



Annual Report 2008

Korea Occupational Safety and Health Agency

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Korea Occupational
Safety and Health Agency

ANNUAL REPORT 2008

The Korea Occupational Safety & Health Agency (KOSHA) is a government-funded institute established on December 9, 1987 as a professional public organization financed through government subsidies in accordance with the Korea Industrial Safety and Health Agency Act(Law No. 3931, effective May 30, 1987). KOSHA seeks to contribute to the growth and development of the national economy by maintaining and improving the safety and health conditions of workplaces. Toward this end, it shall efficiently implement the following projects: promotion of industrial accident prevention techniques, provision of technical assistance, training on occupational safety at work, and diagnosis and inspection of harmful and dangerous facilities and equipment, R&D, etc.





Realization of Valuable Activities for the Prevention of Occupational Accidents through a Global Network

20-year Work to Build a Safe and Healthy Work Environment

Since its establishment on December 9th, 1987, the Korea Occupational Safety and Health Agency (KOSHA) has continued its relentless effort to protect workers' health and lives by preventing industrial accidents and diseases and creating a safe and healthy work environment.

Until KOSHA had been built, Korea had lagged behind in terms of occupational safety and health system (OSH system) and OSH activities. Moreover, employers had focused solely on profits and lacked interest in their employees' welfare. Against this background,

KOSHA conducted various projects including technical support, education and R&D in partnership with the tripartite parties (trade unions, enterprises, and the government) and the academia. These initiatives contributed greatly to significantly lower the industrial accident rate from 2.66% (1987) to 0.71% (2008).

Accident Prevention at Work - a Way to Respect Human Dignity

Deplorably, despite the agency's multi-faceted efforts, some workers are still being injured and killed in workplaces.

Workers should not be regarded as disposable and replaceable, but as valuable human beings with the right to safe and health work conditions, who drive the economy and make our lives rich.

In 2008, KOSHA strove to improve its organizational efficiency to offer custom-tailored services and gain trust and admiration from our customers.

Global Network to Overcome OSH Challenges

The global community has a growing concern that occupational diseases and accidents will rise due to aging workers, complex work processes, larger industrial facilities, and new chemicals, while traditional accidents are still prevalent across the world.

Today, industrial accidents are not an issue solely for workers and businesses. They often cause loss to whole society and sometimes transcend national boundaries due to globalization, which requires close global partnership.

In this context, OSH organizations in many nations are redoubling their efforts to protect workers and build a global cooperation network to respond promptly to diverse challenges.

Global Cooperation for a Brighter Future

KOSHA plans to forge global partnerships with diverse entities in line with the central government's policy to strengthen international ties and expand its technical support for developing nations. As part of this effort, the agency hosted the 18th World Congress on Safety and Health at Work and the 24th annual assembly of the Asia-Pacific Occupational Safety and Health Organization simultaneously in Seoul from June 29th to July 2nd, 2008. These events made contributions to the global OSH community by providing a venue for sharing expertise and information.

I firmly believe that KOSHA's innovative work will create prosperous and healthy society, where every worker can work safely. I hope support for all members of the OSH community will extend warm support for our work.

Thank you.

Noh, Min-ki
Noh, Min-ki
President, KOSHA



I. XVIII World Congress on Safety and Health at Work



The 18th World Congress on Safety and Health at Work was held in Seoul from June 29th to July 2nd, 2008. The Seoul Congress co-organized by KOSHA, the ILO, and the ISSA was recognized as the largest-scale and most successful congress with the highest attendance, over 4500 participants from 121 nations.



Moreover, the Safety and Health Summit-the first of its kind in history of the World Congress-adopted the Seoul Declaration on Safety and Health at Work, presenting a blueprint of the future for the global OSH community.

The 18th Congress provided a valuable venue for exchange of information and knowledge with the motto, *Occupational Safety and Health, a social responsibility*. A total of 466 speakers made presentations at 81 sessions including keynote speech, regional meetings, technology sessions and symposiums on the four main topics: future OSH strategies and programs, impact on workers' health by new working conditions, new OSH challenges and opportunities, and OSH management system.

According to a survey, 470 out of 490 respondents were satisfied with the Seoul Congress, a staggering 96% satisfactory level. In addition, the participants could enjoy Korea's modern dynamism and traditional culture during various events including the opening ceremony, reception, and Korean night. KOSHA made all-out efforts to thoroughly prepare the Seoul Congress since it had won the bid in September 2005. The agency built the Secretariat for the 18th World Congress on Safety and health at Work and held a series of meetings with the International Organization Committee and the National Organization Committee. In close partnership with the ILO, the ISSA and other related organizations home and abroad, KOSHA successfully organized the mega-scale global gathering.



