and health inspectors mostly have an engineering background (mining, geology, mechanics, electronics, physics, chemistry, civil, industry, environment, etc.). In addition, graduates of medicine, pharmacy or architecture faculties can also apply to become occupational safety and health inspectors.

After being selected through an examination process, applicants become assistant inspectors. After a three years' education and "on the job" training period and a successful proficiency exam they will become inspectors. After 10 years of work, an inspector becomes a "senior inspector". The training includes formal theoretical education and training for 4 months, followed by on-the-job training with several senior inspectors, to observe and learn the various elements involved in inspections. Inspectors also participate in continuing learning programmes while they work, as well as national and international conferences on occupational safety and health. Inspectors work on a full-time basis and cannot work in any other occupation.

In 2014, a total of 1005 inspectors were working at the Labour Inspection Board. More than half (587, 58%) were occupational safety and health inspectors, while 418 (42%) were inspectors of labour relations (management issues). Distribution of inspectors by Groups and gender is shown in Table 3.1., and by their status in Table 3.2.

Table 3.1. Number of inspectors by Groups and gender (2014)

Groups	Senior i	nspector	Insp	ector	Assistant	inspector	To	tal
	Male	Female	Male	Female	Male	Female	Male	Female
Adana	18	2	4	1	18	5	41	8
Ankara	96	19	69	23	114	65	279	107
Bursa	21	2	16	4	48	12	85	18
Istanbul	22	6	27	9	95	22	144	37
Izmir	40	8	15	5	58	20	113	33
Board	30	8	30	5	57	10	117	23
Total	228	45	161	47	390	134	779	226

Ministry of Labour and Social Security, Annual Report, 2014 www.csgb.gov.tr/csgbPortal/itkb.portal

Table 3.2. Number of inspectors by groups and their status (2014)

Groups	Оссі	Occupational health and safety				Labour relations		
	Senior	Inspect or	Assistan t inspect or	Total	Senior	Inspect or	Assistan t inspect or	Total
Adana	8	2	16	26	13	3	7	23
Ankara	27	61	128	216	88	31	51	170
Bursa	8	12	40	60	15	8	20	43
Istanbul	11	24	86	121	17	12	31	60
Izmir	21	12	50	83	27	8	28	63
Board	13	19	49	81	25	16	18	59
Total	88	130	369	587	185	78	155	418

Ministry of Labour and Social Security, Annual Report, 2014 www.csqb.gov.tr/csqbPortal/itkb.portal

3.3. Methodology and types of inspections

As for the methodology of inspection, two kinds of inspection are carried out in the workplace; occupational safety and health inspections and inspections concerning labour relations. The concern of occupational safety and health inspections regards the investigation of physical, chemical, biological, ergonomic or any other risk factors emerging in the workplace; risk assessment,

emergency state, vocational training of the employees, health status of workers, etc. Inspections concerning labour relations (management issues) are done mostly for administrative purposes and basically aims to inspect official records, i.e. registration with the social security system and payment of premiums. During visits to workplaces, inspectors also verify questions related to employment of children or young workers, working hours and overtime work, weekly rest, annual leave, etc.

Inspectors work independently during their inspection and enforcement activities. The inspector does not need permission to enter into the workplace, and may enter the workplace at any time, even during night hours when necessary. Inspectors may meet and talk to any person (both the employer and the workers), may ask them certain questions, may examine all documents regarding occupational safety and health, particularly decisions made by occupational safety and health committees and the results of any measurements, and they may also take photographs. After the inspection, they are expected to prepare a report and submit it to both the head of the regional group and to the chair of the Labour Inspection Board.

In case of violation of any legislative provision, the inspector usually gives an "advisory notice" to improve the conditions. If there is no improvement at the re-visit after certain period of time, the inspector can decide on an administrative fine. The amount of the fine will depend on the article violated. Administrative fines are issued by the Provincial Director of Labour and Business. Fine shall be paid in 30 days after being issued. When a severe or imminent danger is detected, the inspector can suspend the operation at the workplace.

The Labour inspection board carries out two types of inspection: scheduled (programmed) inspections or unscheduled (incidental) inspections. (Labour Statistics 2014, Ministry of Labour and Social Security, General Directorate of Labour, Ankara, May 2015)

- Scheduled (programmed) inspections: These types of inspections are performed for a number of
 predetermined targets and for the purpose of checking enforcement of either the whole or any
 particular group of the legislative provisions. The inspection is planned regarding a risk, or area
 or a sector.
- Unscheduled (incidental) inspections: These inspections are performed on the basis of an
 incoming demand, such as notification by an informant. In case of notification of a workplace
 accident or an occupational disease, or any complaint reaching the Labour Inspection Board, it is
 this kind of inspection that is carried out.

In 2014, a total of 23.331 inspections were carried out. 14.174 (60.8%) of them were occupational safety and health inspections and 9.157 (39.2%) were inspections regarding management issues. Of the occupational safety and health inspections, 5,087 (35.9%) were scheduled inspections. Similarly, more of the inspections regarding management issues were unscheduled, only 2.280 (24.9%) of them being scheduled inspections (Table 3.3). Among the inspections, operations were ceased in 2100 workplaces. Through a total of 23.331 inspections, a total of more than 2 million workers and more than 8 thousand apprentices were reached. A total of 1091 occupational accidents were investigated during the inspections. Among them 363 accidents resulted in bodily injury or death. In these 363 accidents 461 workers died, 483 workers were injured and 65 workers permanently lost their organs. Of the 461 deaths, 325 were in mining (301 were in Soma only), 59 were in construction and 17 were in metals works.

Table 3.3. Number of Inspections, Turkey, 2014

Type of inspection	Scheduled	Unscheduled	Other	Total
Occupational safety and health inspections	5087	5042	4045	14 174
Labour relations inspections	2280	6847	30	9 157
Total	7367	11889	4075	23 331

(Ministry of Labour and Social Security, Annual Report, 2014)

With regard to occupational health and safety inspections, more than half were done at construction workplaces, while only 5 percent of labour relations inspections were at this sector (Table 3.4 and Table 3.5).

Table 3.4. Occupational safety and health inspections by economic activities, 2014

Economic activity	Number	Percent
Construction	7 278	51,4
Metal works	2 127	15,0
Mining and stone quarries	1 391	9,8
Other	3 378	23,8
Total	14 174	100,0

Ministry of Labour and Social Security, Annual Report, 2014

Table 3.5. Labour relations inspections by economic activities, 2014

Economic activity	Number	Percent
Transport	991	10,8
Accommodation and entertainment	901	9,8
Food industry	633	6,9
Textile, clothing and leather	576	6,3
Metal works	530	5,8
Health and social services	486	5,3
Construction	457	5,0

Defence and security	412	4,5
Other	4171	45,6
Total	9 157	100,0

Ministry of Labour and Social Security, Annual Report, 2014

More than one-third of all occupational safety and health inspections in 2014 (5275; 37.2%) were done by Ankara Group (Table 3.6).

Table 3.6. Occupational safety and health inspections by regions and types of inspections, 2014

Regions	Scheduled inspection	Unscheduled inspection				Suspension of work	Total
		Occ. injury or death	Occ. disease	On demand	Other		
Adana	425	25	0	152	129	168	899
Ankara	1199	160	7	912	1057	1940	5275
Bursa	1042	61	14	320	213	456	2106
Istanbul	1112	41	5	498	580	1037	3273
Izmir	1309	76	6	575	211	444	2621
Total	5087	363	32	2457	2190	4045	14174

Ministry of Labour and Social Security, Annual Report, 2014

Through these inspections, total of 1,101,484 workers (M: 943,553, F: 157,704, Young: 227) were reached.

As a result of inspections, total of almost 90 million TRY in fines were issued to 7,142 workplaces (Table 3.3 and Table 3.7).

Table 3.7. Fines implemented by type of inspection and amount, 2014

Type of inspection	Number of workplaces	Amount of fine (TRY)
Occupational safety and health inspections	2,206 (30.9%)	40,632,290 (46.2)
Inspections on management issues	4,936 (69.1%)	47,252,084 (53.8)
Total	7,142 (100.0)	87,884,374 (100.0)

Ministry of Labour and Social Security, Annual Report, 2014

The average amount of fine per workplace in occupational safety and health inspections (18 419 TRY) is almost double of the labour relations inspections (9 573 TRY).

3.4. Relevant legislation

The duty and responsibility of the Ministry for labour inspections takes its origin from ILO Convention No. 81 (Labour Inspection Convention, 1947), which was ratified by Turkey in 1950. ILO Convention No. 155 (Occupational Safety and Health Convention, 1981) also emphasizes the importance of labour inspection to protect workers' health. Following these international regulations, both the Labour Law (No. 4857) and Occupational Health and Safety Law (No. 6331) gives duty and right of inspection and enforcement to the Ministry of Labour and Social Security. Articles 92-93-96-97 and 107 of the Labour Law and Articles 24 to 27 of the Occupational Safety and Health Law are related to inspection of workplaces.

Also there are a number of Regulations to explain the details and methodology of the procedures:

- Regulation on Labour Inspection Board (2012): This Implementing Regulation explains the
 establishment, duties, rights and responsibilities of the Board. Types of inspection, methodology
 and reporting, and conditions for the cessation of work are explained.
- Regulation on occupational hygiene measurement, test and analysis laboratories (2013): This
 Regulation explains the regulation of authorization and inspection of the public and private
 laboratories, which shall work on measurement, test and analysis of physical, chemical and
 biologic factors.
- Regulation on safety and health conditions of using work machinery (2013): This Regulation explains the rules of selection, using, maintenance and periodic checking of work machinery.

In addition to these basic regulations regarding inspection and enforcement, there are several other regulations on various safety and health hazards, for example on mining, construction work, asbestos, noise, excessive heat, vibration, working with explosives, working with hazardous chemicals, working with carcinogenic and mutagenic agents, video display units, etc.

3.5. Ceasing of operations due to OSH concerns

Article 25 of the OHS Law is on the conditions under which an operation can be ceased. In case of an imminent or life-threatening situation, work can be ceased on the premises, or partly in the area which might be affected by the risk arising from the danger in question until such danger is eliminated. By partially stopping the operation, adverse effects of closing down the workplace totally will be avoided. During the cessation period, workers are directed to another job relevant to their profession and abilities, so that they will not be paid less than their usual payment.

In addition, in workplaces classified as very hazardous, such as mining, big construction, heavy metal working, workplaces where explosive materials of hazardous chemicals are used or high possibility of serious industrial accidents may occur, in case there is a lack of a risk assessment, the operation can be stopped. The decision to close the operation is taken by a group of three inspectors authorized to carry out occupational safety and health inspection. Implementation of the closing decision is the right of the governor or the district governor. The decision of the inspectors is submitted to the Provincial Directorate of Labour and Employment and the governor (district governor in districts), and enforced by the governor within 24 hours. However, in case of an urgent situation the operation can be stopped on the same day. The employer may appeal the decision through an authorized labour court within six days following the enforcement of decision. The court finalizes the decision of closing within six working days. The employer is required to pay full wages to the workers while the workplace is closed, or employ them in another capacity relevant to their profession.

3.6. Controls and Audits carried out by other institutions

The Institute of Occupational Safety and Health Research and Training (İSGÜM) has the right to carry out controls and audits in the workplace. Based on its annual work programme, ISGUM can enter into the workplace, make observations and take samples for analysis.

The Ministry of Environment and Urbanization is mostly concerned with the possible harms of industrial establishments to the environment in general. Therefore the control and audits carried out by this Ministry aim to control waste output of the workplaces. Nevertheless the Ministry has also responsibilities regarding the safety and health of the workers.

Municipalities are mainly interested in the comfort and wellbeing of the community around workplaces. Waste material coming from workplaces may harm the people living around them. Therefore municipalities have a duty to control any damage caused by workplaces to the community, i.e. controlling waste produced by industrial establishments.

4. CONSULTATION, COORDINATION AND COLLABORATION

There are two main parties in working life, namely workers and the employers, and working life deals with the relationships between these parties. From time to time, the interests of these parties are in conflict, such as economic benefit or commercial interests. Based on the position of the parties, employers aim to maximize their benefits, while employees aim to earn higher wages. Both parties have their organizations. Under these circumstances the government plays a key role in regulating and coordinating the relations between the two parties. Therefore, a "tripartite collaboration" is key in conducting occupational safety and health activities. The major role of the government is to develop laws and regulations and to implement them. Nevertheless, all the key policies related to the issue are negotiated between the three partners, i.e. Trade Unions, Employers' Associations and the Government.

Another coordination mechanism is needed at the international level to coordinate the relations between countries. This collaboration and coordination is mainly carried out by the International Labour Organization. The World Health Organization and some other international organizations also take part in international coordination.

4.1. At the national level

The main responsible body for coordination is the MOLSS. The Ministry is based in the capital city of Ankara, and has representatives at the provincial level. Some other ministries, employers' and workers' associations also take part in the coordination mechanism. The main partners of working life were presented in Table 1.1.

- MoLSS: The Ministry prepares the laws regarding working life and sets the regulations defining the standards of working life. While developing the legislation, international regulations were taken into consideration, such as Conventions and Recommendations of the ILO, Directives of the European Union and others. After the adoption of laws and other regulations, the Ministry counsels employers and workers on how to implement the legislation. The Ministry also enforces the implementation of the laws and other regulations through regular inspections.
- Ministry of Health: The Ministry provides preventive and curative health services to the whole community. Regarding occupational safety and health, the Ministry provides health services to the working population mostly in the form of diagnosis and treatment of occupational diseases and accidents, as well as other general health conditions. Some rehabilitation services are also provided by the Ministry of Health. Recently the Ministry started to provide workplace safety and health services through Community Health Centre Units. Currently, 81 Community Health Centre Units in 64 provinces provide these services.
- Other Ministries: The Ministry of National Education, Ministry of Science, Industry and Technology, Ministry of Environment and Urbanization, Ministry of Development, Ministry of Energy and Natural Resources also involves in occupational safety and health issues, taking part in the National Occupational Safety and Health Council.
- Social partners: Both the workers' and employers' associations are represented in all activities
 in the field of occupational safety and health; in legislation procedures, education and training of
 workers and the implementation of occupational safety and health measures.
- National Occupational Safety and Health Council: The Council was established in 2005 as the
 highest advisory board to the Ministry on occupational safety and health. The Council is chaired
 by the Undersecretary of the Ministry and secretariat is provided by General Directorate of
 Occupational Safety and Health. There are total of 26 members in the Council, half from

government institutions (related ministries, Higher Education Council, etc.) and half from civil society organizations (employees' and employers' associations, engineering and medical associations and other relevant organizations). The aim of the Council is defined as "taking into consideration the national and international developments, to advise the Ministry and the government on developing policies and strategies to improve occupational safety and health conditions in the country". The Council meets twice in a year with a pre-determined agenda. It is expected that the Council reviews the previous meeting's decisions and follows up the implementations.

- Technical (expert) committees on specific topics: The Directorate General of Occupational Safety and Health organizes "ad-hoc committees" on various specific topics when needed. Representatives from workers and employers associations, from relevant ministries and from academia are invited to these committees to discuss and develop policies and strategies. The committees are mostly chaired by one of the deputy director generals. Some examples of the committees are a technical committee on dust control (meets biannually), technical committee on hazard classification (meets annually), technical committee on minimum wages (meets several times in June to discuss and decide the next years' wages), and technical committee on occupational safety and health training (meets when needed).
- Scientific meetings and workshops organized by academia and professional organizations: Every
 year several scientific meetings, conferences, workshops and training programmes are organized
 by government departments or civil society organizations. This kind of event gives occupational
 safety and health professionals the opportunity to meet each other and develop further
 collaborations.
- Awareness-raising and informative activities: The DGOHS prepares and provides various audiovisual and printed materials such as spot films, books, guidelines, risk checklists, brochures, posters, and leaflets for various sectors. These documents are delivered to all related parties free of charge and on demand.
- National and international projects and collaborations: The projects conducted by the Ministry, universities or other institutions serve to develop new approaches to improve safety and health conditions in the workplace. The projects also play a role in joining the major stakeholders and academic work together. After being restructured the General Directorate of Occupational Health and Safety has conducted more than 60 projects on a National and International level, including collaborations with the ILO, WHO, ISSA, OIC, JICA, IFA, DGUV, EU Commission, EU-OSHA, IOSH etc.

4.2. At the enterprise level

There are also possibilities for consultation and collaboration at the enterprise level. Some major examples are as follows:

• Workplace occupational safety and health boards: Based on the regulation, workplaces employing 50 or more workers and which have been in operation for more than 6 months continuously should establish a Board. The Board is composed of workers and the employer, as well as an occupational physician and occupational safety expert. This is a good opportunity for both sides to come together and discuss occupational safety and health issues in the workplace, and produce reasonable solutions. The Board is chaired by the employer or the representative of the employer, and employer should take into consideration the recommendations made by the Board. In case of sub-contractor relationship; if both the main and the sub-contractor institutions employ 50 or more workers, both should establish the board. If any one of the main

or the sub-contractor institutions employ 50 or more workers, the board will be established at the institution employing 50 or more workers and the other institution participates with one representative for coordination and follows the decisions of the board. If both institutions employ less than 50 workers but the total number of the workers is more than 50, the board will be established by the main institution and other institution will participate with a representative.

- Joint Occupational Safety and Health Units (JSHU, OSGB): These are units which are formed by public organizations and institutions, organized industrial zones, and companies operating under the Turkish Code of Commerce No. 6102 dated 13/1/2011 to provide occupational safety and health services at the workplace, which have the necessary equipment and personnel, and which are authorized by the Ministry of Labour and Social Security.
- Education and training programmes: The employer at all workplaces should provide education and training to workers on occupational safety and health issues, as well as some technical information.

5. NATIONAL REVIEW MECHANISMS

The general conditions for conducting a "peaceful" working life are laid down in Government Programmes. These conditions should be in accordance with the Constitution. The Constitution indicates the essential points regarding working life such as "right to work, same wage for the same work, right to join the trade union, protection of at-risk groups, and right to work in a safe and healthy work environment".

Among the three main "parties" of working life, the Government has the role of developing and reviewing the legislation. The Government in this context respects the rights and responsibilities of the parties and acts with the understanding of a tripartite approach. It is the Government's aim to ensure that all citizens will be able to take part in working life. The Government supports actions to increase employment capacity, including by helping disabled and other at-risk groups obtain opportunity for employment, as well as to eliminate illegal employment. The Government is responsible for the enforcement of the current legislation to ensure the provision of safe and healthy working conditions. The Government policy also includes social conditions regarding working life, including retirement policies and rights of workers during pregnancy and after birth.

Within the government, the MOLSS is the main responsible organ regarding OSH issues. Legislation is developed by the DGOHS, in collaboration with other departments in the Ministry and other stakeholders in working life. In 2005, the DGOHS established the National Occupational Safety and Health Council. Half of the 26 members of the Council are from the government side, half from other stakeholders and civil society. The Council meets twice a year to discuss the current issues of working life, and develops recommendations for the MOLSS to improve safety and health conditions in working life. The Council also reviews the relevant legislation and makes recommendations for changes or amendments if needed. Members of the Council can raise any item regarding the legislation or the implementation to the agenda. In this context, employer's and worker's organizations can also bring the relevant issues to the agenda of the Council as necessary.

The MOLSS publishes the National Occupational Safety and Health Policy Document and Action Plans. The first document was published to cover the period of 2006-2008, the second to cover the period of 2009-2013, and the most recent one covers the period of 2014-2018 (www.csgb.gov.tr). The Ministry invites a group of experts to discuss relevant issues in the country and publishes the document for the period in question. Relevant international documents, including ILO and EU publications and standards are taken into consideration while preparing the document. The document reviews the occupational safety and health situation in the country, and recommends the necessary measures to improve those conditions. The last document refers to the OSH Law and stresses the importance of developing a "safety culture" for prevent occupational accidents and diseases.

Another organization for the national review mechanism is "Tripartite Advisory Board". The Board is chaired by the Minister, with participation from both employers and worker's organizations. The Board discusses current issues in working life and make decisions. They also make recommendations regarding occupational safety and health regulations.

There are other committees serving as part of the review mechanism, namely the Hazard Classification Committee, Occupational Health and Safety Training Committee, Technical Committee on Personal Protective Equipment, Technical Committee on Minimum Wages, Dust Control Committee, etc. There are also some committees that work in line with a specific protocol on a specific subject such as agriculture, OSH in public sector, national health, and education. These

committees can make recommendations for occupational safety and health regulations, and they carry out regular meetings and activities.

The Hazard Classification Committee meets annually in February to classify the occupations into one of the three hazard classes (less hazardous-hazardous-highly hazardous), reviewing the previous year's list. The Technical Committee on Personal Protective Equipment develops the standards of personal protective devices.

Technical Committee on Minimum Wages meet several times in June to discuss and decide the minimum wage of the next year. The Committee is composed of the representatives of social partners and chaired by the Minister.

On the workplace level, the Occupational Safety and Health Board deals with work relations and implementation of occupational safety and health regulations in a workplace. The Committee brings the employer's and workers' representatives together, reviews the relevant issues in the workplace and makes decisions.

6. INFORMATION AND ADVISORY SERVICES AND MECHANISMS

6.1. Information Centres

The main body for collecting, producing and disseminating occupational safety and health information is the Ministry of Labour and Social Security. All legislation, including the law and the regulations are available on the Ministry's web page. The General Directorate of Occupational Safety and Health and several other departments of the Ministry, and one institution (Institute of Occupational Health and Safety Research and Development Presidency; İSGÜM) produce books, brochures, posters and similar material and distribute them widely. Some of ILO publications and publications of other international organizations were translated into Turkish by the Ministry and distributed to the relevant workplace, free of charge. All the material produced by Ministry is also accessible through the internet.

One of the associated institutions of the Ministry, the Centre for Labour and Social Security Training and Research (ÇASGEM) produces books, brochures and other kinds of information material. The web address of the MOLSS are as follows:

http://www.csgb.gov.tr

http://www.csgb.gov.tr/csgbportal/isggm.portal

In 2010, the Occupational Health Department was established in the Ministry of Health. The Directorate produces some materials for training. The Directorate has organized several symposiums in the field of occupational health and safety.

Universities, particularly those with medical schools organize activities on occupational safety and health. All medical schools have Public Health Departments, and some have several staff specialized in occupational safety and health. Medical schools provide occupational safety and health classes at undergraduate level and some at postgraduate level. These universities produce training material, brochures, pamphlets, etc. These training materials are mainly for students; however, many professionals in the field also benefit from them. Other universities with engineering and science faculties also play a role in providing information services on occupational safety and health. They organize symposiums, workshops and congresses on the subject, and produce training material for the use of general public, rather than professionals. Representatives from many parties including the government, employer's associations, workers' associations and academics participate in these organizations, some of which are also covered in the Turkish media.

The Turkish Medical Association has a working group for occupational safety and health. In the 1980s, this working group organized the training of occupational physicians. At that time, the Medical Association produced training materials for the participants in the form of books, periodic bulletins etc. The Medical Association publishes a journal 4 times a year; Occupational Health and Safety (www.ttb.org.tr).

The TMMOB organizes occupational safety and health symposiums and congresses on a biannual basis. The Association produces publications, symposium materials and some brochures (www.tmmob.org.tr).

6.2. Advisory mechanisms

There are several organizations providing advisory services. Some well-known examples are the Turkish Medical Association, Turkish Architects and Engineers Association and other private organizations, such as societies of medical specialties namely the Society of Public Health Specialists, Turkish Thoracic Society, Turkish Respiratory Society, etc.

7. OCCUPATIONAL HEALTH AND SAFETY SERVICES

Occupational health services were first regulated in the General Health Law (No. 1593, 1930). In accordance with this Law, employers with more than 50 workers must provide occupational health services in their workplace. Moreover, workplaces with more than 500 workers must have a hospital on the premises, not only for the use of workers but also to provide health services to the general community. A number of such hospitals remained in operation until recent years.

7.1. Occupational health and safety services

Details of occupational health services were regulated for the first time in 1980. As per Article 180 of the General Health Law, the Regulation on "Duties, Rights and Responsibilities of Occupational Physicians" explains the occupational health services. Accordingly workplace health services should be essentially "preventive" by nature. Therefore, an occupational physician is mainly responsible for pre-employment and periodic health examinations of workers and for health education. A physician's workload depends on the number of workers, and they should spend 15 minutes on a worker per month. The physician has the right to obtain all kinds of information on the workers and also the operating procedures. The physicians providing occupational health services have to go through official training and receive a certificate upon successful completion of the training. For this purpose, the Turkish Medical Association initiated training courses in 1988, and certified more than 30 000 physicians. The duration of training courses was initially 40 hours, and was then increased to 64 hours.

According to the Regulation, a workplace owner should apply to the Chamber of Medicine to request an occupational physician. This article of the Regulation also ensured job security for the occupational physicians, by protecting them from the threat of being sacked, and allows them to work independently.

The Labour Law placed the right of organizing and conducting education and training of occupational physicians into the hands of the MOLSS and created ÇASGEM to organize and conduct the required training programmes. The Labour Law of 2003 increased the duration of the required training 220 hours. Forty hours of the programme is practical training in the workplace where a full-time occupational physician is working. The remaining 180 hours can be conducted in two parts; half to be completed through distance learning and half through class lectures.

The OSH Law introduced the concept of "occupational safety" by making it compulsory to employ an OSE, besides an occupational physician. Therefore the ÇASGEM started to organize another 220-hour training programme for OSE candidates, similar to the training programme for occupational physicians. The OSH Law defines three classes of occupational safety experts, namely Classes A, B and C. Therefore, the education and training programmes for the OSE candidates were organized over three classes. OSEs having A-B and C class certificates will be employed at highly hazardous — hazardous and less hazardous workplaces respectively. Nevertheless, due to shortage of OSEs having A and B class certificate, B class OSEs can be employed at highly hazardous workplaces until 01.01.2018 and C class OSEs at hazardous workplaces until 01.01.2017 (Bag Law No 6645, 23.04.2015, Article 6).

Moreover, the organization of training programmes was made open to the training institutions which satisfy the conditions laid out in the Regulation (public organizations and institutions authorized by the Ministry to provide training for occupational safety experts, occupational physicians, and other health personnel, universities, and training facilities established by the

companies operating under the Turkish Code of Commerce no. 6102 dated 13/1/2011). Presently (by July 2015) there are 175 education and training centres, and 3765 trainers are serving. These centres organize education and training programmes for physicians and experts. Although education and training programmes are provided by training institutions, examinations were carried out centrally by the Ministry at the beginning, but eventually transferred to the "Measuring, Selection and Placement Centre" (ÖSYM), the Government body under the Higher Education Council (YÖK).

By the end of June 2015, a total of 26,872 occupational physicians and 87,207 OSEs were certified. Among the OSEs 13,319 have A-class certification, 7,969 have B-class certification, and 65,919 have C-class certificate. According to the OSH Law, all the workers should have access to occupational safety and health service. Therefore the employers should provide these services to all workers, either through an "in-house" service or through purchasing these services from a "Joint Safety and Health Units (JSHU)". By the end of June 2015, a total of 1995 such Units giving service to more than 200,000 workplaces. In addition, by mid-2015, 81 Community Health Centres belonging to the Ministry of Health were providing occupational safety and health services in 64 provinces. The Ministry is planning to establish at least one Community Health Centre providing workplace safety and health services in every province.

The duties of a workplace physician are defined by the Regulation on "Duties, Rights, Responsibilities and Training of Occupational Physicians and Other Health Staff" as follows:

- Counselling: To provide counselling to the workers and the workplace management, in terms of planning and implementation of work procedures, protective measures, particularly selection of proper personal protective devices, as well as health promotion activities.
- Risk evaluation: To participate in risk assessment studies in collaboration with the OSE and take necessary measures.
- Health surveillance: To carry out pre-employment and periodic health examinations of workers, with special attention to the high-risk groups such as workers with chronic conditions, young and elderly workers, or pregnant women. Workers to be employed in workplaces classified as hazardous or very hazardous are not allowed to start working without their fit-to-work report.
- Education and record keeping: To prepare and conduct occupational health education programmes for workers, including first aid training and organization, as well as personal hygiene and protection of health. The health records of all workers will be recorded and kept for each year. These records will be kept for as long as 40 years for workers working with carcinogenic materials.
- Collaboration with other relevant institutions: To collaborate as necessary with academic institutions and education centres for the education and training of workers; for the determination of work capacity loses and disability the physician will collaborate with the insurance institution.

The duration of work of the occupational physician depends on both number of workers and hazard class of the workplace. If a workplace is in the "less hazardous" class, physician should spend 5 minutes on a person per month. The physician should spend 10 or 15 minutes on a person per month when the workplace is in the "hazardous" or "highly hazardous" classes. Workplaces that are classified as less hazardous, hazardous, and highly hazardous must recruit a full-time occupational physician if they have 2000, 1000, and 750 workers respectively.

Similarly, the duties and responsibilities of the OSE are defined by the Implementing Regulation on "Duties, Rights, Responsibilities and Training of OSEs". The main duties and responsibilities are as follows:

- Counselling: To provide counselling to the workplace management, in terms of conducting work
 procedures in accordance with the relevant legislation, planning and implementation of work
 procedures, selection, periodic checks and maintenance of machinery, protective measures, and
 the selection and use of personal protective equipment. Also, the OSE will investigate the
 possible causes of occupational accidents, as well as near misses, and report to the workplace
 management.
- Risk evaluation: To participate in risk assessments studies and give recommendations to the management regarding protective measures.
- Surveillance of workplace: To carry out periodic work control procedures and necessary
 measurements regarding the relevant legislation, prepare and test emergency plans, carry out
 periodic training of the workers, and prepare internal regulations regarding use and
 maintenance of machinery and submit them to the management.
- Education and record keeping: To prepare and conduct education and training programmes on safety at work, prepare the annual report of the health and safety unit in collaboration with the physician and submit it to the management. The OSE keeps all the records on working conditions, work processes and protective measures as official records.
- Collaboration with other relevant institutions: To carry out evaluation of occupational diseases and accidents in collaboration with the occupational physician and take necessary measures for the prevention of unsafe conditions and unsafe work.

The duration of work of OSE is related to the hazard class of the workplace and number of the workers. A full-time expert should be employed in the workplaces employing 1000, 500 and 250 workers at less hazardous, hazardous and highly hazardous classes respectively. The OSE should spend at least 10, 20, or 40 minutes per worker per month at the less hazardous, hazardous, and highly hazardous class workplaces, respectively. The employer can assign one of the experts working at the workplace as occupational safety expert, providing the expert meets the legal requirements of being an OSE. Similarly, if the employer themselves provides the legal requirements, they may also take on the responsibility of being the OSE. The legal requirement for being an OSE is to have completed 220-hour training course. Forty hours of the course should be practical training in the workplace where an OSE is working. The remaining 180 hours can be divided into two sessions; half will be in the form of distance learning, and half through in-class theoretical education. After completing the training course, the candidates take the exam, managed centrally by the "Measuring, Selection and Placement Centre" (ÖSYM), the government body under the Higher Education Council (YÖK).

In cases where a full-time occupational safety expert and occupational physician must be employed, employers must establish an occupational safety and health unit.

In order to provide occupational safety and health services; the employer may designate an occupational safety expert and occupational physician from among the employer's staff, and may designate other health personnel at workplaces classified as highly hazardous with ten or more workers, or may provide such services by obtaining the whole or part of such services from the joint occupational safety and health units. Moreover, in workplaces which have fewer than 10 workers and which are classified as less hazardous, the employer himself may fulfil the conditions set out in the Law, apart from those set out for the examinations and tests at start of employment and periodic examinations and tests, provided that the employer has completed the training programme announced by the Ministry.

7.2. Hospitals for occupational diseases

As a secondary level health service, hospitals for the diagnosis and treatment of occupational diseases were established. In 1939, the hospital established by the Turkish Coal Mine Enterprises in Zonguldak served also as an occupational disease hospital. The hospital was transferred to the Social Insurance Institution in 1977. In the meantime, two hospitals for occupational diseases started functioning in Ankara (1978) and Istanbul (1980). The right to diagnose and treat occupational diseases belonged to these three hospitals only. The Istanbul hospital served the provinces in Marmara region, Zonguldak hospital served 4 neighbouring provinces around the main mining area, and rest of the country was served by the Ankara occupational disease hospital. According Law No. 5283 in 2005, all hospitals and health institutions belonging to the Social Insurance Institution and other state organizations were transferred to the Ministry of Health, including the three hospitals for occupational diseases. Therefore, the Ministry of Health had to become involved in the field of occupational health. Due to the insufficient reporting of occupational diseases, the Ministry of Labour and Social Security gave the right to diagnose occupational diseases to state university hospitals in 2008. After the transfer of the hospitals to the Ministry of Health, a Protocol was signed between the two Ministries in 2010, giving the right to diagnose occupational diseases to the training and research hospitals of the Ministry of Health in 2011. In conclusion, all state university hospitals and training and research hospitals (about 200 hospitals in total) belonging to the Ministry of Health provide secondary health care services in the field of occupational safety and health.

8. OCCUPATIONAL SAFETY AND HEALTH LABORATORIES

8.1. Introduction

Occupational safety and health laboratories are essential components of working life. These laboratories serve to support risk assessment studies and provide evidence in labour inspections.

8.2. Institute of Occupational Safety and Health Research and Development

The Institute of Occupational Safety and Health Research and Development (İSGÜM) was founded 26 March, 1969 by Decree No. 6/11568 of the Council of Ministers following the ratification of the "Pre-implementation Agreement on Special Fund for Occupational Health and Safety" signed in 1968 between the representatives of the Republic of Turkey, Special Fund Administration for United Nations Development Programme (UNDP) and International Labour Organization (ILO) within the scope of the Programme for the Improvement of Working Conditions and Environment (PIACT) aiming to meet occupational health and safety requirements in Turkey. In the years following inception, several attempts were made to strengthen İSGÜM through regional laboratories. In addition to the central institution and laboratory in Ankara, İSGÜM has regional laboratories in 8 provinces (Adana, Bursa, Gaziantep, İstanbul, İzmir, Kayseri, Kocaeli and Samsun).



Figure 8.1. Regional institutions of İSGÜM, 2015 Ankara

The Directorate General of Occupational Safety and Health has conducted two projects funded by the European Union, one to improve occupational safety and health implementation in Turkey (2004-2006), and one to establish mobile health and safety units (2007-2009). The mobile health and safety units came into service in May 2009, and provide the opportunity to give occupational health and safety services and carry out investigations in different regions throughout the country. Mobile laboratories are in two sets, each is set consists of 3 vehicles. One of the vehicles is for the evaluation of heart and lung functions, the second is for the measurement of medical and biological parameters, and the third is for physical measurements. Mobile laboratories serve SMEs in particular to examine the workers in their workplace (reducing absenteeism), and to carry out measurements in the workplace.

ISGÜM is the only official organization that is authorized to conduct measurements, examinations and research enabling the advance identification of workplace factors which may lead to occupational accidents and occupational diseases. As the laboratory works, ISGÜM takes air samples, biological samples, analysis of heavy metals, gases, solvents etc. ISGÜM takes measurements of noise, vibration, thermal comfort, illumination, and also has the facility to carry out electro cardiograms, x-rays and hearing tests.

According to the İSGÜM Regulation (Regulation on Rights, Duties and Responsibilities of Institute of Occupational Safety and Health Research and Development published in Official Gazette No.29417 on 15 July 2015) İSGÜM's functions are as follows:

- Carry out activities for the prevention of occupational accidents and occupational diseases at national and international levels
- Ensure the prevention of harm from workplace hazards, if not possible, minimize them to protect workers' health
- Try to adjust production procedures and working conditions to the workers' capacities and special conditions
- Carry out measurements, analyses, tests and risk assessment studies for workplaces
- Carry out education in its area of interest
- Carry out studies for the development of recommendations for legislation, standards and norms
- Develop projects and guides on a sectoral basis
- Organize seminars, conferences, meetings; develop brochures, posters, spot films; publish books to increase safety culture in the community
- Collect data in its area of interest and develop information for use by relevant institutions
- Define strategies, targets and activities and follow their implementation
- Carry out other works given by the Directorate General

As part of education and training activities, İSGÜM has organized 12 training programmes for asbestos demolition experts and the total number of trained experts is 239 throughout the country.

At present a total of 120 personnel are working in the İSGÜM, including 55 technical staff and 4 physicians. İSGÜM has several departments. The names and main activities of the departments are as follows:

- Department of occupational health: As the health surveillance of workers, İSGÜM conducts screening programmes at various workplaces. During these screening programmes, functional and biological evaluations are done as well as some biochemical and toxicological analysis. Almost 10 thousand workers were screened during the first half of 2015.
- Department of occupational safety: Several projects have been completed on occupational safety. Some examples include surveys at coal mines, improvement of health and safety of workers, evaluation of plastics and lead recycling processes, and occupational safety evaluations in the ceramics and painting industries.
- Department of occupational hygiene: İSGÜM performs 37 measurements as occupational hygiene studies, and was accredited to carry out personal noise and lead exposure measurements in 2013. By the end of June 2015, İSGÜM had performed 71 chemical substance measurements at 13 workplaces and 161 physical factor evaluations at 15 workplaces.
- Department of project coordination: Several projects are being conducted by the İSGÜM. Some
 of these projects are on health and safety of workers, some aim to support the infrastructure of
 the İSGÜM. International coordination with various countries is coordinated by this department.

- Department of education planning and organization: Several education and training programmes have been conducted, such as a pneumoconiosis radiology certificate course for physicians (a total of 250 participants) (Figure 8.2), and asbestos demolition training for OSEs.
- Department of Personal Protective Equipment: İSGÜM has the only authorized laboratory for the testing of personal protective devices. At this laboratory 28 different test methods are performed for the evaluation of personal protective devices.
- Department of authorization of private laboratories: As of 20.08.2015, İSGÜM does not provide laboratory services for occupational hygiene measurement, test, and analysis. Private occupational hygiene measurement, test, and analysis laboratories provide these services, and ISGÜM authorizes these laboratories. 13 private laboratories have been authorized so far out of 64 applications; İSGÜM will follow the activities of these laboratories. Since August 2015, no laboratories can provide services unless they have been authorized by İSGÜM.

iSGÜM took 29,785 measurements, examinations and analyses during the year 2014, almost 23,000 of them at Ankara Laboratories. Some examples of measurements and analyses carried out by laboratories are seen in Table 8.1. As for occupational hygiene measurements in the workplace, regional iSGÜM laboratories make an average of around 2,000 measurements. Most of these evaluations are thermal comfort and noise level measurements, fibrous dust and silica dust and lead level measurement in the work environment (Table 8.2).

Table 8.1. Measurements and analyses done by İSGÜM by laboratories, 2014

Measurement	Adana	Ankara	Bursa	Istanbul	Izmir	Kayseri	Kocaeli	Total
Gas chromatoraphy	-	307	-	-	-	-	224	531
Eudiometry	-	1887	-	-	-	-	-	1 887
Personal noise exp.	182	134	157	170	625	217	561	2 046
Dust measurement	100	87	79	73	358	124	358	1 149
Lung function test	-	2 387	-	-	-	-	-	2 387
Chest x-ray	-	2 841	-	-	-	-	-	2 841
Gas analysis	26	198	26	45	88	66	111	560
Thermal comfort	95	77	52	56	226	114	260	880
Other, miscellaneous	126	14 925	155	64	291	409	1 504	17 504
Total	529	22 843	469	408	1588	930	3018	29 785

Table 8.2. Number of workplace hygiene measurements by Regional Laboratories, 2010-2015

Measure ments	2010	2011	2012	2013	2014	2015 (*)
Thermal comfort	150	161	94	277	342	145
Noise level	799	601	186	541	768	352
Dust (fibre)	533	357	431	362	416	108
Silica	268	58	50	101	92	128
Heavy metal (lead)	66	68	64	87	112	138
Other	759	478	558	969	1137	875
Total	2575	1723	1383	2337	2867	1746

^(*) Six months only



Figure 8.2. Pneumoconiosis certificate training, İSGÜM

ISGÜM carries out market surveillance and evaluations. As part of this aim, personal protective devices were evaluated and reported on. In 2014, a total of 2167 devices were examined, resulting in 390 (18.1%) refusals. The percentage of refused devices has fallen during the last years (Table 8.3)

Table 8.3. Examining of personal protective devices

Year	Number of examined samples	Number of refused samples	Percent refused
2007	332	137	41,3
2008	305	92	30,2
2009	409	131	32,0
2010	620	186	29,4
2011	872	127	14,6
2012	3209	1131	35,2
2013	2460	575	23,4
2014	2167	390	18,1

8.3. Occupational hygiene measurement, test, and analysis laboratories

In accordance with the Regulation on Occupational Hygiene Measurement, Test, and Analysis Laboratories (2013), employers have occupational hygiene measurements, tests, and analyses performed by these laboratories. These laboratories should meet the standards defined by the Regulation on Occupational Hygiene Measurement, Test, and Analysis Laboratories. Up to now, 13 laboratories have been authorized to serve in occupational safety and health, 3 laboratories in Ankara, 2 in Istanbul and Kocaeli and single laboratories in various other provinces. İSGÜM will follow and audit the activities of these laboratories.

8.4. Accreditation of İSGÜM

ISGÜM laboratories have been accredited in some measurements. ISGÜM was accredited by TÜRKAK in October 2014 for lead measurement in the ambient air, and for personal noise exposure measurements. Recently accreditation was approved for four other tests for various personal protective devices, hand gloves, foot protective devices, etc.

9. SOCIAL SECURITY, INSURANCE SCHEMES AND COMPENSATION SERVICES

According to the Turkish Constitution (Article 60) "everyone has the right to social security". The State shall take necessary measures and establish the organization for the provision of social security. The two laws regulate the social security system in the country, and the roles and responsibilities of the State, employers and workers are the "Social Security Institution Law" (2006, No. 5502) and "Social Insurance and Universal Health Insurance Law" (2006, No. 5510).

9.1. History of social security system

The understanding and implementation of social security in Turkey has a long history. Even before Ottoman era social security measures were seen among Turkish populations, during their settlement in Central Asia and the Anatolian Seljuk Empire. During the early years of the Turkish Republic, the 1924 Constitution mentioned social rights of people in general. At that time, some pension funds law were enacted. The first Labour Law in 1936 established the Social Security Institution and set the principles of social security. In 1945, the Law on Work Accidents, Occupational Diseases and Maternity Insurance was enacted. Another Law on Workers' Insurance Institution was adopted in the same year. Three relevant Laws came into force in 1950 (Old Age Insurance Law), 1951 (Sickness and Maternity Insurance Law) and 1957 (Disability, Old Age and Survivors' Insurance Law). (http://www.sgk.gov.tr/wps/portal/accessed 16 May, 2015).

The 1961 Constitution made an important change in the approach to working life and social policies by bringing in the "social security" concept for the first time. The "10-Year Development Plans" were initiated by the State Planning Organization as of 1963 onwards, and brought in the social security system in order to protect individuals (workers) from possible risks. The 1964 Social Insurance Law constituted an integrated social security structure in the modern sense based on the principle of collecting premiums from employers and workers. In the following years, several other laws were enacted, namely the 1971 law which founded the Social Security Institution for Tradesmen and Craftsmen and other Self-Employed People (BAG-KUR); in 1983 the Social Security Law for Agricultural Workers; and the Social Security Law for the Self-Employed in Agriculture.

In the following years it became necessary to implement social security reform in order to unify norms and create a sustainable social security system. Accordingly, the Social Security Institution was established in 2006, bringing together the three social security systems under a single umbrella through Law No. 5502. By unifying these social security system, 81% of the whole population was covered by the new system. In the same year, a second Law (Social Insurance and Universal Health Insurance Law, No. 5510) was enacted to realize a social security system at a contemporary standard, that would provide individuals with social insurance and universal health insurance, and that would create equal, accessible and qualified health services to the whole population.

9.2. Social Security Institution (SSI) and insurance schemes

Since 1990, the social security system has suffered a number of financial problems mainly because of early retirement policies, the high level of unregistered employment, and low rate of premium collection. Also, the system did not cover the entire population and did not have adequate safeguards in place against poverty. Therefore, based on the need to restructure of the system, the Social Insurance Institution was established and Social Insurance and Universal Health Insurance Law (No. 5510) was enacted in 2006. The reformed social security system constitutes of four complementary components:

- Universal health insurance providing equitable, protective and quality healthcare services to the entire population
- An aid system which enables all those in need to access the services
- A single retirement regime including short and long-term insurance branches, separate from the health insurance
- A new institutional structure facilitating the daily life of citizens through modern and efficient services

Based on the social security system, Social Insurance and Universal Health Insurance Law of 2006 (No. 5510) provides insurance in two areas: social insurance and universal health insurance. On the social insurance side, both short term and long term insurance schemes are provided (Table 9.1). All workers will benefit both long-term insurance schemes and universal health insurance services. Individuals working on service contracts will also benefit from work accident, occupational disease, maternity insurance schemes and sickness insurance schemes. Civil servants and optional insurance holders will benefit from only universal health insurance and disability, old-age and widow, widowers;' insurance schemes (Table 9.2) (www.sgk.gov.tr/).

Table 9.1. Turkish Social Security System

SOCIAL INSURANCE and UNIVERSAL HEALTH INSURANCE LAW, 2006, No. 5510					
SOCIAL IN	SOCIAL INSURANCE				
SHORT-TERM INSURANCE	ORT-TERM INSURANCE LONG-TERM INSURANCE				
BRANCHES	BRANCHES				
Work accident insurance	Disability insurance				
Occupational disease	Old-age insurance				
insurance	Widow, widowers'				
Sickness insurance	insurance				
Maternity insurance					

Table 9.2. Insurance holders and insurance branches

Insurance holders, insurance branches	Disability Old-age Widow, widowers' insurance	Work accident Occupational disease Maternity	Sickness insurance	Universal health insurance
Working on	+	+	+	+
service contract				
Working on	+	+		+
their own				
names and				
accounts				
Civil servants	+			+
Optional	+			+
insurance				
holders				

9.3. Financing social security services

A social security system is financed by premiums and contributions collected from workers, employers and the state in general. The Turkish social security system is financed by premiums collected for long and short term insurances, unemployment insurance and universal health insurance. More than one-third of the wages go to the premiums, 14% as worker share and 20.5% employer share. A quarter of the collected premiums comes as state contribution for disability, oldage and widow/widower's schemes (Table 9.3).

Table 9.3. Rate of premiums as worker and employer shares

Insurance branch	Worker share	Employer share	TOTAL	State contribution
Work accident	-	2	2	
Occupational				
disease				
Sickness				
Maternity				
Disability	9	11	20	¼ of collected
Old-age				premium
Widow,				
widowers'				
Universal health	5	7.5	12.5	
insurance				
TOTAL	14	20.5	34.5	
Unemployment	1	2	4	1
insurance				

9.4. Insurance benefits

Insurance benefits of an individual can be in the form of a short-term benefit, long-term benefit or universal health insurance benefit.

- Short-term benefit: This insurance benefit is applied in case of an occupational accident or
 occupational disease (temporary incapacity allowance, permanent incapacity income, widow,
 widowers' income, marriage allowance and funeral allowance), or in the form of sickness
 insurance benefit (incapacity allowance) or maternity insurance benefit (temporary incapacity
 allowance in maternity, breastfeeding benefit).
- Long-term benefit: This insurance branch includes old-age insurance (old-age pension, old-age single (lump-sum) payment and revival), disability insurance (disability pension) and widow, widower's insurance (widow, widower's pension, death grant and revival, marriage and funeral allowance).
- Universal health insurance benefit: This insurance system provides all insured and non-insured individuals living in the country with comprehensive, fair and equitable access to health care services, regardless of their economic status and whether they are willing or not. Low-income individuals receive health services through a "green card", a health card which enables needy and uninsured citizens with a domestic monthly income per capita less than one-third of the gross minimum wage to receive health care services free of charge. This system was in operation before 2012, but has since been removed and all citizens are now included in the universal health insurance system. Individuals with a domestic monthly income more than one-third of

the gross minimum wage will pay universal health insurance premium commensurate with the amount of their income.