Summit on Safety and Health at Work - the Seoul Declaration

The Seoul Declaration on Safety and Health at Work is the first international charter on occupational safety and health, requiring government, employers, employees and all other social members to take full responsibility for safety and health at work.

The declaration was adopted at the Safety and Health Summit on June 29th by a total of 46 world-renowned OSH figures including Secretary General Assane Diop of the ILO, President Corazon de la Paz of the ISSA, Director Jukka Takala of EU-OSHA, labor ministers of nine nations, and CEOs of Dupont, UL and other multinationals. The Seoul Declaration is expected to contribute to a safe and healthy work environment for all, writing a new chapter in history of the global OSH community

The declaration introduces responsibility and obligations of each social member including establishment of health management systems by the government, management policies focused on workers' safety and health by employers, and observation of safety rules by employees.



The Seoul Declaration on Safety and Health at Work- a Blueprint of the Global OSH Community

On an annual basis, over 270 million workers are affected by accidents at work and about 160 million suffer from occupational diseases, leading to 2.3 million deaths. Against this backdrop, OSH organizations across the world should pursue close cooperation to reduce human and economic losses. These organizations should take political responsibility to place workers' safety and health high on international agenda. Now is the time to make a breakthrough in building a safe and healthy workplace for all.

In this context, the Seoul Declaration on Safety and Health at Work was declared in 2008. The objectives of the declaration are as follows.

- To disseminate the importance of OSH and set future directions for related organizations by presenting a framework for OSH policies beneficial to all social members
- To reduce unnecessary burden on workers and contribute to welfare of local community
- To share and implement a vision on a healthy work environment for joint development of workers, employers and society as a whole
- To promote the fundamental notion that a safe and healthy work environment is a basic human right to workers, a management tool for high productivity to employers and a top priority to government

The declaration is expected to improve working conditions dramatically as strategic, social, political, and practical tools. This is the first international OSH declaration jointly adopted by the tripartite parties. This unprecedented statement has been recognized as ground-breaking, writing a new chapter in history of the global OSH community.





The 24th APOSHO Annual Conference

The Asia Pacific Occupational Safety and Health Organization (APOSHO) is an international body composed of non-profit organizations devoted to the prevention of diseases and accidents at work. The organization promotes exchange of prevention technologies and information on accident cases, contributing to a safe and healthy work environment for workers in the Asia-Pacific region. KOSHA held the 24th APOSHO annual conference at COEX, Seoul on June 29th in line with the 18th World Congress on Safety and Health at Work so that the participants of the conference were offered even more extensive information and content. The conference included plenary sessions, presentations on latest OSH policies and technologies, performance reports by member organizations and committee meetings following the opening ceremony. A total of 962 joined the conference (453 international participants from 84 nations and 509 national participants), and six keynote speeches and 40 papers were provided. In addition, it obtained diplomatic accomplishments including an official meeting between Malaysian Minister and KOSHA President and the agreement with the Institution of Occupational Safety and Health Management of Mauritius.



II. Objectives and Directions of 2008 Projects for Occupational Accidents Prevention

- To significantly reduce accidents at work
- To gradually decrease occupational diseases
- To disseminate technological support for prevention
- To build safety and health culture
- To upgrade OSH infrastructure

TO ACHIEVE THESE PRIORITIES, THE AGENCY LAUNCHED DIVERSE PROJECTS.

First, KOSHA provided technical support to prevent the three most frequent accident types and consequent death cases, and financial support for safety facility improvement, along with safety inspection.

Second, the agency helped work sites improve working conditions and manage employees' health in response to new types of chemicals and occupational diseases. Furthermore, KOSHA launched a project to prevent musculoskeletal disorders.

Third, in order to promote enterprises to ensure safety and health of workers on a self-regulatory basis, the agency provided following services: support to build the OSH management system, review of reports on process safety, epidemiological inspection on work-related diseases, and issuance of certifications for high-risk equipment and protective equipment.

Fourth, in order to raise awareness of workers and citizens on safety and promote safety culture in daily lives, the agency provided various education programs and develop extensive materials that were later distributed through the media.