10. EDUCATION, TRAINING AND AWARENESS RAISING STRUCTURES

Education, training and awareness raising in the field of occupational safety and health can be organized with different content and methods for different interest groups, e.g. school education, professional education, public education etc.

10.1. Education at vocational schools (Ministry of National Education)

The Directorate General of Vocational and Technical Education of the Ministry of National Education are responsible for this education. Vocational and Technical High Schools conduct programmes between the 9th and 12th grades. Various kinds of vocational and technical high schools provide the opportunity to study, e.g. high schools on technical and vocational training, tourism high schools, law high schools, communication high schools, health services high schools etc. Students take courses on mathematics, physics, history, etc. during 9th grade as part of general education. Students take occupational safety and health courses as well. At this grade general information on OHS is taught, such as workplace safety, occupational accidents and occupational diseases, as well as some information on the legislation of occupational health and safety. Between the 10th and 12th grades, students take more specific courses according to their area, such as metal work, printing, health services, laboratory work, chemistry, food production, textile, etc. Schooling at vocational and technical high schools is at 43%. More than 1 million students attended 3681 vocational and technical high schools (Table 10.1). Graduates of vocational and technical high schools can apply for university education as graduates of general high schools.

Table 10.1 Number of vocational and technical schools, teachers and students, 2003-2004

School	Number of schools	N	Number of students		
		Male	Female	Total	
Technical high school	2074	474 831	227 801	702 632	46 462
Trade and tourism high school	811	167 924	122 176	290 100	15 319
Religious vocational high school	452	56 617	40 872	97 489	7 631
Schools of special education	38	1595	894	2 489	278
Health services school	3	159	463	622	44

Other vocational schools	303	9 997	26 152	36 149	4 264
Total	3681	711 123	418 358	1 129 481	73 998

10.2. Education and training at university level

10.2.1. Graduate education

Occupational health courses have been present in the curriculum of medical schools since the 1960s. Courses were given by public health departments, however, during the last decade an increasing interest in occupational diseases has developed among some clinicians, mostly among chest physicians. The duration of these courses range between 9 and 15 hours, and are given in the 1st, 3rd, 5th and 6th years of 6-year medical school.

Over recent years some engineering, architecture and science faculties at 32 state universities and 3 private universities have started to give 2-to-3-hour occupational safety and health courses.

A recent change with the Omnibus Law of 23.04.2015 (No. 6645, Article 69) made occupational health and safety courses compulsory in the curriculum of every programme in universities and vocational high schools.

10.2.2. Post-graduate education

Some universities provide post-graduate education programmes through the Institute of Public Health or Institute of Health Sciences. As part of the postgraduate training programmes, 16 universities conduct master's programmes and 6 universities provide doctoral programmes on occupational safety and health. A master's programme is completed in two years (four semesters) and doctoral programme in 4 years (eight semesters). Most students on masters' programmes have an engineering or biology background, while graduates of medical school mostly apply for doctoral programmes.

Education and training on occupational safety and health is a sub-speciality programme for specialists of internal medicine, chest diseases and public health. Physicians work as a resident in these areas for 4 years, and then apply to the sub-speciality programme for 3 years. The programme is conducted in collaboration with the three specialty areas. The residents of the sub-specialty programme have rotational work in these three fields and other rotations in various departments, such as neurology, dermatology, ear-nose and throat, toxicology. After rotations, residents work at an occupational disease clinic and some departments of the Ministry of Labour and Social Security.

10.2.3. Vocational high-schools

Another programme provided by the universities is the 2-year vocational training programme on occupational safety and health. 36 state universities and 21 private universities conduct these programmes. The first year of the programme focuses on theoretical education, whereas in the second year, both theoretical education and practical training in the workplace are conducted together. Graduates of this programme are preferred by workplaces. Recently, a 4-year licence programme was started in 5 universities. The first students will graduate in 2016.

In some universities, occupational safety and health research and implementation centres organize scientific meetings or education and training programmes for professionals in the field.

10.3. Education and training of OHS professionals

Awareness in the field of occupational safety and health has shown a considerable increase during the last 2 – 3 decades. Although the first Labour Law of 1936, and the General Health Law of 1930 defined workplace health services and the employment of a workplace physician, no important activity on education and training of workplace physicians was seen until the 1980s. The Regulation on workplace health services and employment, and working conditions of a workplace physician were declared in 1980. Based on the General Health Law (Article 180) workplaces employing 50 or more workers should establish a health service organization in the workplace and employ a physician. The Regulation described the conditions of workplace health services and indicated "certificate training" for the workplace physicians.

Turkish Medical Association initiative: In 1987, the Turkish Medical Association established the "occupational health unit" with the aim of developing and implementing a training programme for workplace physicians. The first certificate training programme was carried out in 1988 with the participation of 38 physicians. The training programme was well recognized and accepted, and there was excessive demand for the training. Following the first training, a series of trainings were carried out and the number of certified physicians increased rapidly. The education of workplace physicians was initiated by the Turkish Medical Association, and served also to standardize workplace health services. After more than 10 years of implementation, the Labour Law of 2003 (No. 4857) gave the responsibility of organizing and implementing training programmes for workplace physicians and occupational safety experts to the Ministry of Labour and Social Security. The Ministry organized a technical committee on training and developed a 220-hour (180-hour theoretical and 40-hour practical) training programme for workplace physicians and occupational safety experts. Physicians and engineers take an exam at the end of courses, and successful candidates receive certification.

Impact of the OSH Law: The OSH Law made it compulsory to employ an OSE and described the requirement of risk assessment. The Law also made it compulsory to provide occupational health and safety service to all workers, regardless of the number of workers, both in public and private companies, without exception. Therefore, a great need for "certified" physicians and occupational safety experts appeared, and thousands of physicians, engineers, architects, and technical personnel applied for the training programmes to get the certificate. Certificate programmes for occupational safety experts are categorized into three classes, namely (A), (B), and (C). These classes are related to the "hazard class" of the workplaces. According to the Law, workplaces are divided into three groups based on their hazard status: highly hazardous, hazardous and less hazardous. The C Class certificate gives the right to work only in less hazardous workplaces; the B Class certificate gives the right to work in hazardous and less hazardous workplaces; and with A Class certification OSE has the right to work in enterprises of all hazard classes. Besides, the obligation to recruit an occupational safety expert holding an (A) class certificate in workplaces classified as highly hazardous shall be considered to be fulfilled with the recruitment of an occupational safety expert holding an (B) class certificate until 1/1/2018; and the obligation to recruit an occupational safety expert holding a (B) class certificate in workplaces classified as hazardous shall be considered to be fulfilled with the recruitment of an occupational safety expert holding a (C) class certificate until 1/1/2017.

In addition to an occupational physician and an occupational safety expert, other health personnel (nurse, health technician, emergency health technician, and environmental health technician) are also recruited.

10.4. Education and training of workers and employers

The employer is responsible for providing trainings to inform the workers and workers' representatives taking into account the characteristics of the enterprise for the purposes of

ensuring and maintaining the occupational health and safety. In these training sessions, more "tailored" programmes can be developed and applied, specific to the workplace. Health and safety risks in the workplace, their possible harms and methods of prevention are discussed with the workers, and the principles of safe work, primary prevention measures, and the importance of periodic health examinations are explained. Although not so frequent, there are good examples of these kind of education and training programmes. According to the Law all the education and training programmes are carried out during the working hours of the workers.

10.5. Education and training conducted by trade unions

Both employers' and employees' associations have education and training programmes on occupational safety and health. These programmes usually focus on legislation issues, particularly on rights and responsibilities of workers and employers.

10.6. Public education and awareness programmes for adults

Public education is the duty of the Ministry of National Education. The Directorate General for Lifelong Learning of the Ministry creates various programmes to provide information to the community to increase knowledge and awareness in various issues. The establishment of this General Directorate goes back to 1913. After the establishment of the Turkish Republic, a basic primary school education programme was started for those who never attended school and were illiterate. In 1960, the Directorate General of Health Education was established, and eventually became the Directorate General of Lifelong Learning in 2011. Among other education and training programmes for the general community, some modules were developed regarding health and safety in general, or in the field of working life. Some examples of the modules regarding occupational safety and health are "Occupational Safety and Health", "Competency-Based Occupational Health", and "Occupational Safety and Health in Hazardous and Highly Hazardous Works". All people with primary school education and are capable of doing the work can apply for these education and training programmes.

10.7. Education and awareness programmes for media

Although there are education and awareness programmes for media representatives in the sense of "health literacy", no specific programme has been implemented particularly on occupational safety and health.

10.8. Education and training activities of the MOLSS

Education and training of occupational safety and health professionals is the responsibility of the MOLSS. The Ministry also has programmes for education and training of workers. For education and training of different groups the MOLSS set up the ÇASGEM. The Centre has provided free occupational safety and health education and training to thousands of workers in different sectors. Before the provision of certification programmes on occupational safety and health training were opened to private institutions, ÇASGEM was responsible for organizing these programmes, and thousands of workplace physicians and OSEs attended courses to earn the certificate. ÇASGEM also provides training programmes on various issues relevant to work and work safety. Many of these education and training programmes are organized for free as social responsibility programmes. Detailed information on ÇASGEM and its activities can be found in Section 2.

10.9. Education and training activities of professional institutions

The Turkish Medical Association (TTB) and Turkish Architects and Engineers Association (TMMOB) have a special interest in occupational safety and health training. The first organization of workplace physician training programmes was started by the TTB in 1988, until Labour Law No. 4857 came into force in 2003. The TTB organizes symposiums and congresses focusing on various topics and publishes a periodic journal on occupational health and safety. The TMMOB also organize scientific meetings in the area. The Association recently published an expert report on the Soma Disaster. The member chambers under the association organize scientific meetings as well. The Occupational Health and Safety Specialists' Association and some other associations organize education and training programmes and scientific meetings in the field of occupational safety and health. A summary of education, training and awareness programmes are shown in Table 10.2.

Table 10.2. Summary of Education, Training and Awareness Programmes

Types of education	Provider organization	Details
Vocational schools	MoNE,	4 years education
	Vocational High Schools	3681 schools
		1 129 481 students
University	Undergraduate	Medicine: 9-15 hours
		Engineering (some):2-3 hours
	Postgraduate	Masters: 16 universities
		Doctorate: 6 universities
		Sub-specialty training
	Vocational High Schools	2 years
		4 years (new)
OHS Professionals	T. Medical Association	Workplace physicians
	MoLSS	OSEs
	Private institutions	Certificate training (220 hrs.)
Workers and employers	Workplace physician	In-service training
	OSE	Workplace issues
Trade unions		OHS awareness for members
Public education	MoNE; Lifelong learning	OHS awareness; general public
Media		No systematic programme
MoLSS	MoLSS	OHS Week activities
		International Conferences
	ÇASGEM	Education for workplaces
Professional institutions	T. Medical Association	Members
	Turkish Arc. Eng. Assoc.	Scientific meetings, congresses

11. SPECIALIZED, TECHNICAL, MEDICAL AND SCIENTIFIC INSTITUTIONS

There are a number of institutions specialized in technical or medical areas related to health and safety in the field of occupational safety and health. Some of these institutions provide education and training, some technical and scientific support, some have a function of control and inspection and some provide help in case of an emergency.

11.1. Institute of Occupational Safety and Health Research and Development (İSGÜM)

iSGÜM was established in 1969 as a sub-ordinate of the Ministry of Labour and Social Security. The Institute has given technical and laboratory support to workplaces for many years. In addition to this function, iSGÜM organizes education and training programmes for health and safety professionals, and has recently started to perform tests for compliance with standards as well. iSGÜM takes samples of personal protective devices and examines them to determine if they meet the relevant standards. Recently, iSGÜM has started to authorize private institutions as occupational hygiene measurement, test, and analysis laboratories. Through this implementation, iSGÜM will no longer provide laboratory services, instead it will authorize and inspect private laboratories in the field. The Institute carries out these functions through its centre in Ankara and 8 regional institutions throughout the country. More information on iSGÜM can be found in Section 8.2.

11.2. Turkish Standards Institute (TSE)

Turkish Standards Institute (TSE) is an institution affiliated to the Ministry of Science, Industry and Technology. It publishes standards in various fields, including occupational safety and health and encourages the use of those standards. The TSE has adopted some of the important international standards in occupational safety and health, and published more than 900 national standards. The Institute certifies the workplaces and institutions implementing the relevant standards properly. More information on the TSE can be found in Section 2.3.

11.3. Turkish Atomic Energy Authority (TAEK)

The General Secretariat of the Atomic Energy Commission was established in Ankara in 1956 as an affiliated organization of the Prime Ministry. In 1982, the Commission was restructured and the name was changed to the Turkish Atomic Energy Authority. Construction of a research reactor began in 1959 in Istanbul and the reactor started operation in 1962. A few years later, a second reactor was established in Ankara in 1967. In 1979 a Nuclear Agriculture Centre was established in Ankara. The Centre was restructured in 1999 as the Ankara Nuclear Agriculture and Livestock Research Centre.

TAEK declared several Regulations on Nuclear safety (18 Regulations on licensing nuclear installations, principles for safety nuclear power plants, notification and reporting of unusual events, etc.), Radiation safety (7 Regulations on protection and licensing in industrial radiography, radiation safety inspections and enforcements, waste from use of radioactive materials, licensing of facilities incorporating ionizing radiation sources used for medical treatment purposes, etc.) and produced files on nuclear and radiological emergency preparedness, protection of workers, radioactive waste management, and transportation of radioactive materials. TAEK has signed and ratified many international multilateral Agreements, bilateral Agreements and Agreements on the early notification of nuclear accidents. TAEK also produces Personal Dosimeters, Radiation Monitors, and Portable (www.google.com.tr/webhp?sourceid=chrome-Radiation Dose Rate Meters. instant&ion=1&espv=2&ie=UTF-8#q=TAEK)

11.4. Scientific and Technological Research Council of Turkey (TUBITAK)

TUBITAK was founded in 1960, as a scientific council to guide the Ministry of Defence, and later became the Scientific and Technological Research Council of Turkey. At the time of its establishment, TUBITAK's prime task was to support basic and applied research, particularly in natural science. To carry out these tasks several research grant committees were set up to fund projects, such as on basic sciences, engineering, medicine, agriculture, social sciences and humanities, etc. TUBITAK supports many projects in these areas. (www.google.com.tr/webhp?sourceid=chromeinstant&ion=1&espv=2&ie=UTF-8#q=TUBITAK)

11.5. Disaster and Emergency Management Presidency (AFAD)

History of AFAD goes back to 1919, when the International Union of Geodesy and Geophysics (IUGG) was established by 65 countries' participation. Turkey for the first time participated in the General Assembly of International Union of Geodesy and Geophysics in 1948, however did not attend the consecutive meetings. Turkey's National Geodesy, and Geophysics Association was founded in 1968. AFAD was established in 2009 to take necessary measures for effective emergency management and civil protection nationwide in Turkey. AFAD activities can be at three phases: pre-incident activities (preparedness, mitigation and risk management), during-incident work (response to incident) and post-incident work (recovery and reconstruction). In a disaster and emergency situation, AFAD is the only responsible organization, providing coordination between governmental and non-governmental organizations in all activities. AFAD reports to the Turkish Prime Ministry. (www.afad.gov.tr)

11.6. Toxicology Laboratories

The National Toxicity Counselling Centre was founded in 1986 under the Ministry of Health. The Centre serves via toll-free telephone counselling 24 hours daily. The number of calls during the early years was between several thousand to 20 thousand calls annually, and then increased after 2006, reaching more than 100 thousand calls.

Some universities have established Toxicity Counselling Centres serving 24 hours:

- Hacettepe University Drug and Poison Counselling Centre (HIZBIM): established in 1992, serves during office hours.
- 9 Eylül University Toxicity Counselling Centre: established in 1993, 24 hours service, handling 5000 telephone counselling calls annually.
- Uludağ University Toxicity Counselling Centre: established in 1995, 24 hours service.
- Yeditepe University Drug and Poison Counselling Centre: established in 2005.
- Hacettepe University Medicinal Chemistry Research, Development and Implementation Centre, was founded in 1996 to carry out studies on the analysis and development of drugs.

12. AVAILABLE HUMAN RESOURCES IN THE AREA OF OSH

12.1. General information

The main human resource in the field of occupational safety and health services are occupational physicians and other health personnel, and occupational safety experts. This group mainly provide the occupational safety and health services. The other group in this field is the labour inspectors that are responsible for OSH and Occupational Safety and Health Experts employed at ISGGM.

The concept of the occupational physician has been an issue since 1930, based on the General Health Law No. 1593. However the qualification and training of physicians was regulated for the first time with a By-Law in 1980. Safety and health inspectors have also been working at the Ministry of Labour and Social Security since the first Labour Law in 1936. On the other hand, occupational nurses and OSEs were introduced as a new concept by the Law No. 4857 in 2003.

Regardless of the number of workers and type of enterprise, the employer should provide occupational safety and health services for all workers as indicated by the Occupational Safety and Health Law (No. 6331, 2012). Workplaces may establish a safety and health unit in the workplace and employ both health personnel and OSE, or they may take the services from a Joint Health and Safety Centre (JSHU/OSGB). However, if a workplace will employ a full-time occupational physician or OSE based on the hazard class of the workplace and number of workers, the employer has to organize a safety and health unit in the workplace.

If the employer meets the criteria of being occupational physician or OSE defined by the relevant legislation, they are able to undertake the services. Occupational safety and health professionals are accountable to the employer within the scope of their authorities while the employer shall have a duty to ensure the safety and health of workers in every aspect related to the work. These OSEs will communicate to the employer on safety and health matters. In case of a risk which bears a critical threat, when employer fails to take the necessary action to manage it, occupational safety and health professionals shall apply to the Ministry directly.

12.2. Occupational physicians

Occupational physicians are certified based on a 220-hour theoretical education and practical training scheme. Forty hours of the course should be practical training at a workplace where a full-time occupational physician is working. In the beginning, the education and training courses were provided by the Labour and Social Security Training and Research Centre of the Ministry of Labour and Social Security. A few years later, the Ministry opened the courses to private institutions, providing the standards defined by the relevant regulation were met. However, the examination after the courses was carried out by the Measuring, Selection and Placement Centre (ÖSYM), an official organization of the Higher Educational Council (YÖK). By July 2015, 175 private education centres organized the courses and a total of 26,872 physicians had been certified.

12.3. Other health personnel

Certification of other health personnel is carried out by the Ministry based on a proficiency examination prepared by ÖSYM. The personnel holding a provisional certificate are obligated to receive training until 30/06/2016. Furthermore, these personnel must pass the exam for other health personnel until 1/7/2017.

Half of this programme can be arranged as distance training, and other half as in-class training. Public organizations and institutions authorized by the Ministry to provide training for occupational

safety experts, occupational physicians, and other health personnel, universities, and training facilities established by the companies operating under the Turkish Code of Commerce no. 6102 dated 13/1/2011, which provide training for physicians, also organize trainings for nurses, health technicians, emergency health technicians, and environmental health technicians.

12.4. Occupational safety experts

Occupational safety experts are certified based on a 220 hours theoretical education and practical training. Forty hours of the course should be practical training at a workplace where an OSE is working. For the occupational safety experts to be recruited, they must hold at least an (A) class certificate for the workplaces classified as highly hazardous, at least a (B) class certificate for the workplaces classified as hazardous, and a (C) class certificate for the workplaces classified as less hazardous. However, the obligation to recruit an occupational safety expert holding an (A) class certificate in workplaces classified as highly hazardous shall be considered to be fulfilled with the recruitment of an occupational safety expert holding an (B) class certificate until 1/1/2018; and the obligation to recruit an occupational safety expert holding a (B) class certificate in workplaces classified as hazardous shall be considered to be fulfilled with the recruitment of an occupational safety expert holding a (C) class certificate until 1/1/2017.

Initially education and training programmes were only organized by the MOLSS at the beginning, but were later opened to private institutions, based on standards defined by the relevant regulation. Examination after the courses is done in the same way as for physicians. By June 2015 a total of 87 207 people have been certified at A (13 319), B (7 969) and C (65 919) classes. The certificate of an OSE can be suspended in cases of failure to take necessary preventive measures due to negligence in case of an accident.

12.5. Occupational safety and health professionals at the workplaces

The population of Turkey was 76,667,864 in 2013. As of 2013, a total of 12,484,113 workers were working at 1,611,292 workplaces. Almost half (43.9%) of the workplaces were in the three big cities (Istanbul: 469,149, Ankara: 127,091, İzmir: 111,670 workplaces) and about the same proportion (44.6%) of the workers are employed in these cities. Workplaces employing 2000, 1000 and 750 workers should employ a full-time physician at low, middle and high hazard classes respectively. The numbers for the employment of a full-time OSE are 1000-500 and 250. The number of workplaces employing 750 or more workers is 519 (0.04%) and the number workplaces employing 250 or more workers are 3836 (0.25%). Only 16.4% of the workers are working in workplaces employing 250 or more workers (Tables 12.1.a and 12.1.b). According to the relevant legislation, a very small number of workplaces employ 250 or more workers, i.e. will employ a full-time physician and expert (considering that all these workplaces are at high hazard class). Therefore most of the workplaces do not have to establish "in-house" safety and health unit; they can receive safety and health services form joint safety and health units.

Table 12.1.a. Number of workplaces employing 250 or more workers

	250-499	500-749	750-999	1000+
Number	2663	654	229	290
Percent of total	0.17	0.04	0.02	0.02

Table 12.1.b. Number of workers employed at workplaces employing 250 or more workers

	250-499	500-749	750-999	1000+
Number	903 343	392 519	195 973	567 397
Percent of total	7.2	3.1	1.6	4.5

More than 27 thousand physicians have been certified as occupational physicians and almost 90 thousand people certified as OSEs, most of whom have Class C certification. However less than half of the certified physicians and only one-in-four of the OSEs are actively working in the field (Table 12.2).

Table 12.2. Number of occupational safety and health professionals and number actively working (July 2015)

Profession	Number certified	Number working	Percent working
Occupational	27,360	10,932	40.0
physician			
OSE, Class A	13,370	5,431	40.6
OSE, Class B	8,326	4,426	53.2
OSE, Class C	66,543	13,507	20.3
Other Health	125,021(*)	2,271	1.8
Personnel			
Teacher	3826	1621	42.4

^(*) number of all nurses available to be "occupational nurse"

In total more than 200 thousand contracts had been signed with occupational physicians and almost 250 thousand contracts with OSEs by July 2015. The number of personnel eligible to be recruited as other health personnel is 125 thousand. Total number of contracts of workplace physicians, OSEs and other health personnel are shown at Table 12.3.

Table 12.3. Total number of contracts of occupational physicians, OSEs and nurses (July 2015).

	Personal contract	Contract by JOSU ^(*)	Contract by CHC	TOTAL
Physician	41 028	183 946	861	225 835
OSE	57 831	186 124	310	244 265
Class A	19 992	55 308	134	75 434
Class B	13 264	50 796	20	64 080
Class C	24 575	80 020	156	104 751

Ministry of Labour and Social Security, 2015

^{*} JOSU; OSGB: Joint Occupational Safety and Health Unit

^{**} CHC; TSM: Community Health Centre Unit

12.6. Labour inspectors

Inspection and enforcement issues are dealt with by the Ministry of Labour and Social Security. Within the Ministry, there is a separate department on inspection as one of the advisory and inspection units. There are two main groups of inspectors; the technical group and the social group. Social group inspectors deal with the implementation of general issues regarding working life, i.e. legal records in the workplace, basic records of the workers, labour turnover and distribution, insurance records and premiums, etc. Overall, 1005 labour inspectors are working for the inspection of 1.6 million workplaces; 587 are technical and 418 are social. Details of labour inspectors and the inspection system can be found in Chapter 3.

12.7. Occupational Safety and Health Experts

Occupational Safety and Health Experts, who make up almost half of the human resources at the Directorate General of Occupational Safety and Health of the Ministry of Labour and Social Security are career personnel employed under the Civil Servants Act no. 657. Stepping into this profession following a competitive exam, OSH assistant experts are entitled to become OSH Experts once they successfully defend their thesis, obtain the necessary language proficiency, and pass the written and oral exams following a 3-year training. One of the main areas of responsibility for the OSH Experts is to follow and interpret the national and international legislation on OSH, and, when necessary, draw up reports about such legislation containing summaries and reviews thereof. Employed at the Directorate General since 2004, OSH Experts have made largest contribution to the recent efforts in Turkey for the harmonization of the Turkish OSH legislation with ILO conventions, EU directives, and international norms as well as the execution of various projects for the implementation of the legislation. Furthermore, OSH Experts are also assigned with such duties as the authorization and inspection of Joint Safety and Health Units (JSHU) which provide OSH services, of training institutions which provide training in this field, and of the laboratories which provide occupational hygiene measurement, test, and analysis services.

13. OCCUPATIONAL ACCIDENTS AND DISEASES (OHS INDICATORS)

13.1. Notification of occupational accidents and occupational diseases

The two essential indicators specific to working life are occupational accidents and occupational diseases. These indicators reflect the general conditions of occupational safety and health in the country, as well as the health status of the working group. According to the Occupational Safety and Health Law (No 6331, 2012), the employer shall keep a list of occupational accidents and occupational diseases and shall notify the Social Security Institution of these within 3 working days. Near-miss accidents in the workplace should also be recorded by the employer. Occupational physicians or health care providers shall refer workers with pre-diagnosis of occupational diseases to health care providers authorized by the Social Security Institution. These authorized health care providers shall notify the Social Security Institution within 10 days when diagnosis of occupational disease is confirmed. The health care provider shall provide notification of occupational accidents within the same period.

13.2. Occupational accidents

Occupational accident rates have declined considerably during the last 40 years in Turkey. However, Turkey still has high rate of occupational accidents. The rates fell to less than 1% during the last years, but the latest figure of 2014 occupational accident rate was 1.6% (Table 13.1, Figure 13.1). Almost three quarters of occupational accidents occur during the daytime, between 08.00 and 18.00. This is predictable since more people are at work during these hours and more work is being done.

Table 13.1. Occupational accidents, Turkey, 1995-2014

Year	Number of	Number of	Occupational	Number	Mortality*	Fatality**
	workers	occupational	accident per	of deaths	rate per	rate per
	x1000	accidents	100 workers		100 000	1000
1995	4 411	87 960	1.99	919	20.8	10.4
2000	5 254	74 847	1.42	731	13.9	9.8
2005	6 919	73 923	1.06	1 048	15.1	14.2
2006	7 819	79 027	1.01	1 583	20.2	20.0
2007	8 505	80 602	0.94	1 043	12.3	12.9
2008	8 803	72 963	0.82	865	9.8	11.9
2009	9 030	64 316	0.71	1 171	13.0	18.2
2010	10 031	62 903	0.63	1 444	14.4	23.0
2011	11 031	69 227	0.63	1 700	15.4	24.6

2012	12 527	74 871	0.60	744	5.9	9.9
2013	11 940	191 389	1.60	1 360	11.4	7.1
2014	13 967	221 366	1.58	1 626	11,6	7.3

Social Security Institution, Statistics Yearbooks

^{**} Fatality rate is number of deaths divided by number of injured.

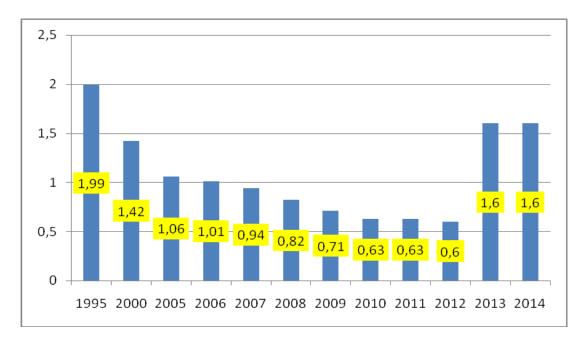


Figure 13.1. Occupational accident rates, Turkey, 1995-2014* (per 100)

Almost half (48.9%) of occupational accidents occur during production, manufacturing, processing and storing activities (Table 13.2). About one in ten accidents occur in excavation, construction, repair and demolition works.

Table 13.2. Occupational accidents by activities, Turkey, 2014

Activity	Number	Percent
Production, manufacturing, processing, storing, not specified	105 538	47.7
Excavation, Construction, Repair, Demolition, Not specified	19 177	8.7

^{*} Mortality rate is number of deaths divided by number of employees.

^{*} Until 2013 numbers represent the accidents all the official procedures are completed. 2013 numbers represent all the notified accidents regardless of the procedures completed.

Movement, sport, artistic activity, Not specified	6 672	3.1
Service provided to enterprise and/or to the general public; intellectual activity, Not specified	4 592	2.1
Agricultural type work, forestry, horticulture, fish farming, work with live animals, Not specified	1 300	0.6
No information	8 477	3.8
Other working processes not listed in the above	71 248	32.2
Total	221 366	100.,0

Social Security Institution, Statistics Yearbook, 2014

The most commonly injured organs in occupational accidents are upper and lower extremities, and the head. In 38.7% of the accidents upper extremities are injured, followed by lower extremities; one every five accidents (Table 13.3, Figure 13.2). Almost half (45.7%) of the injuries are in the form of wounds or superficial injuries. Dislocations, sprains and strains come second with 14.3% (Table 13.4, Figure 13.3).

Table 13.3. Accident by injured part of the body, Turkey, 2014

Part of the body injured	Number	Percent
Upper Extremities, not further specified	85 566	38.7
Lower Extremities, not further specified	42 223	19.1
Head, not further specified	26 349	11.9
Back, including spine and vertebra in the back	5 615	2.5
Torso and organs, not further specified	4 823	2.2
Whole body and multiple sites, not further specified	5 086	2.3
Neck, inclusive spine and vertebra in the neck	1 393	0.6

Other Parts of body injured, not mentioned above	39 298	17.8
Part of body injured, not specified	11 013	5.0
Total	221 366	100.0

Social Security Institution, Statistics Yearbook, 2014

Type of injury	Number	Percent
Wounds and superficial	101 158	45.7
injuries		
Dislocations, sprains and	31 571	14.3
strains		
Bone fractures	17 202	7.8
Burns, scalds and frostbites	5 626	2.5
Poisonings and infections	4 075	1.8
Concussion and internal	895	0.4
injuries		
Traumatic amputations (Loss	570	0.3
of body parts)		
Drowning and asphyxiation	41	0.0
Effects of sound, vibration and	144	0.1
pressure		
Effects of temperature	139	0.1
extremes, light and radiation		
Shock	521	0.2
Multiple injuries	1 338	0.6
Other specified injuries not	47 389	21.4
included under other headings		
Type of injury unknown or	10 697	4.8
unspecified		
Total	221 366	100.0

72

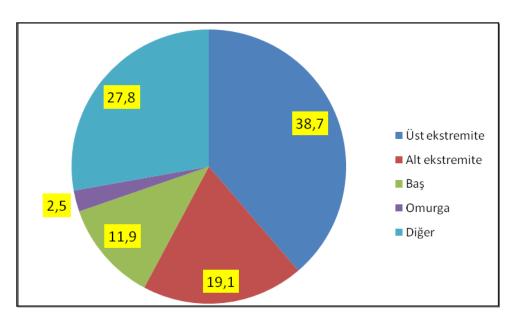


Figure 13.2. Accidents by injured part of body, Turkey, 2014

Table 13.4. Accidents by type of injury, Turkey, 2014

Type of injury	Number	Percent
Wounds and superficial injuries	101 158	45.7
Dislocations, sprains and strains	31 571	14.3
Bone fractures	17 202	7.8
Burns, scalds and frostbites	5 626	2.5
Poisonings and infections	4 075	1.8
Concussion and internal injuries	895	0.4
Traumatic amputations (Loss of body parts)	570	0.3
Drowning and asphyxiation	41	0.0
Effects of sound, vibration and pressure	144	0.1

Effects of temperature extremes, light and radiation	139	0.1
Shock	521	0.2
Multiple injuries	1 338	0.6
Other specified injuries not included under other headings	47 389	21.4
Type of injury unknown or unspecified	10 697	4.8
Total	221 366	100.0

Social Security Institution, Statistics Yearbook, 2014

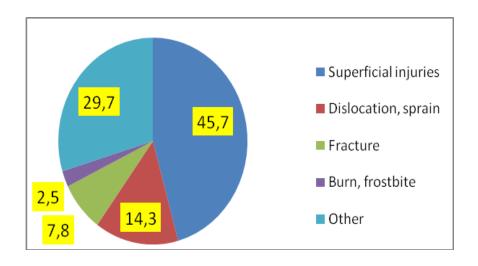


Figure 13.3. Accidents by type of injury, Turkey, 2014

Fatal occupational accidents are more common in Turkey, compared to European countries. In 2014, 1626 workers died (1589 males and 37 females) due to accidents, with an accident mortality rate of 11.6 per 100,000 (Table 13.1 and Figure 13.4). Accident mortality rate is in the range of 1 to 6 per 100,000 in most European countries. Although mortality rates during the last years have been less than 20 year ago, nevertheless no significant trend is observed in mortality rates.

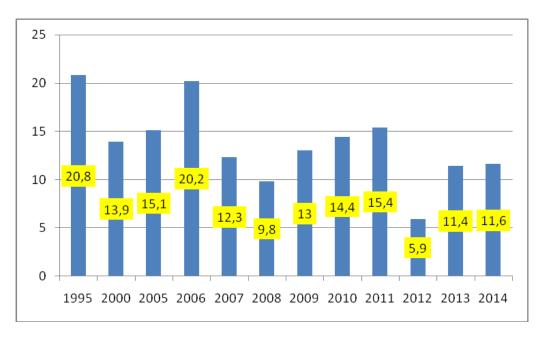


Figure 13.4. Occupational accident mortality rates, Turkey 1995-2013 (per 100 000)

(Mortality rate is number of deaths divided by number of employees)

more than half (56,2%) of occupational accident deaths occurred in the 25-44 years age groups (Table 13.5, Figure 13.5). In terms of occupational groups, more than half (60.7%) of accident deaths occurred among unskilled workers (973 males and 14 females). Among other occupations, machine operators (265 deaths), craftsmen (143 deaths), and service and sales workers (95 deaths) are seen as significant groups. Among fatalities due to occupational accidents, 521 (38.3%) deaths occurred in construction work, 382 (23.5% in mining, 230 (14.1%) in the manufacturing of various products and 211(13.0 %) in transportation (Table 13.6). Almost one fifth (18.9 %) of accident deaths occurred in three big cities: İstanbul: 243, Ankara: 107 and İzmir: 64 deaths.

Table 13.5. Occupational accident deaths by age groups, Turkey, 2014

Age groups	Number of deaths	Percent
15-17	15	0.9%
18-24	210	12.9%
25-34	443	27.3%
35-44	470	28.9%
45-54	347	21.3%
55-64	132	8.1%
65+	9	0.6%
Total	1626	100.0%

Social Security Institution, Statistics Yearbook, 2014

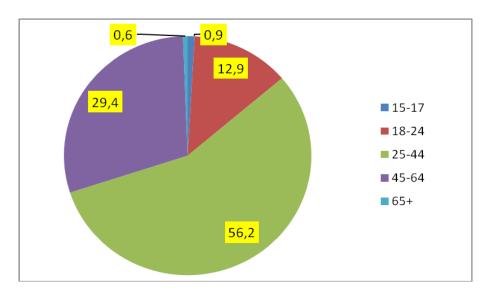


Figure 13.5. Accident deaths by age groups, Turkey, 2014

Table 13.6. Deaths due to occupational accidents by economic activities, Turkey, 2014

Economic activity	Number of deaths	Percent
Construction	501	30.8
Production	230	14.1
Transportation	211	13.0
Mining	382	23.5
Other	302	18.6
Total	1626	100.0

Social Security Institution, Statistics Yearbook, 2013

Although occupational accident rates show a decreasing trend, mortality and fatality rates due to occupational accidents do not show such a decrease. In fact, fatality rates show an upward trend before 2012 (Figure 13.6).

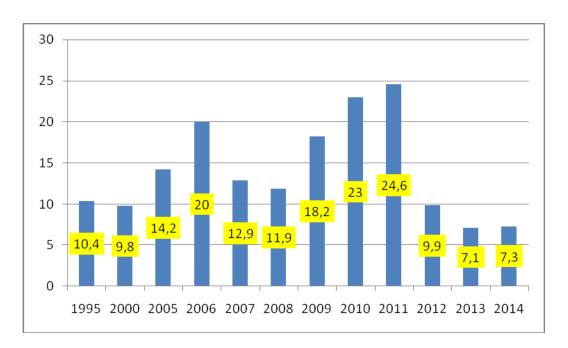


Figure 13.6. Occupational accident fatality rates, Turkey 1995-2014 (per 100 000)

(Fatality rate is number of deaths divided by number of accidents)

Occupational accident rates show an increasing trend by size of the workplaces. The annual rate is 0.7 per hundred at workplaces employing less than 50 workers, and increases to 4.2 percent at much bigger workplaces employing more than 1000 workers (Figure 13.7)

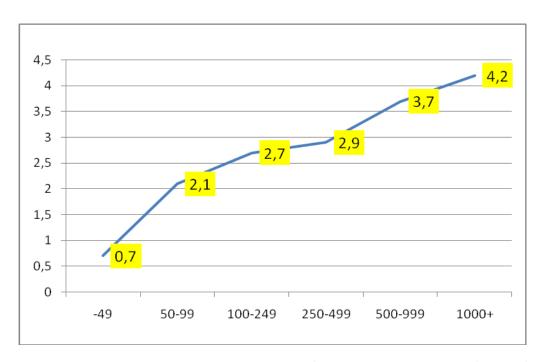


Figure 13.7. Occupational accident rates by size of workplaces, Turkey, 2014 (percent)

13.3. Occupational diseases

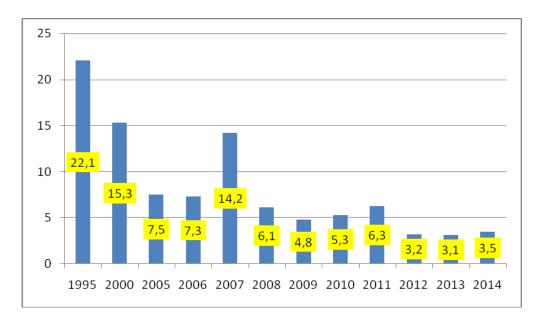
The number of occupational diseases has been unexpectedly low in Turkey. Based on the global rate of occupational diseases (4-12 per thousand workers) the expected number of occupational diseases would be 50-140 thousand annually. However, the annual number of occupational diseases reported is around several hundred cases only. In addition, the frequency of occupational diseases has decreased during recent years (Table 13.7, Figure 13.8). The rates of occupational diseases were between 15 and 22 per 100,000 workers before 2008, and then decreased to less than 5 per 100,000. No one died as a result of an occupational disease in 2013 and 2014.

Table 13.7. Number and rate of occupational diseases, Turkey, 1995-2014

Year	Number of workers x1000	Number of occupational disease	Occupational disease per 100 000 workers
1995	4 411	975	22.1
2000	5 254	803	15.3
2005	6 919	519	7.5
2006	7 819	574	7.3
2007	8 505	1208	14.2
2008	8 803	539	6.1
2009	9 030	429	4.8
2010	10 031	533	5.3

2011	11 031	697	6.3
2012	12 527	395	3.2
2013	11 940	371	3.1
2014	13 136	494	3.5

Social Security Institution, Statistics Yearbooks



Social Security Institution, Statistics Yearbooks

Figure 13.8. Occupational disease rates, Turkey, 1995-2014 (per 100,000)

Occupational diseases are mostly seen among males. In 2014, 470 out of 494 occupational disease cases were among males and only 24 were among females. As for the type of occupational diseases, the most common form is pneumoconiosis due to various dust exposure (115 cases, 23.3%), and hearing impairment due to noise exposure (24 cases, 4.9%). In 230 cases, the diagnosis of the disease was made after the worker retired, therefore definite diagnosis was not recorded. In 2014, most occupational diseases are seen among workers in basic occupations, and in craft and related trades (Table 13.8 and Table 13.9).

Table 13.8. Occupational diseases by occupations, 2014

Occupation	Number	Percent
Plant and machine operators and assemblers	59	11.9

Total	494	100.0
Other occupations	48	9.7
Number of insured diagnosed occupational disease after the end of the insurance	230	46.6
Elementary occupations without specification	117	23.7
Craft and related trades	40	8.1

Social Security Institution, Statistics Yearbook, 2014

In 230 out of 494 occupational diseases, no clinical diagnosis was made because the occurrence of diseases came to light after the retirement of the worker. Eighty five cases of occupational diseases are diseases not listed on the occupational disease list. Among the remaining group, 115 cases of respiratory conditions were diagnosed. Twenty four cases of hearing impairment due to noise exposure, 23 cases of musculoskeletal disease,6 cases of skin were diagnosed (Table 13.9).

Table 13.9. Clinical diagnosis of occupational diseases, Turkey, 2014

Occupational disease	Number	Percent
Respiratory diseases	115	23.3
Hearing impairment	24	4.9
Musculoskeletal disease	23	4.7
Skin conditions	6	1.2
Other diseases	11	2.2
Not in the occupational disease list	85	17.2
Diagnosed after the end of insurance	230	46.5
Total	494	100.0

Social Security Institution, Statistics Yearbook, 2014

Due to the insufficient number of occupational diseases reported, a protocol was signed between the Ministry of Labour and Social Security and the Ministry of Health in 2010 to reach more cases of occupational diseases. The project was started with the aim of increasing awareness among health care providers to obtain more information about the occupation of their patients. As part of the project, the number of hospitals having the right to carry out the clinical diagnosis of an occupational disease was increased by authorizing the state university hospitals and the teaching hospitals of the

Ministry of Health. By mid-2015, a total of 168 hospitals were able to carry out the clinical diagnosis of occupational disease, including 49 state university hospitals and 119 Ministry of Health hospitals. These hospitals will refer cases to the Social Security Institution for a final decision on compensation.

According to the Occupational Safety and Health Law (No 6331, 2012), the final diagnosis and final decision of an occupational disease is carried out by the Social Security Institution. Current implementation of reporting occupational disease gives greater opportunity to inform the Institution regarding an occupational disease. Any physician working at a health care provider organization (occupational physician, primary care physician, hospital physician, etc.) can report the case to the Social Security Institution via the authorized hospitals. Even a person (working or retired) can directly apply to the Institution with the claim of an occupational disease. This application is conveyed to one of the authorized hospitals for evaluation. The final diagnosis and compensation issues are the right and responsibility of the Social Security Institution.

As part of the first three phases of the project, a series of seminars were organized aiming at increasing awareness among physicians and social partners in 2011, 2012 and 2013. The Project was planned to be finalized in 2015 and pilot implementation will be started.

In addition to the statistics collected by Social Security Institution, Ministry of Labour and Social Security carried out survey in 2013 on "Occupational Accidents and Work Related Health Problems, covering a total of 42 360 households. During the past 12 months period, 2.3% of the employed people in these households had an occupational accident, and 2.1% experienced work-related health problem (National Policy Document and Action Plan (No. III) on Health and Safety at Work, 2014-2018).

14. POLICIES AND PROGRAMS OF EMPLOYERS' AND WORKERS' ORGANIZATIONS

In the "tripartite approach" to working life, employers and workers are the two essential parties; the third party is the government. Workers and employers share the same setting in the workplaces, while the government establishes the regulations to indicate the duties and responsibilities of both sides in order to provide a safe and healthy workplace, i.e. to ensure the peace in working life.

14.1. Employers' organizations

The employer side can be a government institution or private sector employer. The most known employer organization belonging private sector is "Turkish Confederation of Employers' Association" (TİSK). Private sector employers have some other organizations, such as Turkish Industry & Business Association (TUSİAD), TOBB, TESK, though among them TİSK is the most involved in occupational safety and health issues.

14.1.1 Turkish Confederation of Employers' Association (TİSK) (tisk.org.tr)

TİSK was established in 1962 as the only employer organization representing 20 employer unions in various fields, such as the cement industries, leather industries, textile industries, pharmaceutical industries and petro-chemical industries. Member employer organizations employ more than 1.2 million workers at almost 10 thousand workplaces. TİSK represents the employer community in structures such as the National Health and Safety Council, Protection from Dust Committee, Hazard Classes Commission, Technical Committee for Personal Protective Equipment, and Social Security Institution.

Member Associations contribute to the improvement of occupational safety and health through several national and international platforms. For instance, the Cement Industry Employers' Association (ÇEİS) acted as a pioneer for the development of OSH management systems. The Turkish Employers' Association of Metal Industries (MESS) provides financial support to its members and undertakes training activities via the MESS Education Foundation which was established by MESS. The Construction Employers Association also gives health and safety training via the Turkish Training Site which was established by the Association and related trade union, namely the Construction Workers Union of Turkey.

TİSK actively participates in the legislation procedures regarding working life and occupational safety and health, and Collective Bargaining meetings. TİSK's main task is to provide advocacy and guidance services for Turkish employers concerning occupational safety and health. Occupational safety and health issues feature significantly in the publications of TİSK, such as Occupational Safety and Health Law (No 6331), Labour Law (4857), Occupational Accidents and Diseases, and Statistics on Working Life.

There is no organization specific to occupational safety and health at TİSK headquarters; nevertheless there are such organizations at several member unions.

14.1.2. Turkish Industrialists and Businessmen Association (TUSİAD) (tusiad.org.tr)

TUSİAD was founded in 1971 as an independent non-governmental organization dedicated to promoting public welfare through private enterprises. In this regard, TUSİAD make comments on legislation on working life and give recommendation to the government. TUSİAD is composed of the high-level managers and executives of major industrial and services companies in Turkey.

14.1.3. Confederation of Turkish Tradesmen and Craftsmen (TESK) (tesk.org.tr)

TESK was founded in 1964 and restructured in 2005 as the highest status occupational organization representing nearly 1.9 million tradesmen and craftsmen working in the service and production sectors. The confederation has a Vocational Training and Technology Centre (METEM) providing professional training for tradesman and craftsmen, and small business workers and employers. It is likely that occupational safety and health issues are mentioned in these training programmes.

14.1.4. Turkish Union of Chambers and Commodity Exchanges (TOBB) (tobb.org.tr)

TOBB was founded in 1950 to lead and guide Turkish entrepreneurs, particularly in small and medium size enterprises. More information on TOBB can be found in section 2.8.

14.2. Workers' organizations

14.2.1. Confederation of Turkish Trade Unions (Türk-İş) (turkis.org.tr)

The confederation of Turkish Trade Unions (Türk-İş) was established in 1952 as the first nationwide trade union organization and covers total of 842 322 members belonging to 33 affiliated unions, holding the biggest number of members within its body. Türk-İş believes that trade unions are for the protection of rights and benefits of the working population. Therefore Türk-İş actively participates in the legislation and implementation of occupational safety and health legislation. According to Türk-İş, legislation is essential, as is training of workers and employers on the issue to develop a safety culture and safe behaviour. For this purpose, Türk-İş organizes education and training programmes on occupational safety and health for its members. Some of these programmes are organized in collaboration with other institutions, such as universities or ÇASGEM.TURK-İŞ has an occupational safety and health unit, one professional is working in.

14.2.2. Confederation of Turkish Real Trade Unions (Hak-İş) (hakis.org.tr)

Hak-İş was established in 1976, and has the membership of 20 affiliated unions and 385 065 workers. Hak-İş is member of national (Economic and Social Committee, Social Security Advisor Board, National Council on Occupational Safety and Health, National Programme on Youth Employment, etc.) and international (ILO General Assembly) organizations. Occupational safety and health is one of the major areas of interest of Hak-İş.

14.2.3. Confederation of Progressive Trade Unions (DISK) (disk.org.tr)

DİSK was founded in 1967, and has 20 affiliates and a total of 143 233 members. DİSK profiles itself as a politically far-left union confederation. DİSK policy mainly focuses on the right to work in acceptable and humane conditions, and the elimination of child labour. The DİSK Research Institute published a report on child labour, citing long hours of work of children and their concern about the exploitation of children under the name of child labour.

The number of unions and members under confederations by July 2015 are seen at Table 14.1.