Lastly, to improve efficiency of the OSH projects, KOSHA conducted numerous R&D projects, release OSH statistics, deliver epidemiological inspection on work-related diseases, and pursue collaboration with international entities.

In 2008, KOSHA set five priorities in line with its mid-term goal to lower the rate of industrial accidents and diseases to 0.54 % by 2012. The five priorities are as follows.

- to significantly reduce accidents at work
- to gradually decrease occupational diseases
- to disseminate technological support for prevention
- to build safety and health culture and Health
- to upgrade OSH infrastructure





III. KOSHA Activities in 2008



1. Financial Support to Improve the Safety and Health Facilities in Small and Medium Sized Enterprises
2. Technical Support for the improvement of Occupational Safety and Health
3. Test, Examination, Approval, and Certification
4. Education & Training on Prevention of Occupational Accidents
5. Safety and Health Culture
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9. International Cooperation

01. Financial Support to Improve the Safety and Health Facilities in Small and Medium Sized Enterprises

KOSHA contributes to the prevention of industrial accidents by subsidizing small workplaces that are vulnerable to industrial accidents due to their poor working conditions and insufficient safety and health facilities. Specific programs include: ‘The Clean Workplace Program’ project, which supports gratis the cost needed to improve the safety and health facilities at manufacturing workplaces employing less than 50 employees; ‘financial subsidy for the improvement of working environment in harmful processes’, a project for the manufacturing industry and other industries with less than 300 employees and ‘providing loans for industrial accident prevention facilities’, which offers financing for the purchase of safety and health facilities at long-term, low interests.

The program on ‘The Clean Workplace Program’ subsidizes the cost needed to improve the safety and health facilities at manufacturing workplaces employing less than 50 employees to make safe and pleasant ‘clean workplaces.’ A workplace satisfying KOSHA’s evaluation standard may get up to KRW30 million in subsidies.

The program on the ‘financial subsidy for the improvement of working environment in harmful and hazardous processes’ is designed to support the workplaces employing less than 300 workers with poor working conditions with deafening noise, dusts, harmful and hazardous chemical materials and the works that cause musculoskeletal disorders maximum KRW50 million gratis for the improvement of facilities to make a pleasant working environment.

The program on ‘providing loans for industrial accident prevention facilities’ seeks to prevent industrial accidents and improve working environments by promoting investments in industrial accident prevention facilities.

Records of Projects by Years						
(Unit : site, KRW100 million)						
Category	2008	2007	2006	2005	2004	2003
Clean Workplaces Program		9,847 (994)	9,508 (1,000)	10,428 (1,110)	5,236 (563)	3,266 (319)
Financial support for improving harmful processes	531 (96)	470 (91)	446 (67)	510 (77)	208 (25)	-
Loans		878 (940)	948 (881)	1,040 (800)	980 (763)	940 (627)

* Amount of subsidy enclosed in parenthesis



02. Technical Support for the Improvement of Occupational Safety and Health

Technical Support related to safety and health is one of the basic roles of KOSHA, which was established to contribute to the growth and development of the national economy by maintaining and improving workers’ safety and health and facilitating the accident prevention activities of business owners. Various projects have been implemented since 1988 based on the changes in the industrial environment. Major projects that are currently under way include the comprehensive support for self-regulatory safety as implemented to offer overall technical support related to safety and health to all manufacturing workplaces based on the 4-M Risk Assessment Method, technical assistance for safety management at construction sites recording less than KRW 300 million in sales to prevent conventional accidents such as falling, collision, struck by falling and flying object, management of the working environment and workers’ health to protect workers from various occupational harmful elements at industrial sites, and production of the Safety Technology Standard (KOSHA Code) designed to stipulate the technical guidelines for preventing new occupational diseases or musculoskeletal disorders caused by the treatment of heavy objects or repetition of simple operations and to assist the safety and health activities at workplaces.

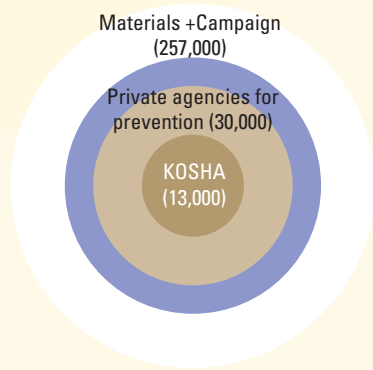
In particular, the Occupational Health Department of KOSHA-a WHO collaboration center-provides SMEs with information on hazardous chemicals and technical support for safe management of these materials. In addition, the department carries out medical check-ups for employees of small enterprises with less than 50 workers.