The number of unions and members under confederations by July 2015 are seen at Table 14.1.

Table 14.1. Number of members and unions under confederations, Turkey, July 2015

Confederation	Number of unions	Number of members
Türk-İş	33	842 322
Hak-İş	20	385 065
DİSK	20	143 233
Aksiyon-İş	85	27 384
Tüm-İş	5	117
Independent	76	30 935
Total	162	1 429 056

Source: Ministry of Labour and Social Security, July 2015

There are also newly organized unions for public workers, namely the Turkish Confederation of Public Employees Associations (Kamu-Sen, 1992), Confederation of Public Employees' Unions (KESK, 1995) and Confederation of Public Servants' Unions (Memur-Sen, 1995). By July 2011, total of 1.2 million public servants out of 1.9 million had been registered to any of the unions, with the unionization rate at 64%.

14.2.4. Turkish Confederation of Public Employees Associations (Kamu Sen) (kamusen.org.tr)

Kamu Sen was established in 1992 as the first public employees association, and represents 450 thousand public employees. It is a confederation of 12 public employee unions. The aim of Kamu Sen is defined as to ensure the protection and promotion of social, economic and professional rights, and cooperation and coordination between the member unions. Kamu Sen has published several books: Report of Social Security Reform, Handbook of Union Representatives, etc.

14.2.5. Confederation of Public Employees' Trade Unions (KESK) (kesk.org.tr)

The Confederation was founded in 1995 with the participation of 11 Unions and has 236,203 members. KESK is affiliated with the International Trade Union Confederation and European Trade Union Confederation. KESK publishes several declarations on various topics relevant to working life and has a special interest in the problems of working women.

14.2.6. Confederation of Public Servants' Unions (Memur-Sen) (memursen.org.tr)

Memur-Sen was established in 1995 with the mission of protecting and promoting economic, social and democratic common rights of its members derived from national and international legislation. Among its tasks, Memur-Sen organizes education programmes such as conferences, seminars and panels. 12 member unions are organized under the Confederation, and it has 836,505 members. Memur-Sen has several publications, such as Social Policy in Public Services and Memur-Sen Gazette.

Until 1980's, more than half of the workers were unionized, mostly among the public sector workers. During the last 3 decades, unionization showed a decreasing trend to around 10 percent (Table 14.2 and Figure 14.1).

Table 14.2. Unionization in Turkey, 1988-2014

Year	Number of workers (x1000)	Unionization (%)
1988	7.170	22,2
1990	7.224	19,8
1995	8 551	14,7
2000	10 485	10,0
2005	11 436	7,8
2010	13 762	5,7
2013 (July)	11 629	8,9
2014 (July)	12 287	9,7

Labour Statistics, Ministry of Labour and Social Security

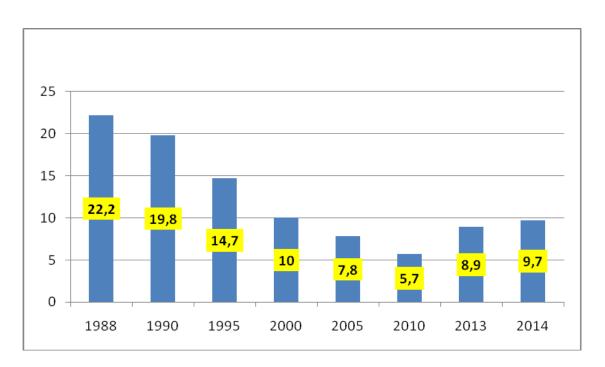


Figure 14.1. Unionization in Turkey, 1988-2014

Labour Statistics, Ministry of Labour and Social Security

15. REGULAR AND ON-GOING ACTIVITIES RELATED TO OCCUPATIONAL SAFETY AND HEALTH

15.1. Scientific meetings and activities organized by government

- The Ministry of Labour and Social Security has been organizing "Occupational Safety and Health Week" activities annually since 1987. Tripartite contribution has been essential to these activities; presidents of all workers and employer organizations give address during the opening ceremony and the Minister of Labour and Social Security opens the week's activities. During the last years the week's activities have been organized on rotation basis as "national" and "international conferences".
- After the establishment of the Workers Health and Safety Directorate at the Ministry of Health, the Directorate organized an occupational safety and health symposium.
- Some universities organize various meetings under the titles of symposiums, workshops or conferences.

15.2. National awareness campaigns

The Ministry of Labour and Social Security have conducted several projects with international collaboration on the issue. Some examples include:

- Health, Environment and Safety Management in Enterprises, 2002-2003 (HESME Project): The Occupational health environment and safety train: A traditional "steam-powered" train travelled all over the country from west to east, visiting provinces over a period of two years. The project was undertaken in collaboration with the World Health Organization (WHO). Conferences on occupational safety and health and protection of the environment were organized for the general public to increase awareness. Speakers from universities and the Ministry gave information on the importance of the issue.
- Regional Awareness-Raising Seminars, 2004-2006 (İSAG Project): An EU-funded project aimed at raising awareness of employers and employees, particularly working at SME's, and upgrading occupational safety and health services. A series of seminars were organized in 10 provinces and in Ankara. The seminars started with the Ankara seminar and ended in Istanbul. The seminars were held in: Ankara (18 March 2005), Bursa (22 March 2005), İzmir (24 March 2005), Adana (18 April 2005), G.Antep (20 April 2005), Malatya (22 April 2005), Samsun (12 May 2005), Konya (24 May 2005), Kayseri (26 May 2005), Kocaeli (24 June 2005), and İstanbul (29 June 2005).
- Improvement of occupational safety and health conditions at workplaces in Turkey (İSGİP Project, January 2010 February 2012): The project focused on SME's functioning in the metal, construction and mining sectors and aimed to reach 10 to 250 employees in each sector. The aim of the project was to develop a model for occupational safety and health management systems for SME's, therefore improving health and safety conditions of workers at work; to improve awareness on safety and health issues; and to ensure the implementation of the relevant EU Acquis in Turkey.

15.3. Activities by workers' and employers' organizations

Employees' and employers' organizations organize many education and training activities in collaboration with each other and government institutions, or independently. Workers' and employers' organizations have education and training centres in various provinces, therefore both organizations organize programmes on working life, as well as programmes on occupational safety

and health. Education and training programmes are sometimes organized for foreign participants from neighbouring countries. Some examples are listed below:

- Collaboration with Ministry of National Education on education and training: According to
 occupational safety and health legislation, workers in hazardous and highly hazardous
 occupations should have a certificate indicating their proficiency to work in the job, before
 starting work. A protocol was signed in 2010 between TİSK and the Ministry of National
 Education, aiming to educate and train workers in hazardous occupations.
- Collaboration with the Institution of Providing Jobs and Employees (İŞKUR) on education and training: A protocol was signed between TİSK and İŞKUR on the GAN (Global Apprenticeship Network, 2013) Project. The project aimed to educate and train workers while they were at work.
- Zero accident project in construction work (2004-2005): A project protocol was signed between The Turkish Employers' Association of Construction Industries (İNTES, intes.com.tr), the Road, Building and Construction Workers Union (YOL-İŞ) and the Centre for Labour and Social Security Training and Research (ÇASGEM) to organize an education and training programme for workers and OSEs working in construction. A total of 218 workers and 71 unemployed people participated in a 120-hour theoretical and practical training programme
- New Horizons for unemployed young project (2004-2005): In collaboration with İNTES, YOL-İŞ and İŞKUR, it organized education and training programmes for the unemployed young to settle them in a job.

15.4. Other NGO activities

- Both the Turkish Medical Association (TTB) and the Union of Chambers of Turkish Architects and Engineers (TMMOB) organize symposiums and congresses in the field of occupational safety and health. The Mechanical Engineers' Association under TMMOB regularly organizes occupational health and safety congresses on a biannual basis. Similarly, many other engineering associations (mining engineers, construction engineers, physics engineers, agriculture engineers, geology engineers, etc.) also organize scientific meetings in the form of symposiums or congresses, and education courses on various topics.
- TTB organizes symposiums and congresses on different areas such as health care workers, and mine workers at two-or-three-year intervals.

15.5. Certification programmes

Certification programmes are organized on occupational safety and health management systems; i.e. on ISO 9000, ISO 14000, OHSAS 18001, etc. by a number of private institutions, mostly based in Istanbul and Ankara. Certification programmes are accredited by the Turkish Accreditation Agency (TURKAK).

16. INTERNATIONAL COOPERATION

Turkey hosts international activities in collaboration with the international organizations ILO, WHO, EU, UNEP, UNDP, and many others. On the other hand, trade unions and employers' organizations have relationships and collaborative activities with their international partner organizations regarding occupational safety and health. Some well-known examples of international collaboration are as follows:

- The main organization for international cooperation in the field of occupational safety and health is the International Labour Organization (ILO). Turkey has been a member of ILO since 1932. Before Turkey's membership of United Nations, Turkey participated in ILO Conferences in an observer status, and then as it joined the United Nations in 1932, it became a member of ILO as well. Turkey participates in the Annual ILO Conferences with a tripartite approach. Turkey ratified 59 of the ILO Conventions, 8 of them directly relevant to occupational health and safety (Number C.81, C.115, C.152, C.155, C.161, C.167, C.176, and C.187) (http://www.ilo.org/public/english/region/eurpro/ankara/about/conventions.htm)
- ILO Technical Assistance Project on Occupational Safety and Health: Following the tragic
 mine accident last year, ILO and tripartite constituents in Turkey have been engaged in a
 collaborative process to develop a Tripartite Roadmap for improving OSH, in particular in
 mining and construction. As part of the process a national tripartite meeting was organized
 jointly by the Ministry of Labour and Social Security and ILO in October 2014.
 (http://www.ilo.org/public/english/region/eurpro/ankara/areas/ta_project_on_occupational_safety_and_health_kicks_off.htm)
- The employment of children is a global concern, as well as in Turkey. Turkey was one of the first countries to implement the IPEC (International Programme on Eliminating Child Labour) Programme. Several projects were conducted as part of the IPEC programme in SMEs, such as furniture manufacturing. Upon successful implementation, Turkey provided guidance to other countries where child labour is worse. In order to eliminate child labour, Turkey collaborated other international organizations: WHO, UNICEF, UNDP, World Bank, FAO and UNFPA.
- An international meeting on "Employment Strategies under Globalization" was held in Istanbul in 2006, in collaboration with ILO.
- There are also other technical cooperation projects; the UN Joint Programme on Harnessing Sustainable Linkage for SMEs in Turkeys' Textile Sector, Auditing and Certification Research, and the ILO/EU Textile Training Project. (http://www.ilo.org/public/english/region/eurpro/ankara/areas/other.htm)
- The Biennial Collaborative Agreement (BCA) between WHO/EURO and the Ministry of Health for 2010-2011 aimed to deliver recommendations for redefining and expanding a package for Primary Health Care (PHC) provision, including basic occupational health services (BOHS). Activities included the preparation of a situation analysis of workers' health in Turkey in 2010 and a stakeholder workshop for national policy towards integration of basic occupational health services into BOHC into PHC system 2011. (http://www.euro.who.int/en/health-topics/environment-and-health/occupationalhealth/country-work).
- The Transnational Network Project under OIC-VET: A cooperation project on Occupational Safety and Health was jointly organized by SESRIC (Statistical, Economic and Social Research and Training Centre for Islamic Countries) and İSGÜM,

- Turkey with the participation of experts and directors of occupational safety and health form 7 OIC member countries in 2010. (http://www.oicvet.org/event-detail.php?id=450).
- As a follow-up to the recommendations of cooperation project, SESRIC and İSGÜM collaboratively developed the OIC Capacity Building Programme and started a survey in order to identify the needs and capacities of OSH institutions of member countries to organize short-term training programmes. Four training programmes were conducted during the 2011-2012 period (http://www.oicvet.org/cbp-ohscab.php). An OIC-Occupational Safety and Health Network (OIC-OSHNET) was proposed to be established among similar local, national and regional institutions in the member countries and a Kick-Off Meeting was organized in Istanbul by SESRIC in 2011. (www.sesrtcic.org/event-detail.php?id=536)
- Turkey participated in the Risk Assessment Campaign organized by the European Occupational Safety and Health Agency (EU-OSHA), which aims to reduce work-related accidents and illnesses by promoting risk assessment as the first step to a sustainable prevention culture. Thirty multinational organizations and companies participated in the Campaign. In the campaign, Turkey organized best the practice contest "collaborate for prevention of risks". (https://osha.europa.eu/fop/turkey/en/documents/eu-risk-assessment-campaign).
- International collaboration of private organizations in occupational health and safety: There are a number of private institutions providing education, training and counselling in the field of occupational safety and health. These companies also have international collaborations: ARME is a training and consultancy company based in Istanbul organizing training courses collaboratively with partner organizations. (http://www.rrc.co.uk/international/turkey.aspx)
- TNO is an international organization, based in the Netherlands collaborating with the Ministry of Health and Metal Industries in Turkey (Turkish Metal Workers' Union and Metal Industries Employers' Union, MESS), and under the name FERROSH (Facilitating Effective and Reliable Resources for Occupational Safety and Health) it provides education and consultancy. (http://app.csgb.gov.tr/isggm/oshaturkey/sunumlar/113.pdf)
- Technical Assistance and Information Exchange (TAIEX) Project (2006): The purpose of the project was to assist Turkish Government in upgrading OSH-related recording systems and to promote OSH culture among workplaces with a specific focus on mining, construction and metal industries. (http://ec.europa.eu/enlargement/pdf/turkey/ipa/tr 07 02 20 improving occupati onal health and safety at workplaces en.pdf

17. GENERAL COUNTRY DATA

Following the end of Ottoman Empire, the Turkish Republic was established in 1923 as a democratic, secular, unitary and constitutional republic. Turkey has an area of 770 thousand square kilometres, lying between two continents. The Asian part (Anatolia) is much larger than the European part (Figure 17.1). Turkey joined United Nations in 1945 and was one of the signatory countries of the World Health Organization in 1948. The country is divided into 7 geographic regions and has 81 provinces.



Figure 16.1. Geographical Localisation of Turkey

17.1. Population

By 2014, the total population of Turkey was 77,695,904, of whom 50.18% were males and 49.82% were females. A large majority (91.8%) of people live in urban areas. Almost one third of people live in the three most populated provinces, istanbul (14,377,018), Ankara (5,150,072) and izmir (4,113,072) (http://www.resmiistatistik.gov.tr/). Quarter (26%) of the population is under 15 years of age, 7.68% is 65 years and over, and the median age is 29.5 years (Demographic and Health Survey, Turkey, 2013).

Fertility in Turkey has decreased from 2.65 births per woman to 2.26 births during the past 20 years. 4% of women entered marriage before 15 years of age, and 22% were already married by the age of 18. The median age at first birth for women 25-49 years of age is 22.9 years. The general household size is 3.6 people, 80% of households have one or two sleeping rooms, there are 1.9 persons per sleeping room on average (2.2 persons in rural and 1.8 in urban areas) (Demographic and Health Survey, Turkey, 2013). In 2013, the crude birth rate was 16.9 per thousand and the annual population growth rate was 13.7 per thousand (Health Statistics, Turkey, 2013).

17.2. Education

Overall, 88% of people 15 years and over have completed primary school or higher (Fig. 17.2). More than half (54.1 %) have completed compulsory education (primary and secondary school), 10.8% are university graduates and only 1% have masters or doctoral degrees. Men usually see more years of education than women (Fig.17.3).

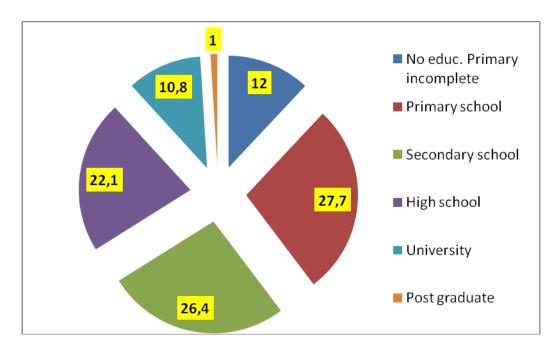


Fig.17.2. Percent distribution of population age 15 years and over by highest level of education completed

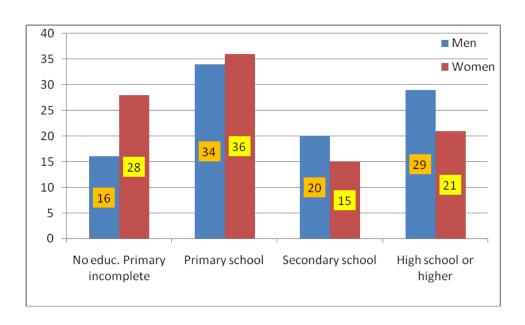


Fig. 17.3. Percent distribution of men and women age 6 and over by highest level of education completed

17.3. Health status

By 2014, a total of 760 322 health personnel were working in Turkey, including 135,616 physicians, 22,996 dental physicians, 27,199 pharmacists and more than 350,000 other health personnel. The physician/population ratio is 175/100,000. The main responsible institution for health services is the Ministry of Health. Almost half of physicians work at the Ministry. The total budget of the Ministry in 2014 was 2.5 billion Turkish Lira. Besides the Ministry of Health, hospitals of medical schools and private health institutions provide health services.

Almost all (98.5%) births were given at hospitals. The childhood vaccination rate is 98%. Tobacco control, obesity control, diabetes prevention, healthy nutrition and reducing salt intake programmes are significant and successful public health programmes conducted by the Ministry of Health. In 2014 a total of 664 million admissions to the health institutions occurred, with a per capita admission rate of 8.5.

The crude death rate was 4.9 per thousand and infant mortality rate was 7.8 per thousand in 2013. Life expectancy at birth was 76.9 years (male 74.7 and female 79.2 years) (Health Statistics, Turkey, 2013). The most frequent causes of deaths are cardiovascular diseases (39.78%), malignant neoplasm (21.32%) and chronic respiratory diseases (9.83%) (Health Statistics, Turkey, 2013, Ministry of Health).

As for the major risk factors among the 15 years and over age group, 27.1% smoke tobacco products, 52.0% are overweight or obese, almost half do not exercise regularly, 20.1% do not have a regular breakfast and 59.4% do not consume fresh fruits and vegetables on a daily basis.

The economy of Turkey is defined as an "emerging market economy" by the IMF and Turkey is among the world's developed economies according to the CIA World Fact book. Turkey is one of the G-20 major economies and a member of several international trade organizations such as OECD, EU Customs Union and WTO. GDP in 2015 is \$1.569 trillion (PPP) and \$753.510 billion (nominal). GDP Growth rate was 5.2% for the 2002-2011 period and 2.9% in 2014. GDP per capita was \$20,188 (PPP) and \$9,680 (nominal, end of 2014), with an inflation rate of 7.55% as of March 2015. GDP by sector

is 8.9% for agriculture, 27.3% for industry and 63.8% for services. The total value of exports in 2014 was \$176.6 billion, mostly to Germany, Iraq, United Kingdom, Russia, Italy and France. The value of imports in 2014 was \$240.4 billion, mostly from Russia, China, Germany, Italy, USA and Iran. Economists and political scientists define Turkey as "newly industrialized country".

17.4. Working population

By the end of 2014 out of 77.7 million people living in Turkey, 57.0 million (73.4%) were in the 15-years-and-over age group. A total of 26 million people were employed and 2.9 million unemployed, with an unemployment rate of 9.9% (Table 17.1, Figure 17.4).

Total informal employment is 9.4 million, with more than half of that in the agricultural sector. Labour force participation rate was 50.8% (71.5% for males and 30.8% for females). (Ministry of Labour and Social Security, Labour Statistics, 2013).

Table 17.1. Employment status, Turkey, 2014 (thousand)

Groups	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Total	38 988	50.2	38 708	49.8	77 696	100.0
population						
15 +	28 145	49.4	28 841	50.6	56 986	100.0
population						
Labour force	20 057	71.3	8 729	30.3	28 786	50.5
Employed	18 244	64.8	7 689	26.7	25 933	45.5
Unemployed	1 813	9.0	1 040	11.9	2 853	9.9

Ref. TUIK, Labour force Statistics, 2014

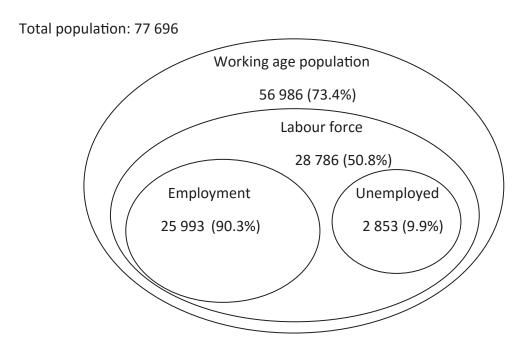


Figure 17.4. Population and employment figures, Turkey, 2014

Turkey has a lower unemployment rate compared to Greece or Latvia, though higher unemployment than Germany or Japan (Table 17.2). Unemployment in the 15-24 years age group is almost double that of the whole group (18.2; Male: 17.3, Female: 20.1).

Table 17.2. Unemployment rates of some countries, by October 2013

Country	Unemployment rate (%)
Greece	27.5
Latvia	11.3
Poland	9.8
Turkey	9.7 (9.9 in 2014)
Finland	7.4
United Kingdom	7.0
USA	7.0
Canada	6.5
Brazil	5.2
Germany	5.1
Japan	4.0

Of the working group, 22.4% were in agriculture, 27.1% in industry and 50.5% in the services sectors. The main industrial areas are textiles, food processing, automobile, electronics, tourism, mining (coal, chromate, copper, boron), iron and steel, petroleum, construction, lumbar, paper, etc. As for the distribution of labour force by major sectors, the services sector employs half of the total labour force (Table 17.3).

By the end of 2013, a total of 17,129,452 people were employed and covered by the Social Security System. When dependants are included, the number of persons covered by the Social Security System increases to 62,789,365, which is equal to 81.9% of the total population of the same year.

Table 17.3. Distribution of working group by major sectors (percent) Turkey, 2005-2014,

Years	Agriculture	Industry	Construction	Services
2005	25.5	21.6	5.6	47.3
2006	23.3	21.9	6.0	48.8
2007	22.5	21.8	6.1	49.6

2008	22.4	22.0	6.0	49.5
2009	23.1	20.3	6.3	50.4
2010	23.3	21.1	6.6	49.1
2011	23.3	20.8	7.2	48.7
2012	22.1	20.5	7.2	50.2
2013	21.2	20.7	7.2	50.9
2014	21.1	20.5	7.4	51.0
2015 (*)	19.4	20.1	7.5	53.1

^(*) November 2015

TURKSTAT Labour force Statistics

The number of workplaces was 1,611,292 in 2013. The great majority of workplaces are small-scale establishments. The number of workplaces with 1-3 employees is 1,011,054 (62.7%). The number of workplaces with less than 50 employees is 1,579,742 (98.0%) workplaces. In only 1173 workplaces do 500 or more employees work, and there are only 290 workplaces with 1000 employees or more. A total of 1,155,889 (9.3% of total) persons work at workplaces employing 500 or more workers and 7,681,552 (61.5% of total) persons work at workplaces employing less than 50 workers.

Of the employed workforce, 12,484,113 people (48.0%) work under Article of 4-1/a of Act No. 5510. Three-quarters of these workers are male (9,297,209 male, 3,186,904 female). Almost two-thirds (61.5%, 7,681,552) of them work at workplaces employing less than 50 workers. As for age groups, 210,734 are working males at 14 to 18 years. The number of women workers in the same age group is 75,957 (Table 17.4). Most of the workforce (82.5%) is 25-64 years of age and very few people of 65 years and over are working (0.1%).

Table 17.4. Number of workers by major age groups and gender, Turkey, 2013

Age groups	Male	Female	Total	
			Number	Percent
14-18	210 734	75 957	286 691	2.3
19-24	1 258 198	628 255	1 886 453	15.1
25-64	7 817 105	2 480 275	10 297 380	82.5
65+	11 172	2 417	13 589	0.1
Total	9 297 209	3 186 904	12 484 113	100.0

18. OTHER RELEVANT INFORMATION

Various institutions (state or NGO) publish reports in the field of occupational safety and health, either on an annual basis or as ad-hoc reports. Some examples are as follows:

18.1. Social Security Institution (SGK) (www.sgk.gov.tr)

- SGK Statistics Yearbook, 2013 (latest published) (Section 3: Occupational Accidents and Occupational Diseases) (http://www.sgk.gov.tr/wps/portal/tr/kurumsal/istatistikler) dprenticeship Network, 2013
- Population Science and Management; A Glance to Labour Market, Aysıt Tansel, TÜSİAD Publication NO. 2012-11/536, 2012

18.2. Professional organizations

- TMMOB: Report on Soma Mine Disaster, Sept. 2014
- TTB: Periodic journal on Occupational Safety and Health (three monthly, since 2000)

18.3. Other

- Turkey: Mine Disaster Trial to Open: 13 April 2013 (https://www.hrw.org/news/2015/04/13)
- Evaluation of occupational accidents in mines, TEPAV Report, 2010 (www.tepav.org.tr/)
- Contractual Arrangements in Turkey's Coal Mines, TEPAV, 2015
- Annex 1. Occupational Safety and Health Law, No. 6331, 2012

19. ELEMENTS FOR INPUT IN THE SITUATION ANALYSIS

Turkey has made major developments during the last two decades in the field of occupational health and safety. The old Labour Law of 1971 (No. 1475) was replaced by the new Labour Law in 2003 (No. 4857) and a new stand-alone Occupational Health and Safety Law was introduced in 2012 (No. 6331). The new law which covers virtually¹ all workers and workplaces, including civil servants² and agriculture, regardless of the number of workers and the area of employment. Risk assessment is now compulsory for all workplaces and the number and capacity of occupational health and safety laboratories has increased. Preventive occupational safety and health activities have gained momentum and thousands of physicians and engineers have been trained as occupational health and safety professionals. Turkey has ratified central ILO Conventions on occupational safety and health such as C.155 (OSH), C. 161 (Occupational health services) as well as C.187 (Promotional Framework for OSH). In addition, Turkey has recently ratified two topical sectoral conventions: C.167 (OSH in construction), and C.176 (OSH in mining).

Turkey has thus laid the necessary legislative foundation for a modern occupational safety and health system built on prevention and a cyclical review of progress. Turkey is now in the process of meeting the challenge to ensure an effective implementation of this system. Building a functional preventative safety and health culture will require a significant investment of time and resources as well as an active collaboration between all stakeholders concerned. As provided in the OSH Law, employers are duty bound to "ensure the safety and health for workers in every aspect related to work" and the building of a safety and health culture has to start from the top. Employers have to lead by example, in active collaboration with adequately trained workers and their representatives, who must have an effective voice in the system. The occupational safety experts and occupational health experts which are there to assist, must be properly trained, motivated to work and be secure in their functions. It is also essential to ensure that OSH laws and regulations are enforced through an adequate and appropriate labour inspectorate with increasing capacity also to provide information, advice and support.

The national system for recording occupational accidents and diseases is being reviewed in order to better reflect the reality. There is a particular need to increase national awareness of and capacity to handle occupational diseases and to ensure that occupational diseases are adequately reflected in national statistics. Hospitals and health institutions including hospitals for occupational diseases are now all under the responsibility of Ministry of Health and a new Department of Worker's Health and Safety has been established under the Ministry. The national interest of professionals on occupational health and safety issues has increased. International collaboration is increasing and several initiatives and projects have been initiated in collaboration between the Ministry of Labour, the Ministry of Health, the ILO and the European Union. Most recently occupational health and

¹ Exceptions are made for persons engaged in the armed forces, in disaster and emergency units, in domestic service and persons that are self-employed.

² Act 6331 will apply to civil servants as of 1 July 2016.

safety has also been placed on global agendas including in the context of the recent G 20 meetings (the 2015 meeting under Turkish presidency). As reflected in Conventions Nos. 155 and No. 187 as well as Recommendation No. 197, the modern approach to OSH calls for recurring reviews of progress in the implementation of national policies and actions. In that context increasing emphasis is being placed on the use of indicators, not only nationally but also in the global context. The ensuing section provides a tentative illustration of how such indicators could be constructed.

20. MEASURING PROGRESS

20.1 Indicators specific to Turkey

The most frequent manner to reflect developments regarding occupational safety and health is to refer to statistical data based on recording and notification of occupational accidents and diseases. The extent to which such data is an accurate reflection of the reality depends on how the national system for collecting data is organized and which type of data that is collected. In Turkey currently available data is based on information regarding claims for compensation from the Social Security System. Consequently the data collected does not reflect accidents and diseases of the groups excluded from coverage (see above). In addition it does not cover the undeclared workers. A particular problem in Turkey is the significant under diagnosis and underreporting of occupational diseases and the Government is currently examining ways to address this problem.

Statistical data on occupational accidents and diseases are based on data of past events and are therefore often referred to as lagging indicators. The shift towards prevention has resulted in more and more insistent calls to develop and use leading indicators, i.e. indicators reflecting how the system is able to prevent accidents and diseases. Such indicators may be difficult to identify and also to measure with accuracy. There must be a global effort to improve the indicators.

OSH INDICATORS	Explanation
ILO Conventions ratified	Six out of 19 Conventions were ratified by 2014 and additional two in 2015.
Coverage of OSH law	The Law no. 6331 applies to all works and workplaces in both the public and the private sector, and covers employees, interns, employers and their representatives, regardless of the field of activity or the number of workers. The Law is not applicable to the activities of the Turkish Armed Forces, the Police Department, certain activities of civil defence services, and intervention activities of disaster and emergency units. Furthermore, it is not applicable to domestic services, persons producing goods and services in their own name and on their own account without employing workers, and
Workplace inspections: 1005 inspectors	One inspector is available per 15 thousand workers
Joint Safety and Health Units (JSHU) inspections	2015: 405 ISGGM OSH experts and assistant experts, and SSI inspectors for 2095 JSHUs
Training institution inspections	2015: 734 inspections for 154 institutions

	The obligation of notification of occupational accidents	
Scope of notification requirements	for workplaces under Law no. 6331 took effect on	
of occupational accidents	1/1/2014.	
Scope of notification requirements	Review of national system under way	
of occupational diseases	neview of flational system under way	
List of occupational diseases		
revised	SSI is currently working on revision	
National policy adopted,	National policy was adopted in 2006 and revised twice in	
implemented and updated	2009 and 2014	
Sector-specific OSH management	3 sectors covered before 2014. Five additional sectors	
systems developed	targeted until 2018	
National OSH profile prepared and	Profile was prepared for the first time in 2015	
updated	Frome was prepared for the mot time in 2013	
Education and increasing	Vocational schools	
awareness for OSH	Universities: OSH was integrated in curriculum, also two-	
	year undergraduate, undergraduate, MSc and PhD	
	programmes are available	
	MoLSS and trade unions: education for workers	
	Professional organizations: OSH professionals	
	Public: MoNE; Lifelong learning programmes	

20.2 G20 Indicators

International high level attention is now also given to OSH and this subject matter was discussed at the G20 Summit in Antalya in Turkey 15-16 November under Turkish presidency. In that context it was agreed that the G20 members would report on developments in the area of employment based on a *Country self reporting template on implementation of G20 Employment Plans.*³ Among the six indicators in the template, occupational safety and health appears as one of three elements under indicator No. 5"Multi-year collective commitments". The commitment to promote safe and healthier workplaces calls upon the G 20 members to monitor progress by tracking developments in four main

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 $^{^3}$ http://g20.org.tr/wp-content/uploads/2015/11/Country-Self-reporting-Template-on-Implementation-of-G20-Employment-Plans.pdf

policy areas and to measure the values of a set of key indicators. The year 2013 is the designated base year and data should be provided every two years until 2021.

In future discussions on indicators for Turkey it would be relevant to take into account on the one hand indicators which reflect progress in the implementation of the national policy and on the other hand indicators which reflect the OSH developments in the country more generally. In this latter context, consideration should be given to the indicators developed in the G20 discussions outlined below.

20.3 G20 INDICATORS

PROGRESS REGARDING POLICY AREAS

National action that strengthens national policies, systems, programmes and strategies to improve safety and health

National action that supports international collaboration and development, sharing and application of knowledge on OSH

National action that targets measures to improve OSH conditions from priority safety and health hazards, high risk sectors, SMEs, supply chains and vulnerable workers

National action that fosters a culture of consultation, collaboration and collective action with social partners to improve occupational safety and health.

INDICATORS

General indicators

Occupational fatal injuries

Occupational non-fatal injuries

Occupational disease

Policy indicators

Workers covered by OSH legal protections (% of workers)

Workers covered by employment injury insurance or program (% of workers)

Inspectorate responsible for OSH enforcement (number of full time equivalent OSH inspectors)

Enterprises with health and safety committees established consistent with national law (% of enterprises)

Enterprises implementing occupational safety and health management systems (% of enterprises)

Workers covered by basic occupational health services (% of workers)

OSH training integrated into job training and skills development programmes (% of training programmes)

21. REFERENCES AND MATERIAL FOR FURTHER READING

- Main Constitution, Turkey, 1982.
- Labour Law, No. 4857, 2003.
- Occupational Safety and Health Law, No. 6331, 2012.
- Law of Obligations, No. 6098, 2011.
- General Health Law, No. 1593, 1930.
- Social Security Institution Law, No. 5502, 2006.
- Social Insurance and Universal Health Insurance Law, No. 5510, 2006.
- TC Ministry of Development, Development Plan, 2014-2018, Employment and working life, Special Expert Group Report, Ankara 2014.
- National Occupational Safety and Health, Policy Document, 2006-2008.
- National Occupational Safety and Health, Policy Document, 2009-2013.
- National Occupational Safety and Health, Policy Document, 2014-2018.
- National Policy Document, No.III and Action Plan on Safety and Health at Work, 2014-2018.
- Labour Statistics, 2014, Ministry of Labour and Social Security, Directorate General of Labour, May 2015, Ankara.
- Labour Statistics, Report on Labour Force Cost by TİSK, 2014.
- Annual Statistics TUIK, 2014 and pervious years.
- Labour Statistics, 2014, TUIK.
- Ministry of Health, Annual Report, 2014, Ankara.
- Social Security Institution, Annual Statistics, 2013 and previous years.
- Country Report on Occupational Safety and Health, Turkey, Y Demiral, A Ergor, H Baydur, Occupational Safety and Health in Eastern Europe Networking, İzmir, 2010 (http://www.oshnet.eu).
- Demographic and Health Survey, Turkey, 2013.
- Labour Force and Employment, Turkey, Karacadag, 2012.
- Household Labour Force Statistics, TOBB, 2014.
- Eurostat, 2013.
- Occupational Health and Safety, N Bilir, AN Yıldız, Hacettepe University Publication, 2013.
- Bulletin of Household Workforce Statistics, Turkish Union of Chambers and Commodity Exchanges, 2014.
- MoLSS, Workplace and Insured Person Statistics, 2013.
- Turkish Confederation of Employer Associations, Newsletter, TİSK

ANNEX 1: OCCUPATIONAL HEALTH AND SAFETY LAW

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LAW

OCCUPATIONAL HEALTH AND SAFETY LAW

<u>Law No. 6331</u> <u>Date of Issuance: 20/6/2012</u>

SECTION ONE Object, Scope and Definitions

Object

ARTICLE 1 –(1) Object of this law is to regulate duties, authority, responsibility, rights and obligations of employers and workers in order to ensure occupational health and safety at workplaces and to improve existing health and safety conditions.

Scope and exceptions

ARTICLE 2 –(1) This Law shall apply to all works and workplaces in both public and private sector, employers of these workplaces and their representatives, all workers including apprentices and interns regardless of their field of activity.

- (2) However, this Law shall not be applicable to the following activities and persons:
- a) Activities of the Turkish Armed Forces, the police and the Undersecretary of National Intelligence Organisation except for those employed in workplaces such as factories, maintenance centres, sewing workshops and the like.
 - b) Intervention activities of disaster and emergency units.
 - c) Domestic services.
- ç) Persons producing goods and services on their own account without employing workers.
- d) Prison workshop, training, security and vocational course activities within the framework of improvement of enforcement services for convicts and inmates.
- e) (Annex: 10/9/2014-6552/15 Article; Annulment: Supreme Court's dated 14/5/2015 and numbered E.: 2014/177, K.: 2015/49 decision)

Definitions

ARTICLE 3 –(1) For the purposes of this Law, the following terms shall have the following meanings:

- a) Ministry: Ministry of Labour and Social Security;
- b) Worker: any natural person employed at public or private sector workplaces, regardless of their status in their relevant laws;
- c) Workers' representative: any worker authorised to represent workers in matters such as participating in occupational health and safety related activities, monitoring these activities, requesting measures, making propositions;
- ç) Support staff: any person with appropriate competence and sufficient training who is specifically put in charge of issues related to occupational health and safety such as prevention, protection, evacuation, firefighting, first-aid besides their main duty;
- d) Training institution: public institutions and organisations authorised by the Ministry to provide training for occupational safety specialists, occupational physicians and other health-care personnel, universities and enterprises established by companies operating in accordance with the Turkish Code of Commerce;
- e) Young worker: any worker who is of at least fifteen years of age but less than eighteen years of age;
- f) (Amendment: 12/7/2013-6495/101 Article)Occupational safety specialist: any engineer, architect or technician who are authorised by the Ministry to work in the field of occupational health and safety and who have occupational health and safety expertise certificate:
- g) Occupational accident: any occurrence taking place at the workplace or due to the performance of work which leads to death or makes physically or mentally disabled to the physical integrity of the victim;

- ğ) Employer: any natural or legal person or any institution and organisation which is not a legal entity who has an employment relationship with the worker;
- h) Workplace: any organisation in which material and non-material elements and workers are organised together to produce goods or services, where the employer is linked in qualitative terms to the goods or services produced and which includes locations linked to the workplace organised under the same management and other premises and equipment such as rest rooms, nursing rooms, canteens, sleeping, washing, examination and maintenance facilities as well as physical and vocational training locations and courtyards;
- ı) Occupational physician: any physician who is authorised by the Ministry to work in the field of occupational health and safety and who has occupational medicine certificate;
- i) Workplace health and safety unit: any unit established to provide occupational health and safety services at the workplace with required equipment and personnel;
 - j) Council: National Occupational Health and Safety Council;
 - k) Committee: occupational health and safety committee;
 - 1) Occupational disease: any illness caused by exposure to occupational risks;
- m) Common health and safety unit: any unit which is established by public institutions and organisations, organised industrial zones and companies operating under the Turkish Code of Commerce in order to provide occupational health and safety services to workplaces, with required equipment and personnel and which is authorised by the Ministry;
- n) Prevention: all the measures planned or taken in order to eliminate or reduce occupational health and safety risks at all stages of work undertaken at the workplace;
 - o) Risk: probability of loss, injury or other harmful result arising from hazard;
- ö) Risk assessment: activities required for identifying hazards which are existing in or may arise from outside the workplace, analysing and rating the factors causing these hazards to turn into risks and the risks caused by hazards and determining control measures;
- p) Hazard: potential which exists at the workplace or may arise from outside the workplace to cause harm or damage which could affect the worker or the workplace;
- r) Hazard classification: hazard group in which a workplace is identified to fit in, taking into account the nature of the work performed, substances used or produced at every stage of work, work equipment, production methods and types as well as other issues related to work environment and working conditions in terms of occupational health and safety;
- s) (Amendment: 12/7/2013-6495/101 Article) Technician: any person with the title of technical instructor, physicist and chemist as well as any graduate of an occupational health and safety programme at universities;
- ş) Occupational nurse: any nurse/health technician who is authorised to perform the nursing profession pursuant to the Nursing Law dated 25/2/1954 and numbered 6283 and who has the occupational nurse's certificate issued by the Ministry in order to work in the field of occupational health and safety.
- (2) Employer's representatives who act on behalf of the employer and are involved in the work and the management of the workplace are considered as employers as far as the implementation of this Law is concerned.

SECTION TWO

Duties, Authority and Responsibilities of the Employer and Workers

General responsibility of the employer

ARTICLE 4 –(1) The employer shall have a duty to ensure the safety and health of workers in every aspect related to the work. In this respect, the employer shall;

- a) take the measures necessary for the safety and health protection of workers, including prevention of occupational risks and provision of information and training, as well as provision of the necessary organization and means and shall ensure that these measures are adjusted taking account of changing circumstances and aim to improve existing situations.
- b) monitor and check whether occupational health and safety measures that have been taken in the workplace are followed and ensure that nonconforming situations are eliminated.
 - c) carry out a risk assessment or get one carried out;
- d)take into consideration the worker's capabilities as regards health and safety where he entrusts tasks to a worker;
 - e) take appropriate measures to ensure that only workers who have received adequate

instructions may have access to areas where there is serious and specific danger.

- (2) In case an employer enlists competent external services or persons, this shall not discharge him from his responsibilities in this area.
- (3) The workers' obligations in the field of safety and health at work shall not affect the principle of the responsibility of the employer.
- (4) Measures related to health and safety at work may in no circumstances involve the workers in financial cost.

Principles of protection from risks

ARTICLE 5 –(1) The employer shall fulfil these responsibilities on the basis of the following principles:

- a) avoiding risks.
- b) evaluating the risks which cannot be avoided.
- c) combating the risks at source.
- d) adapting the work to the individual, especially as regards the design of work places, the choice of work equipment and the choice of working and production methods, with a view, in particular, to avoiding or minimizing adverse effects of monotonous work and work at a predetermined work-rate on health and safety
 - e) adapting to technical progress.
 - f) replacing the dangerous by the non-dangerous or the less dangerous.
- g) developing a coherent overall prevention policy which covers technology, organization of work, working conditions, social relationships and the influence of factors related to the working environment
 - h) giving collective protective measures priority over individual protective measures
 - i) giving appropriate instructions to the workers.

Occupational health and safety services

ARTICLE 6 –(1) In order to provide occupational health and safety services including activities related to the protection and prevention of occupational risks, the employer shall:

- a) designate workers as occupational safety specialist, occupational physician and other health staff. In case there is lack of personnel in the undertaking competent enough to be designated, the employer shall enlist a common health and safety unit to provide these services partially or completely. Provided that the employer has the required qualifications and documents, these services can be offered by the employer considering the hazard classification and the number of workers. (Additional clause: 10/9/2014-6552/16 Article)In enterprises where less than 10 employees and which are classified as less hazardous employer or employer's representative who do not have specified qualifications and the required certification, provided by completing the training which declared by the Ministry, shall fulfil occupational health and safety services except for recruitment medical and periodic examinations.
- b) meet the need for means, space and time to help designated people or organizations fulfill their duties.
- c) ensure cooperation and coordination among all people and bodies responsible for providing health and safety services at workplaces
- d) implement measures that are in accordance with the relevant occupational health and safety and notified in written by the designated persons or organizations providing service
- e) inform designated persons, external services consulted and other workers and their employers from any outside enterprise or undertaking engaged in work in his undertaking or enterprise receive adequate information as regards the factors known to affect, or suspected of affecting, the safety and health of workers.
- (2) Public bodies and organizations as defined in Public Procurement Law no. 4734 dated 4/1/2002 may get occupational health and safety services either directly from circulating capital enterprises operating under the Ministry of Health or as defined in law no. 4734.
- (3) It is not obligatory to hire other health care staff in enterprises where there is a full time occupational physician.
- (4) (Annex: 10/9/2014-6552/16 Article) For determining appointment time according to (a) of the first paragraph of this article apprentices and trainees with student status which is in the scope of Vocational Training Law no. 3308dated 5/6/1986 and Higher Education Law no.

2547 dated4/11/1981 shall not be taken into account the total number of workers.

State Subsidies to Occupational Health and Safety Services

ARTICLE 7 –(1) The Ministry may provide support to enterprises to carry out occupational health and safety services provided that the following conditions are met:

- a) This support may be provided to enterprises employing fewer than ten workers except for public bodies and organizations provided that the enterprise is classified as 'very hazardous' and 'hazardous'. However, the Council of Ministers may decide that the Ministry may also provide subsidies to enterprises employing fewer than ten workers and classified as 'less hazardous'.
- b) Social Security Institution shall cover expenses by allocating resources out of premiums collected under the short-term insurance program including occupational accidents and occupational diseases.
- c) The records kept by the Social Security Institution shall constitute the basis in the implementation phase.
- d) In case it is revealed, in the scope of controls and inspections carried out as per this law and other relevant pieces of legislation, that the employer has failed to enter their employees into social insurance registry, the Social Security Institution shall collect the outstanding debts together with legal interest rate. Employers who are found to be in such violation shall be deprived of the right to benefit from all types of subsidy for a period of three years.
- e) The Ministry is the authorized body to guide the practice, remove hesitations on how to implement the law and resolve problems arising out of implementation.
- (2) The following issues and the relevant procedures and principles shall be specified by a regulation issued by the Ministry after receiving the approval of the Ministry of Finance:
- a) Utilization of subsidies provided as a means to support occupational health and safety services.
- b) Determining the amount of remuneration to be paid by the Social Security Institution to cover occupational health and safety services, identifying which part of these services are to be supported and deciding on the payment rate taking account of the characteristics of the enterprises to be provided subsidy with fewer than ten workers
 - c) Conditions to be met by the enterprises to be provided with state subsidy.
 - d) Characteristics of enterprises providing occupational health and safety service.
- (3) The Ministry might cooperate with Ministry of Health, Ministry of Science, Industry and Technology and other relevant professional organizations in order to ensure efficiency and sustainability.

Occupational physicians and occupational safety specialists

ARTICLE 8 –(1) Rights and authorities of occupational physicians and occupational safety specialists might not be restricted in the execution of their duties. Occupational physicians and safety specialists shall seek and maintain professional independence and observe the rules of ethics in the execution of their functions.

(2)(Amendment: 4/4/2015-6645/1 Article) Occupational physician and occupational safety specialist, whom are appointed as guide and consultant in occupational health and safety issues to the employer, shall identify the deficiencies and defects regarding occupational health and safety issues in the workplace, considering improvements and changes to the legislation and technical developments and notify the employer regarding these deficiencies and defects in writing. It is the responsibility of the employer to correct the deficiencies and defects. In case the employer fails to implement measures against life threatening dangers such as fire, explosion, collapse, chemical leakage or environment that may cause occupational disease; occupational physician or occupational safety specialist shall notify the component body of the Ministry, if available authorized union representative if not available worker representative. The license of the occupational physician or occupational safety specialist who is detected to act against the previous sentence falls into abeyance for three months and in repetition six months. The contract of the occupational physician or occupational safety specialist cannot be terminated nor can their rights be forfeited. Otherwise employer shall pay compensation not lower than a 1 year employment contract. All the rights of the occupational physician or occupational safety specialist mentioned in the Labour Law and other related laws are

reserved. If claims of the occupational physician or occupational safety specialist are found to be false by the court the certificate shall be suspended for 6 months.

- (3) Occupational physicians and occupational safety specialists as well as external services consulted shall be accountable to the employer for neglect of duty in the execution of their offices.
- (4) Where an occupational physician or occupational safety specialist is found to be in neglect of his/her duties resulting in an occupational accident or occupational disease which causes disruption in the integrity of the body such as death or disability, his/her certificate of authorization shall be suspended.
- (5) In order to be able to be employed as an occupational safety specialist, one shall obtain class (A) certification to be considered as qualified enough to work in enterprises classified as very hazardous and at least class (B) certification to work in enterprises classified as hazardous and at least class (C) certification to be hired in less hazardous enterprises. The Ministry might introduce several arrangements specific to a sector related to the designation of occupational safety specialists and occupational physicians. (Additional sentence: 4/4/2015-6645/1 Article) Under the framework of sectoral arrangement, procedures and principles regarding determination of which occupational titles from mining and construction and other sectors which occupational safety expert have and occupational safety expert who work in other duties and with these people are made by the Ministry.
- (6) In the event that it is required to hire full time occupational physicians and safety specialists due to the working hours, the employer shall establish a workplace health and safety unit. Without prejudice to the provisions of the law applicable to workers, the weekly working hours as defined in the Labour Law no. 4857 dated 22/5/2003 shall be taken into account.
- (7) The personnel qualified enough to be hired as occupational physician or occupational safety specialist in public bodies and organizations according to the relevant legislation might be assigned in other public bodies and organizations in addition to their fundamental duties following the approval and consent of the relevant personnel and top management provided that the working hours are not to exceed the time indicated in their contract and all required documentation is presented. An additional payment equal to the product of an indicative figure (200) and quotient of the monthly salary of civil servants shall be awarded by the organization benefiting from this additional service to the personnel assigned in public bodies other than the one that they were originally assigned. There shall be no deduction in this payment other than the deduction due to stamp tax. Assignments exceeding eighty hours in total in a month shall not be included in the additional payment provided that the daily working hours are not exceeded
- (8) Without prejudice to the legislation on full time employment in public health care services, the restrictive provisions of other laws shall not apply to employment of occupational physicians and other health care staff in workplace health and safety units and common health and safety units and fulfilment of their duties the scope of which shall be limited to the number of workers in the enterprise benefiting from the service.

Determining the Hazard Classification

ARTICLE 9 –(1) Considering the short-term insurance premium tariff as defined in article 83 of the Law no. 5510 dated 31/5/2006 on Social Insurance and Universal Health Insurance and in line with the views of commission composed of all parties concerned and set up under the chairmanship of Directorate General of Occupational Health and Safety, the Ministry shall issue a circular on assigning a hazard classification to enterprises.

(2) The hazard classification for enterprises shall be assigned based on the main activities conducted.

Risk assessment, control, measurement and examinations

ARTICLE 10 –(1)The employer shall conduct an assessment of risks to health and safety of workers or get one carried out, taking account the following points:

- a) The situation of workers who might get affected by risks.
- b) Choice of work equipment, the chemical substances or preparations used.
- c) Workplace organization and housekeeping.
- d) The situation of female workers and other workers such as young workers, older workers, disabled, pregnant or breastfeeding workers who need specific policies.

- (2) The employer shall identify measures needed to be taken for the safety and health of workers as a consequence of the risk assessment and protective equipment needed to be used to implement the measures.
- (3) Measures to be taken for the safety and health protection of workers and the working and production methods implemented by the employer must assure an improvement in the level of protection afforded to workers with regard to safety and health and be practicable at all hierarchical level within the undertaking and/or enterprise.
- (4) The employer shall ensure that controls, measurements, examinations and researches are carried out to determine the risks related to safety and health present at the workplace and affecting the workers.

Emergency plans, fire-fighting and first aid

ARTICLE 11 –(1) The employer shall;

- a) assess the foreseeable emergency situations and identify those that might potentially affect workers and work environment taking into account the work environment, substances used, equipment and environmental conditions present in the workplace and take measures to prevent and limit adverse effects of emergency situations.
- b) conduct measurement and assessments to afford protection against adverse effects of emergency situations and prepare emergency plans.
- c) designate a sufficient amount of persons trained in prevention, protection, evacuation, fire fighting, first aid and other related issues taking into account the size and specific hazards of the undertaking, nature of the activities, number of employees and other persons present in the enterprise. The number of such workers, their training and equipment available to them shall be adequate and the employer shall arrange emergency drills and trainings and make sure that the rescue teams are always available to respond.
- d) arrange any necessary contacts with external services, particularly as regards first aid, emergency medical care, rescue work and fire-fighting.

Evacuation

ARTICLE 12 –(1) In the event of serious, imminent and unavoidable danger, the employer shall:

- a) take action and give instructions to enable workers to stop work and/or immediately to leave the work place and proceed to a place of safety.
- b) save in exceptional cases for reasons duly substantiated; refrain from asking workers to resume work in a working situation where there is still a serious and imminent danger.
- (2) The employer shall ensure that all workers are able, in the event of serious and imminent danger to their own safety and/or that of other persons, and where the immediate superior responsible cannot be contacted, to take the appropriate steps in the light of their knowledge and the technical means at their disposal, to avoid the consequences of such danger. Their actions shall not place them at any disadvantage, unless they acted carelessly or there was negligence on their part.

Right to Abstain from Work

- **ARTICLE 13** –(1) Workers exposed to serious and imminent danger shall file an application to the committee or the employer in the absence of such a committee requesting an identification of the present hazard and measures for emergency intervention. The committee shall convene without delay and the employer shall make a decision immediately and write this decision down. The decision shall be communicated to the worker and workers' representative in writing.
- (2) In the event that the committee or the employer takes a decision that is supportive of the request made by the worker, the worker may abstain from work until necessary measures are put into practice. The worker shall be entitled to payment during this period of abstention from work and his/her rights arising under the employment contract and other laws shall be reserved.
- (3) In the event of serious, imminent and unavoidable danger; workers shall leave their workstation or dangerous area and proceed to a place safety without any necessity to comply with the requirements in the first paragraph. Workers may not be placed at any disadvantage because of their action.
 - (4) Where the necessary measures are not taken despite the requests by workers,

workers under labour contract might terminate their employment contract in accordance with the provisions of the law applicable to them. As for the workers under collective bargaining agreement, the abstention period as defined in this article shall be deemed as actual work time.

(5) In compliance with the article 25 of this law, the provisions of this article shall not apply in the event of cease of work in the enterprise.

Recording and Notification of Occupational Accidents and Diseases

ARTICLE 14 –(1) The employer shall;

- a) keep a list of all occupational accidents and diseases suffered by his workers and draw up reports after required studies are carried out.
- b) investigate and draw up reports on incidents that might potentially harm the workers, work place or work equipment or have damaged the work place or equipment despite not resulting in injury or death.
- (2) The employer shall notify the Social Security Institution of the following situations within a prescribed time as follows:
 - a) Within three work days of the date of the accident.
- b) Within three work days after receiving the notification of an occupational disease from health care providers or occupational physicians.
- (3) Occupational physicians or health care providers shall refer workers who have been pre-diagnosed with an occupational disease to health care providers authorized by the Social Security Institution.
- (4) Occupational accidents referred to health care providers shall be notified to the Social Security Institution within ten days at most and authorized health care providers shall notify the Social Security Institution of the occupational diseases within the same period of time.
- (5) The procedures and principles as regards this article shall be defined by the Ministry following the receipt of approval from the Ministry of Health.

Health Surveillance

ARTICLE 15 –(1) The employer shall;

- a) ensure that workers receive health surveillance appropriate to the health and safety risks they incur at work.
 - b) Health examination of workers is required under the following situations:
 - 1) Pre-assignment.
 - 2) Job change after the assignment.
- 3) In case of return to work following repetitive absence from work due to occupational accidents, occupational diseases or health problems upon request.
- 4) At regular intervals recommended by the Ministry in the course of employment taking into account the workers, the nature of work and hazard classification of the enterprise.
- (2) Workers to be employed (Amended expression: 10/9/2014-6552/17 Article)in jobs classified as hazardous and very hazardous shall receive a medical report before employment.
- (3) (Amended first sentence: 10/9/2014-6552/17 Article) Medical reports required to be received as per this law shall be obtained from occupational physician. It might also be obtained from the Public Health Service Providers or family physicians for enterprises where less than 10 workers and which are classified as less hazardous.
- (4) The employer shall cover all expenses arising from health surveillance and any additional expense related to this surveillance. The health surveillance may in no circumstances bring financial burden to workers.
- (5) Health data of workers undergoing a medical examination shall be kept confidential in order to ensure protection of individual privacy and prestige.

Worker Information

ARTICLE 16 –(1) The employer shall inform the workers and workers' representatives of the following issues taking into account the characteristics of the enterprise for the purposes of ensuring and maintaining the occupational health and safety:

- a) the safety and health risks and protective and preventive measures.
- b) their legal rights and responsibilities.
- c) Workers designated to handle first aid, extra ordinary situations, disasters, fire-fighting and the evacuation.
 - (2) The employer shall;

- a) as soon as possible, inform all workers who are, or may be, exposed to serious and imminent danger of the risk involved as defined in article 12 and of the steps taken or to be taken as regards protection
- b) ensure that employers of workers from any outside undertakings and/or enterprises engaged in work in his undertaking and/or enterprise receive adequate information concerning the points referred to in paragraph 1 which is to be provided to the workers in question.
- c) ensure that support staff and workers' representatives shall have access to the risk assessment, protective and preventive measures related to safety and health at work, the information yielded by measurements, analysis, technical controls, records, reports and inspections.

Training of Workers

- **ARTICLE 17** –(1) The employer shall ensure that each worker receives adequate safety and health training. This training shall be provided on recruitment, in the event of a transfer or a change of job, in the event of a change in equipment or introduction of any new technology. The training shall be adapted to take account of new or changed risks and repeated periodically if necessary.
 - (2) Workers' representatives shall be entitled to appropriate training.
- (3) Workers failing to present documents to prove that they have received vocational training on their job might not be employed in jobs classified as hazardous and very hazardous which require vocational training.
- (4) Workers who have had occupational accident or disease shall receive additional training on reasons for the accident or disease, ways to protect themselves and safe working methods. Workers who are away from work for any reason for more than six months shall receive refresher training before return to work.
- (5) Workers from outside undertakings and/or enterprises might not start to be employed in jobs classified as hazardous and very hazardous unless they can present documents to prove that they have received appropriate instructions regarding health and safety risks.
- (6) The employer who is the party to temporary employment relationship shall ensure that the worker receives training on health and safety risks.
- (7) Trainings mentioned in this article may in no circumstances bring financial burden to workers. Time spent on trainings shall be deemed as actual work time. In case the time allocated for trainings exceeds weekly working hours, hours worked in excess of weekly working hours shall be considered as overtime.

Consultation with and Participation of Workers

- **ARTICLE 18** –(1) The employer shall consult workers or representatives authorized by trade unions in enterprises with more than two workers' representatives or workers' representatives themselves in the absence of trade union representative to ensure the consultation and participation of workers. This presupposes:
- a) Consultation with regard to safety and health at work, the right of workers and/or their representatives to make proposals and allowing them to take part in discussions and ensuring their participation.
- b) Consultation as regards the introduction of new technology and the consequences of the choice of equipment, the working conditions and the working environment for the safety and health of workers.
- (2) The employer shall ensure that support staff and workers' representatives shall be consulted in advance with regard to:
- a) The assignment of occupational physicians, occupational safety specialists and other staff inside the enterprise or the enlistment, where appropriate, of the competent services or persons outside the undertaking and/or enterprise and designation people to be in charge of first aid, fire fighting and evacuation.
- b) Identification of the protective equipment and protective and preventive measures to be introduced as a consequence of risk assessment.
 - c) Prevention of health and safety risks and providing protective services.
 - d) Worker information.
 - e) The planning of training to be provided to workers.

(3) Workers and/or their representatives are entitled to report to the authority responsible for safety and health protection at work if they consider that the measures taken and the means employed by the employer are inadequate for the purposes of ensuring safety and health at work. The workers may not be placed at a disadvantage because of their respective activities.

Workers' Obligations

ARTICLE 19 –(1) It shall be the responsibility of each worker to take care as far as possible of his own safety and health and that of other persons affected by his acts or commissions at work in accordance with his training and the instructions given by his employer

- (2) To this end, workers must in particular, in accordance with their training and the instructions given by their employer:
- a) make correct use of machinery, apparatus, tools, dangerous substances, transport equipment and other means of production; use such safety devices correctly and refrain from changing or removing arbitrarily safety devices fitted
 - b) make correct use of the personal protective equipment supplied to them.
- c) immediately inform the employer and/or the workers' representative of any work situation they have reasonable grounds for considering represents a serious and immediate danger to safety and health and of any shortcomings in the machinery, apparatus, tools, facilities and buildings;
- d) cooperate with the employer and/or workers' representative to enable any tasks or requirements imposed by the competent authority to protect the safety and health of workers at work to be carried out
- e) cooperate with the employer and/or workers' representative for the safety and health of workers within their field of activity.

Workers' Representative

ARTICLE 20 –(1) In the event that no person might be elected or chosen to represent workers, the employer shall designate a workers' representative considering the risks present at work and the number of workers with special attention to balanced participation of workers. The number of representatives shall be identified in the following way:

- a) One representative for enterprises between two and fifty workers.
- b) Two representatives for enterprises between fifty one and one hundred workers.
- c) Three representatives for enterprises between one hundred one and five hundred workers.
- d) Four representatives for enterprises between five hundred one and one thousand workers.
- e) Five representatives for enterprises between one thousand one and two thousand workers.
 - f) Six representatives for enterprises between two thousand one and more workers.
- (2) Where there is more than one workers' representative, the chief representative shall be elected among the other workers' representative.
- (3) Workers' representatives shall have the right to ask the employer to take appropriate measures and to submit proposals to him to that end to mitigate hazards for workers and/or to remove sources of danger.
- (4) Workers' representatives may not be placed at a disadvantage because of their respective activities and the employer shall provide them with the necessary means to enable such representatives to exercise their rights and functions.
- (5) Where there is an authorized trade union represented in the enterprise, the trade union representative shall act as workers' representative.

SECTION THREE

Council, Committee and Coordination

National Occupational Health and Safety Council

ARTICLE 21 –(1) A council has been set up to make recommendations on policies and strategies relevant to health and safety at work.

- (2) The council shall be headed by the Undersecretary of the Ministry and comprise the following persons or organizations:
 - a) General Director for Occupational Health and Safety, General Director of Labour, Head

of the Labour Inspection Board and one general director from the Social Security Institution.

- b) One general director from the Ministry of Science, Industry and Technology, Ministry of Environment and Urbanization, Ministry of Energy and Natural Resources, Ministry of Food, Agriculture and Livestock, Ministry of Development, Ministry of National Education and Ministry of Health.
- c) A member from the executive board of the Council of Higher Education and a vice president from the State Personnel Presidency.
- d) The first three trade unions with the highest number of members representing employers, workers and public officials separately and one executive board member or any other relevant person from The Union of Chambers and Commodity Exchanges of Turkey, Confederation of Turkish Craftsmen and Tradesmen, Turkish Medical Association, Union of Chambers of Turkish Engineers and Architects and Union of Turkish Chambers of Agriculture.
- e) Two representatives at most, when needed, from organizations or institutions operating in the field of occupational health and safety upon the suggestion of Director General for Occupational Health and Safety and approval of the Council.
- (3) The members of the Council referred to in sub clause (e) of the second paragraph shall hold office for a period of two years and the office of a member shall be vacant if the member is absent from two consecutive meetings.
- (4) The role of the secretariat of the Council shall be fulfilled by the Directorate General for Occupational Health and Safety.
- (5) The Council shall act by an absolute majority. In the event of equality of votes, the President shall have a casting vote. No one shall abstain from a vote.
- (6) The council shall hold two ordinary meetings a year. The council might hold emergency meetings upon the suggestion of the President or one third of members.
 - (7) The operating principles and procedures shall be governed by the Ministry.

Occupational Health and Safety Committee

ARTICLE 22 –(1) The employer shall set up an occupational health and safety committee in enterprises where a minimum of fifty employees are employed and permanent work is performed for more than six months. Employers are under the obligation to enforce the decisions of the occupational health and safety committees taken in accordance with the legislation on occupational health and safety.

- (2)In the event that main employer sub contract or relation exceeds six months:
- a) Where the contractor and sub-contractor have set up separate committees, the contractor shall ensure cooperation in the enforcement of decisions and maintenance of activities.
- b) Where the contractor has set up a committee, the sub-contractor shall appoint by proxy an authorized representative to facilitate coordination.
- c) The contractor who is not required to set up a committee shall appoint by proxy an authorized member to be represented in the committee set up by the sub-contractor to ensure cooperation and coordination.
- d) Where the contractor is not supposed to set up a committee and the sub-contractor employs more than fifty workers, the contractor and sub-contractor shall set up a joint committee provided that the cooperation is ensured by the contractor.
- (3) Where there is more than one employer in the same workplace and these employers set up more than one committee, these employers shall inform each other of the decisions of the committees which might affect one another.

Coordination of Occupational Health and Safety Services

ARTICLE 23 –(1) Where there is more than one employer in the same work environment, the employers shall cooperate in the implementation of measures related to health and safety at work and occupational hygiene. The employers shall work in cooperation to prevent occupational risks and offer protection against such risks and inform each other and workers' representatives on these risks.

(2) Where there is a business centre, office block, industrial zone or an industrial estate with more than one workplace, the management shall ensure cooperation in the field of occupational health and safety. The management shall advise the employers to take necessary measures against hazards that might affect the health and safety in other workplaces. The

management shall notify the Ministry of the employers failing to take these measures.

SECTION FOUR Inspection and Administrative Sanctions

Inspection, examination, investigation and authority, obligation and responsibility of the inspector

- **ARTICLE 24** –(1) The monitoring and inspection with regards to the implementation of this Law is carried out by the labour inspectors of the Ministry authorized to carry out occupational health and safety inspections. During the inspections and examinations to be carried out under this Law, the articles numbered 92, 93, 96, 97 and 107 of the Law numbered 4857 are implemented.
- (2) The Ministry has the authority to carry out occupational health and safety measurements, examinations and investigations, to take samples for this purpose and to control and inspect training institutions and common health and safety units. The authorized personnel in this respect are obliged to avoid interrupting the work as much as possible and to keep professional secrets of the employer and the workplace and what he/she sees and learns confidential. The procedures and principles of such control and inspection are regulated by the Ministry.
- (3) The audit and inspection of military workplaces and the workplaces producing materials for home security and the results of such inspection are carried out according to the regulations to be jointly prepared by the Ministry of National Defence and the Ministry of Labour.

Cease of operations

- **ARTICLE 25** –(1) In case of any situation found dangerous to workers' life in the premises, working methods or equipment, operations shall be stopped in the premises or any part of it, taking into account the nature of the hazard and the part of the premises and the workers to be affected by the hazard, until such hazard is eliminated. In addition, at the workplaces classified as very hazardous, mining, metal and construction workplaces, workplaces where hazardous chemicals are used and the workplaces where serious industrial accidents may take place, the operations shall be stopped in case of a lack of risk assessment.
- (2) The group of three labour inspectors, authorized to carry out occupational health and safety inspection, carry out required examination based on the decision of the labour inspector authorized to carry out occupational health and safety inspection and may decide to stop the operations in the days following the date of the decision. However, in case the hazard requires urgent intervention, the labour inspector taking the decision shall stop the operations temporarily until a decision is taken by the group of inspectors.
- (3) The decision on cease of operations shall be sent in one day to the relevant local authority and to the Provincial Directorate of Labour and Employment which has the file of the workplace. The decision on the cease of operations is enforced in twenty four hours (Annex expression: 4/4/2015-6645/2 Article) by means of the police. However, the cease of operations decision requiring urgent intervention is enforced (Annex expression: 4/4/2015-6645/2 Article) by means of the police on the same day.
- (4) The employer may appeal the decision on the cease of operations through authorized labour court in six days following the enforcement of the decision. The appeal shall not affect the enforcement of the decision on the cease of operations. The court first evaluates the appeal and takes a decision in six working days. The court's decision is the final decision.
- (5) In case that the employer informs the Ministry in written form that the factors leading to cease of operations are not in place any more, there shall be another examination at the workplace in seven days at maximum in order to address the request of the employer.
- (6) The employer is obliged to make the payments of his workers unemployed due to the cease of operations or assign them to another job judging by their profession or situation on the condition that they are not paid less.
- (7) (Annex: 4/4/2015-6645/2 Article) In jobs classified as very hazardous and taken by procurement; technological development, increasing the workforce capacity, without providing a portion elements such as innovation in production methods life-threatening forms of work due to the force production by way act contrary to production and/or the manufacturing plan, work programs, considered as a reason to cease of operation.

(8) (Annex: 4/4/2015-6645/2 Article) Employer and their representatives who make working without permission in ceased operations in the workplace is given a prison sentence from three years to five years.

Prohibition from public procurement due to fatal occupational accident ARTICLE 25/A – (Annex: 4/4/2015-6645/3 Article)

In the mining workplace occuring fatal occupational accidents, as determined by the employer defected by the judgment, is prohibited for two years from participating in public procurement by the court with specified in the second paragraph of the Article 26 of Public Procurement Contacts Law dated 5/1/2002 and numbered 4735. A copy of the decision is sent to the Public Procurement Authority to be processed by the employer of record and shall be announced on the Authority's website.

Administrative fines and enforcement

ARTICLE 26 –(1) Within the scope of this Law, the administrative fines are as follows;

- a) For the employer who violates the obligations laid down in lines (a) and (b) of the first paragraph of the Article 4, two thousand Turkish Lira per each obligation,
- b) For the employer who does not employ an occupational safety specialist or occupational physician as foreseen in the first paragraph Article 6, five thousand Turkish Lira per each professional, the same amount per each month until it is corrected, for the employer who does not employ other health technician two thousand five hundred Turkish Lira, the same amount per each month until it is corrected, for the employer who violates the obligations laid down in lines (b), (c) and (d) of the same paragraph, one thousand five hundred Turkish Lira per each obligation, for the employer who violates the obligations laid down in line (ç) thousand Turkish Lira per each obligation,
- c) For the employer who violates the obligations laid down in the first and sixth paragraphs of the Article 8 one thousand five hundred Turkish Lira per each obligation,
- ç) For the employer who fails to do risk assessment or to have risk assessment done in accordance with the first paragraph of the Article 10, three thousand Turkish Lira, four thousand five hundred Turkish Lira per each month until it is corrected, for the employer who violates the obligations laid down in the fourth paragraph, one thousand five hundred Turkish Lira,
- d) For the employer who violates the Articles 11 and 12, one thousand Turkish Lira per each obligation violated and the same amount per each month until it is corrected,
- e) For the employer who violates the obligations laid down in the first paragraph of the Article 14, one thousand five hundred Turkish Lira per each obligation, for the obligations in the second paragraph two thousand Turkish Lira, for the health service providers or authorized health service providers who violate the obligations laid down in the fourth paragraph two thousand Turkish Lira,
- f) For the employer who violates the obligations laid down in the first and second paragraphs of the Article 15, one thousand Turkish Lira per each worker who hasn't gone through health surveillance or who doesn't have a health report,
- g) For the employer who violates the obligations laid down in the Article 16, one thousand Turkish Lira per each uninformed worker,
- ğ) (Amendment: 4/4/2015-6645/4 Article) The employer who doesn't carry out the obligations stated in 17. Article, 500 Turkish Liras for each nonconformity per employee,
- I) For the employer who violates the obligations laid down in the first and fourth paragraphs of the Article 20 one thousand Turkish Lira, for the obligations laid down in the third paragraph one thousand five hundred Turkish Lira,
- i) For the employer who violates the obligations laid down in the Article 22, two thousand Turkish Lira per each obligation,
- j) For the management which violates the notification obligations laid down in the second paragraph of the Article 23, five thousand Turkish Lira,
- k) For the employer who prevents measurement, examination and investigation, taking samples in terms of occupational health and safety or checks and audits of training institutions and common health and safety units laid down in the second paragraph of the Article 24, five thousand Turkish Lira,
 - 1) (Amendment: 4/4/2015-6645/4 Article) The employer who doesn't carry out the

obligations stated in 6. Sub-Article of 25. Article, 1000 Turkish Liras for each employee whose right violated, the same amount per month that the violation continues,

- m) For the employer who fails to prepare serious accident prevention policy document in accordance with the Article 29 fifty thousand Turkish Lira, for the employer who prepares safety report but fails to submit to the Ministry before starting the operations, the employer who starts the operations without getting the permit from the Ministry or the employer who maintains the operations ceased by the Ministry, eighty thousand Turkish Lira,
- n) For the employer who violates the obligations laid down in the regulations mentioned in Article 30, one thousand Turkish Lira per each provision violated per month following the date of detection of the violation.
- o) (Annex: 4/4/2015-6645/4 Article) The employers who doesn't supply CE marked personal protective equipment, 500 Turkish Liras per employee,
- ö) (Annex: 4/4/2015-6645/4 Article) The employer who doesn't set up a tracking system which shows the place of the employees and the direction of enters and exits, 500 Turkish Liras per employee.
- (2) (Amendment: 4/4/2015-6645/4 Article) The administrative fines defined in this law except for the administrative fines which are applied to ones who don't carry out the declaration obligation stated in 14 article of this Law, are conducted by the province director of Provincial Directorates of Labour and Employment, thereby the reasons are stated. The administrative fines, except for the administrative fines applied to the ones who don't carry out the declaration obligation stated in 14 article of this Law, are registered as income to the national budget. The administrative fines which are applied to ones, who don't carry out the declaration obligation stated in 14 article of this Law, are directly paid to Social Security Institution. In case of the declaration, objection and collection of administrative fines conducted by Social Security Institution, decrees of 102article of Law No 5510 applied. The other administrative fines shall be paid in 30 days. The administrative fines also can be applied on the state institutions and organizations which aren't legal entity.
- (3)(Annex: 4/4/2015-6645/4 Article) Within the scope of this article, the administrative fines are as follows,
 - a) For the management with fewer than ten workers;
 - 1) same amount to classified as less hazardous,
 - 2) twenty-five percent increase in amount to classified as hazardous,
 - 3) fifty percent increase in amount to classified as very hazardous,
 - b) For the management having between ten and forty-nine workers,
 - 1) same amount to classified as less hazardous,
 - 2) fifty percent increase in amount to classified as hazardous,
 - 3) one hundred percent increase in amount to classified as very hazardous,
 - c) For the management fifty or more workers,
 - 1) fifty percent increase in amount to classified as less hazardous,
 - 2) one hundred percent increase in amount to classified as hazardous,
 - 3) two hundred percent increase in amount to classified as very hazardous, shall apply.
- (4) (Annex: 4/4/2015-6645/4 Article) the administrative fines shall not apply in the event of cease of work due to related to actions that caused the suspension.
- (5) (Annex:4/4/2015-6645/4 Article) the provisions of the third paragraph shall not apply in administrative fines which multiplied with the number of employees.
- (6)(Annex: 4/4/2015-6645/4 Article) The administrative fines collected in accordance with this Law shall be used in spending on education and research and development projects related to occupational health and safety except for applying for the management which violates the notification obligations laid down in the Article 14. The appropriations needed for this purpose is provided for in the Ministry's budget. These allowances and the relevant procedures and principles shall determine by jointly with the Ministry of Finance and the Ministry.

Cases for which no provision exists and exemption

ARTICLE 27 -(1) Save for the legal provisions that the workers are subject to, for the

cases for which there are no provisions in this Law, the provisions of the Law numbered 4857, which are in compliance with this Law shall apply.

- (2) The papers issued in accordance with this Law are exempted from stamp tax and the transactions are exempted from fees.
- (3) The Ministry shall ask for and archive any document or data related to the work or transactions to be done according to this Law via electronic or similar media and shall confirm, authorize, inform and issue documents via these media.

SECTION FIVE Miscellaneous and Temporary Provisions

Prohibition of using drugs

ARTICLE 28 –(1) It is forbidden to come to the workplace drunk or on drugs and to drink alcohol or use drugs in the workplace.

- (2) The employer has the authority to determine in which cases, when and under which conditions alcohol can be consumed in the premises.
 - (3) The prohibition of drinking is not applicable to the following workers:
- a) The workers employed in workplaces producing alcoholic drinks and assigned to inspect what is produced.
- b) The workers who have to drink alcohol due to the requirements of their job in workplaces where alcohol is sold either in closed bottles or open ones.
- c) The workers who have to drink alcoholic drinks with the customers due to the nature of their job.

Safety report or serious accident prevention policy document

ARTICLE 29 –(1) For workplaces where a serious industrial accident can take place, the employer shall prepare a serious accident prevention policy document or safety report based on the size of the workplace before starting the operations.

(2) The employer shall start operations in the workplace following the examination of the safety report of the workplace in terms of the content and competency by the Ministry.

Regulations related to occupational health and safety

ARTICLE 30 –(1) The following issues as well as the procedures and rules related to them shall be set out by the regulations to be prepared by the Ministry:

- a) With the aim of ensuring, maintaining and improving occupational health and safety by consulting the relevant ministries, the issues that may require specific regulation such as; premises, work equipment, the materials used or produced in every phase of the work, working environment and conditions, work equipment, works and workplaces which involve specific risks, employment of groups which require specific policy, night work and shift work based on the nature of the work done, works that should be done for shorter time due to health reasons, working conditions of pregnant and nursing women, establishing breast feeding rooms and day-care dormitories or having external services as well as notifications and permits related to them and other issues with regards to implementation of this Law.
 - b) In relation to occupational health and safety services;
- 1) The workplaces where occupational health and safety units shall be established based on the number of workers and the hazard classification, the physical conditions and the equipment that should be available in such units.
- 2) The qualifications, employment, appointment, duty, authority and responsibilities of occupational physicians, occupational safety specialist and other health technicians to be employed in workplace health and safety units and common health and safety units, the procedures as to how they should carry out their duties, minimum working hours based on the number of workers and the hazard class of the workplace, the procedures of notification of hazardous situations at the workplace, the workplaces where they can be employed according to the certificates they have.
- 3) Duty, authority and obligations, certification and authorization of people and institutions providing occupational health and safety services, health surveillance and health reports to be provided within such services, physical conditions, staff and equipment that should be available in such institutions.
- 4) The conditions under which the services will be received from people and institutions providing occupational health and safety services based on the workplace hazard classification

and the number of workers; the number of staff to be assigned or employed, the duration of services to be provided and the conditions under which the employer can undertake the assigned duties himself.

- 5) The training and certification of occupational physicians, occupational safety specialist and other health technicians, the classification of the certificates to which they are entitled based on their titles, certification and authorization of the institutions training occupational physicians, occupational safety specialist and other health technicians, appointment and certification of the training schedule and the trainers of such training institutions, the tests to be taken at the end of such trainings and certificates to be issued.,
- 6) (Annex: 10/9/2014-6552/18 Article) The points related to the duration of training, qualifications of trainers, assignments and training programs for occupational health and safety in the enterprises employing fewer than ten workers and classified as less hazardous.
- c) In relation to risk assessment; the workplaces where risk assessment shall be done and how, setting down the qualification of people and institutions to carry out risk assessment, providing the required permit and cancellation of the permits.
- ç) By consulting Ministry of Health, the checks, examination and investigation required for personal exposure and working environment stipulated by this Law, procedures and rules of physical, chemical and biological factor measurements and laboratory analysis, setting up the required qualification of people and institutions providing such measurements and analysis, authorization and cancellation of authorization as well as authorization and certification costs.
- d) Preparation of an emergency plan based on the nature of the work done, the number of workers, the size of the workplace, materials produced and stored, working equipment and location of the workplace, prevention, protection, evacuation, first aid and people to be assigned for such issues.
- e) Training sessions to be organized for workers and their representatives, certification of these training sessions, qualifications of people and institutions providing occupational health and safety training, work requiring professional training.
- f) Composition of the council, its duty, authority, rules and procedures, the coordination and cooperation among the councils in case there are more than one council.
- g) (Amendment: 4/4/2015-6645/5 Article) the cease of operations at the workplace, the workplaces where the operations shall be stopped in case of lack of risk assessment, temporary lift of closure with the aim of eliminating the reasons leading to cease of operations, conditions under which resume of operations can be allowed, the issues requiring urgent cease at the workplaces classified as very hazardous mainly in the mining and construction, implementation of the measures to be taken until the decision on cease of operations shall be taken in urgent cases.
- ğ) Jointly with the Ministry of Environment and Urbanisation, measures to be taken in order to prevent serious industrial accidents and mitigating their effects, determination and classification of the workplaces where serious industrial accidents may take place, preparation and implementation of serious accidents prevention policy document and safety report, the cease of operations and allowing maintaining of operations in case of lack of safety report, failing to send it to the Ministry or its being found incompetent by the Ministry.
- (2) Training schedule for occupational physician and other health technician stipulated in the regulations to be published on occupational physician and other health technician in compliance with the line (b) of the first paragraph, duration of their work, the Ministry of Health is consulted on the issues of duties and authority.
- (3) (Annex: 4/4/2015-6645/5 Article) The procedures and principles regarding the technical specifications about refuge chambers in which mining workplaces can be established is arranged by the regulation issued by Ministry within a year. These specifications are determined in accordance with national and international standards.

Certification, notice and cancellation

ARTICLE 31 –(1) Authorization and certification costs of people, institutions and training institutions which provide occupational health and safety services, conduct measurements and analysis, the registration of rules imposed on such people and institutions as slight, medium and severe notice in case of violation, suspending of and procedures and principles of cancellation of the authorization certificates directly or considering notice points, are regulated

by the Ministry.

Amended provisions

ARTICLE 32 -Of the Labour Law numbered 4857 and dated 22/5/2003;

- a) The last sentence of the first paragraph of the Article 7 is amended as follows: "Having established a temporary business relation, the employer has the right to give instructions to the worker."
- b) The expression in the sub clause (d) of line (II) in the first paragraph of Article 25 "or violating the Article 84" has been replaced as follows: ", coming to the workplace drunk or on drugs and to drink alcohol or use drugs in the workplace".
- c) The following clause is added in the third paragraph of the Article 7, just after "light work": ", the jobs where youngsters over sixteen but under eighteen can be employed".

ARTICLE 33 –The posts of "Chief Labour Inspector", belonging to the Ministry of Labour and Social Security on the table (I) which is an annex to Decree Law on General Posts and Procedures dated 13/12/1983 and numbered 190, has been changed as "Chief Inspector of Labour".

ARTICLE 34 –The posts on the tables (I), (II) and (III) in the annex are formed and added on the table (I) which is an annex to Decree Law numbered 190 under the section of Ministry of Labour and Social Security, the posts in the table (IV) in the annex are cancelled and taken out of the table (I) which is an annex to Decree Law numbered 190 under the section of Ministry of Labour and Social Security.

ARTICLE 35 –The expression of "Director of Worker's Health and Safety Institute" has been replaced by "Director of Occupational Health and Safety Institute" under the section of "4. In Prime Minister's Office and Ministries" on the table (II) which is an annex to the Public Officers Law dated 14/7/1965 and numbered 657.

ARTICLE 36 –The following article has been added to the Law on Organization and Duties of Ministry of Labour and Social Security dated 9/1/1985 and numbered 3146:

"Obligation of broadcasting

ADDITIONAL ARTICLE 2 — Turkish Radio and Television Corporation as well as national, regional, and local private television channels and radios shall broadcast programs of warning and didactic content in relation to occupational health and safety, elimination of black economy in working life, social security, employer and worker relations for at least sixty minutes a month. These programs shall be broadcasted at 08:00-22:00, at least thirty minutes to be broadcasted at 17:00-22:00, and the copies of the broadcasts shall be regularly submitted to the High Council of Radio and Television every month. The broadcasts beyond these hours shall not be counted within sixty minutes of broadcast per month. The Ministry and affiliated and relevant institutions, High Council of Radio and Television and other relevant public institutions and scientific institutions, professional organizations with public institution status or civil society organizations shall prepare or have somebody else prepare such programs. The programs, following the confirmation of the Ministry, shall be broadcasted on radio and television channels by the High Council of Radio and Television.

The broadcasts within the scope of this article shall be free of charge. The supervision of such broadcasts and their duration shall be performed by the High Council of Radio and Television."

Abolished provisions

ARTICLE 37 –The following provisions of the Law numbered 4857 have been abolished:

- a) fourth paragraph of the Article 2.
- b) fourth paragraph of the Article 63.
- c) fourth, fifth and sixth paragraphs of the Article 69.
- c) the Articles 77, 78, 79, 80, 81, 83, 84, 85, 86, 87, 88, 89, 95, 105 and temporary article

2.

The following expressions are left out of the text: "Saving for occupational health and safety provisions" in line (f) of the first paragraph of the Article 4 of the Law numbered 4857 and "under the scope of the article 85, one thousand New Turkish Lira per each worker employed".

References

TEMPORARY ARTICLE 1- (1) References included in other pieces of legislation to the Law

numbered 4857 are considered as references to this Law.

Current regulations

TEMPORARY ARTICLE 2 – (1) Provisions in regulation which have been enacted pursuant to articles 77, 78, 79, 80, 81 and 88 of the Law numbered 4857 which are not in violation of this Law, shall remain in force until the regulations foreseen in this Law enter into force.

Medical reports

TEMPORARY ARTICLE 3 –(1) Periodic medical reports which were given out to workers previously in accordance with the Law numbered 4857 and other pieces of legislation shall remain valid until the expiry date.

Requirement to appoint occupational safety specialist

TEMPORARY ARTICLE 4 - (Amendment: 4/4/2015-6645/6 Article)(1) The requirement of employing an occupational safety expert with (A) class certificate in enterprises classified as very hazardous and mentioned in article 8 of this Law shall be deemed as met on condition that an occupational safety expert with (B) class certificate is employed in these enterprises until 1/1/2018; the requirement of employing an occupational safety expert with (B) class certificate in enterprises classified as hazardous shall be deemed as met on condition that an occupational safety expert with (C) class certificate is employed in these enterprises until 1/1/2017.

- (2) (Annex: 12/7/2013-6495/55 Article) The Ministry, with the condition to determine the procedures and principles, is authorized to make the necessary arrangements for whom have occupational expert certificate concerning the granting the right to a maximum two exams on the condition to be used within one year from the date of entry into force of paragraph taking into account the issues such as the days of premium have been paid to Social Security Institution and class of certificate that they have in order to get the certificate in the upper classes.
- 3) (Annex: 4/4/2015-6645/6 Article) The rights of occupational safety experts who enter the certificate upgrade exam and eligible to get the certificate according to second paragraph are reserved.

Existing certificates and documents, and warning points

TEMPORARY ARTICLE 5 –(1) Of the persons who hold occupational physician's, occupational safety specialist's and occupational nurse's certificate or document issued by the Ministry or occupational physician's certificate given out by the Turkish Medical Association before the date of issuance of this Law, those whose certificates were deemed invalid can exercise all rights and authority conferred upon by this Law on condition that they replace their existing document or certificate with the document to be issued by the Ministry within one year as of the issuance of this Law. Of the persons who completed a training programme provided by training institutions for occupational physicians and occupational safety specialists before the above-mentioned date, those whose training was deemed invalid shall be awarded the right to enter the examination in accordance with the relevant piece of legislation. Records of the Ministry shall be deemed as privileged for determining the ownership of right.

(2) Warning points given to training institutions and common health and safety units for which no final court order was delivered before the issuance of this Law shall be transferred to the upcoming new regulation exactly as they are in records.

Payments to physicians employed as occupational physicians in public institutions

TEMPORARY ARTICLE 6 –(1) Public sector employees cannot be subject to administrative or financial procedures or prosecution due to payments made to occupational physicians from public institutions and organisations as well as local governments; any initiated procedure or prosecution shall be annulled; these payments cannot be collected or compensated retrospectively.

TEMPORARY ARTICLE 7 –(1) As of the issuance of this Law, those persons who are assigned in the posts of Chief Labour Inspector shall be considered as assigned to the posts of Chief Inspector for Labour without requiring any procedure.

TEMPORARY ARTICLE 8—(1) Duties of the persons holding the titles of the Director of the Institute for Worker's Health and Occupational Safety and the Deputy Director of the Institute for Worker's Health and Occupational Safety under the Central Directorate of Occupational Health and Safety on the date of the issuance of this Law shall end on the day this Law has been

issued and they shall be reassigned to other posts suitable to their degrees and levels within at least one month. They shall, until they are reassigned to their new posts, continue to receive their salaries, additional indicators and all kinds of raises and compensations as well as other financial rights related to their old posts. In the event that the total net amount (this amount is considered as a fixed value) of the salaries, additional indicators, all kinds of raises and compensations paid as well as additional payments and all other payments made under similar names(with the exception of overtime and additional course payments made for work performed actually pursuant to the relevant legislation) to the personnel in question within the last month related to their old posts as of their reassignment is higher than the total net amount of the salaries, additional indicators, all kinds of raises and compensations paid as well as additional payments and all other payments made under similar names (with the exception of overtime and additional course payments made for work performed actually pursuant to the relevant legislation)related to their new posts; the difference between the two amounts shall be paid separately as compensation as long as the difference remains without being subject to any tax or deduction. Payment of the reassignment compensation shall be stopped for those whose post titles were changed upon their own request and those who were reassigned to other institutions upon their own request.

(2) Assignments may be made to the vacant posts, which are included in the annexed list of posts created for this Law, of 20 Occupational Health and Safety specialists, 100 Assistant Specialists on Occupational Health and Safety, 40 Civil Servants, 40 Data Preparation and Control Operators and 10 Engineers within the year 2012 without being subject to the limitations under the Central Government Budget Law for the year 2012 dated 21/12/2011 and numbered 6260.

TEMPORARY ARTICLE 9 –(Annex: 4/4/2015-6645/7 Article)

(1) Having added (ö) of the first paragraph of Article 26 of this Law shall be implemented bythe date of 01.01.2016.

Enforcement

ARTICLE 38 –(1)

- a) (Annex: 2/7/2013-6495/56 Article) Articles 6, and 7 of this Law shall enter into force
- 1) the date of 01.07.2016 for public institutions excepting employees within the scope of (repealed) Article 81of the Law numbered 4857 and enterprises where less than 50 workers and which are classified as less hazardous;
- 2) one year as of the date of issuance for enterprises where less than 50 workers are employed and which are classified as hazardous and very hazardous;
 - 3) six months as of the date of issuance for other enterprises,
- b) articles 9, 31, 33, 34, 35, 36 and 38 as well as temporary articles 4, 5, 6, 7 and 8 shall enter into force on the date of issuance.
 - c) other articles shall enter into force six months as of the date of issuance.

Execution

ARTICLE 39 –(1) The provisions of this Law shall be implemented by the Cabinet.

ANNEX 2: RATIFICATIONS OF RELEVANT ILO CONVENTIONS

Annex to Recommendation No.197	Ratified			
Labour Inspection Convention, 1947 (No. 81)				
Radiation Protection Convention, 1960 (No. 115)				
Hygiene (Commerce and Offices) Convention, 1964 (No. 120)				
Employment Injury Benefits Convention, 1964 (No. 121)				
Labour Inspection (Agriculture) Convention, 1969 (No. 129)				
Occupational Cancer Convention, 1974 (No. 139)				
Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 (No. 148)				
Occupational Safety and Health (Dock Work) Convention, 1979 (No. 152)	2005			
Occupational Safety and Health Convention, 1981 (No. 155)				
Occupational Health Services Convention, 1985 (No. 161)	2005			
Asbestos Convention, 1986 (No. 162)				
Safety and Health in Construction Convention, 1988 (No. 167)	2015			
Chemicals Convention, 1990 (No. 170)				
Prevention of Major Industrial Accidents Convention, 1993 (No. 174)				
Safety and Health in Mines Convention, 1995 (No. 176)	2015			
Protocol of 1995 to the Labour Inspection Convention, 1947 (No. 81)				
Safety and Health in Agriculture Convention, 2001 (No. 184)				
Protocol of 2002 to the Occupational Safety and Health Convention, 1981 (No.				
155)				
Promotional Framework for Occupational Safety and Health, 2006 (No. 187)	2014			

ANNEX 3: VISITED AND CONTACED INSTITUTIONS

- Ministry of Labour and Social Security
 - Directorate General of Occupational Health and Safety
 - O Directorate General of Labour
 - O Labour Inspection Board
 - O Institute of Occupational Health and Safety Research and Development (İSGÜM)
- Ministry of Health
 - O Directorate of Workers' Health and Safety
- Ministry of National Education
 - O General Directorate of Vocational and Technical Education
 - O General Directorate for Lifelong Education
- Ministry of Justice
 - Directorate General of EU Coordination
- Ministry of Energy and Natural Resources
 - o Directorate General of Mining Enterprises (MİGEM)
 - Turkish Coal Industries(TKİ)
- Ministry of Food, Agriculture and Livestock
- Turkish Employers' Association (TİSK)
- Confederation of Turkish Trade Unions (TÜRK-İŞ)
- Confederation of Progressive Trade Unions (DİSK)
- Confederation of Turkish Real Trade Unions (Hak-İş)
- Turkish Standards Institute (TSE)
- Turkish Medical Association (TMA)
- Association of Turkish Architects and Engineers (TMMOB)

ANNEX 4: ABBREVIATIONS

(In alphabetical order)

CoHE (YÖK) Council of Higher Education

CPSU (MEMUR-SEN) Confederation of Public Servants' Unions

CPTU (DİSK) Confederation of Progressive Trade Unions

CTRTU (HAK-İŞ) Confederation of Turkish Real Trade Unions

CTTC (TESK) Confederation of Turkish Tradesmen and Craftsmen

CTTU (TÜRK-İŞ) Confederation of Turkish Trade Unions

DGoL Directorate General of Labour

DGOSH Directorate General of Occupational Safety and Health

ILO International Labour Organization

iSG KATIP OSH Registration, Tracking and Monitoring Software

JOSU (OSGB) Joint Safety and Health Unit

LIB Labour Inspection Board

MoD Ministry of Development

MoENR Ministry of Energy and Natural Resources

MoFA Ministry of Food, Agriculture and Livestock

MoH (SB) Ministry of Health

MoLSS Ministry of Labour and Social Security

MoNE (MEB) Ministry of National Education

MSPC (ÖSYM) Measuring, Selection and Placement Centre

NOHSC National Occupational Health and Safety Council

OSH Occupational Safety and Health

SSI (SGK) Social Security Institution

TAA (TURKAK) Turkish Accreditation Agency

TCEA (TİSK) Turkish Confederation of Employer Associations

TCPEA (KAMU-SEN) Turkish Confederation of Public Employees Associations

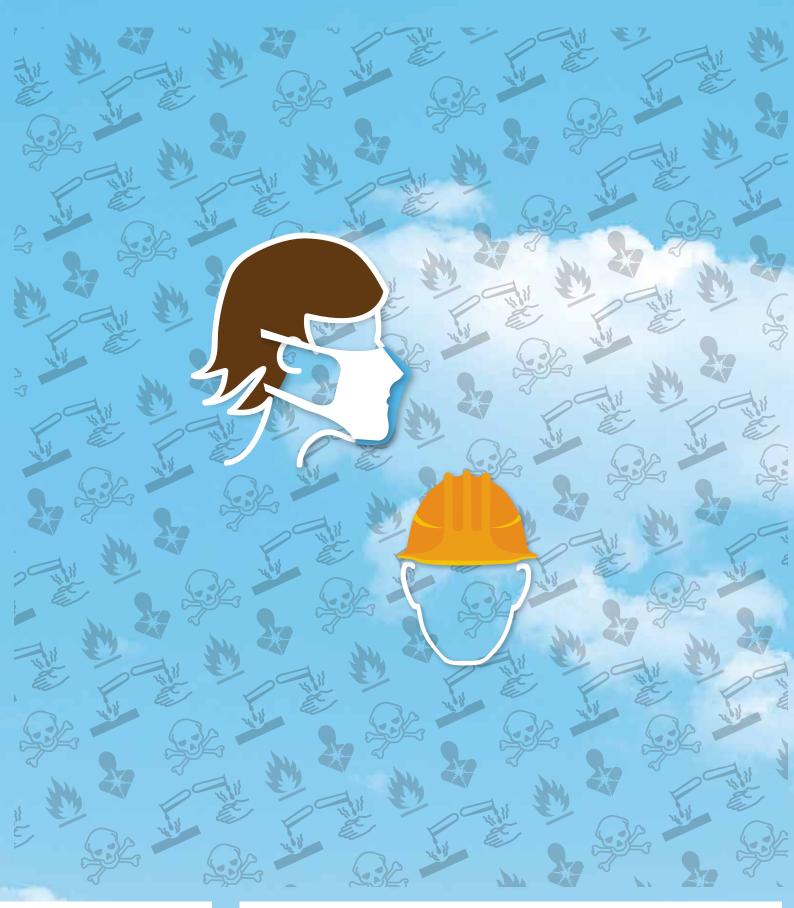
TMA (TTB) Turkish Medical Association

TSI (TSE) Turkish Standards Institute

TUCCE (TOBB) Turkish Union of Chambers and Commodity Exchanges

TurkStat (TÜİK) Turkish Statistical Institute

UCTEA (TMMOB) Union of Chambers of Turkish Engineers and Architects







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REPUBLIC OF TURKEY MINISTRY OF LABOUR AND SOCIAL SECURITY