TECHNICAL SUPPORT TO WORKPLACES VULNERABLE TO INDUSTRIAL ACCIDENTS

● Special Support for the Top Three Accident Types

KOSHA is striving to help enterprises build their own OSH management system on a voluntary basis and raise public awareness on prevention of major industrial accidents. To this end, the agency is providing vulnerable enterprises with comprehensive services including identification of hazards of the three most frequent accident types (crushing, falling, and tripping), follow-up measures, technical support, financial support for safety facility, safety inspection and training programs.

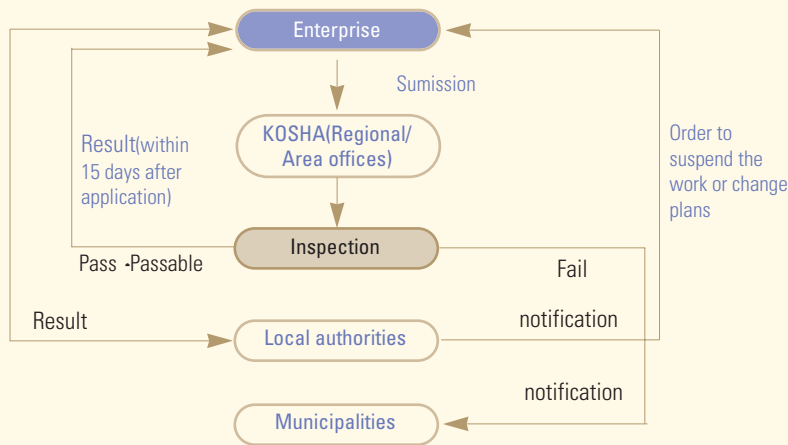
Management of 300,000 enterprises subject of the top three accident type



- Direct technical support**
(training at customers' work sites + financial support + safety inspection)
※ review on individual work sites
- Indirect technical support I**
(education+material+PR activities)
※ collective education according to industries, sizes, and districts)
- Indirect technical support II**
(material+PR activities)

● Inspection of Plans on Hazards Prevention Submitted by Manufacturers

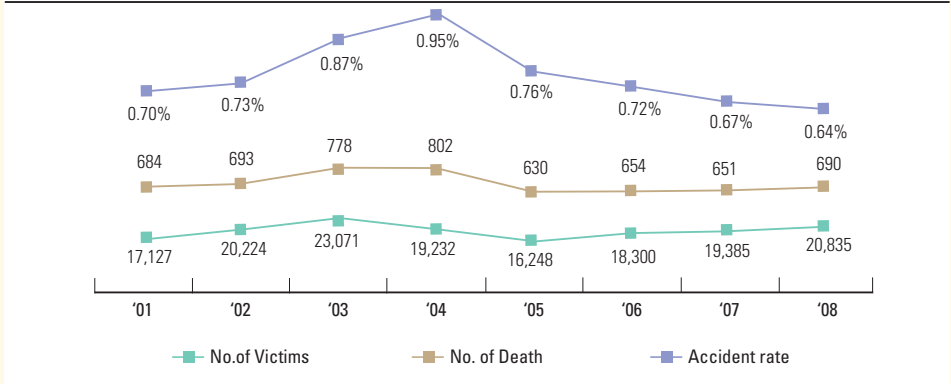
When work sites in the two highest-risk sectors including metal processing install, move or modify the five major hazardous facilities such as a melting furnace, they should have their safety plans reviewed by related authorities. In doing so, risk factors can be fundamentally prevented.



TECHNICAL ASSISTANCE FOR THE SAFETY AND HEALTH AT CONSTRUCTION SITES

In 2008, due to the global depression, the construction industry recorded a mere KRW12.0851 billion in orders from the domestic market, a 6.1% drop year on year. Although the demand from the public sector rose by 12.8%, this increase was offset by a 13.9% fall in the private sector. While public works were active including bridges and roads, the orders in the residence sector plummeted due to the government regulations and the oversupply. Over the past eight years, 19,303 workers suffered from industrial accidents or disasters and 698 were killed on an annual average. The figures have been standing still for the period, requiring innovative measures. Against this backdrop, technical support for prevention of the top three accident types has been offered to the construction industry since 2008.

The top three accident types mean crushing, falling and tripping

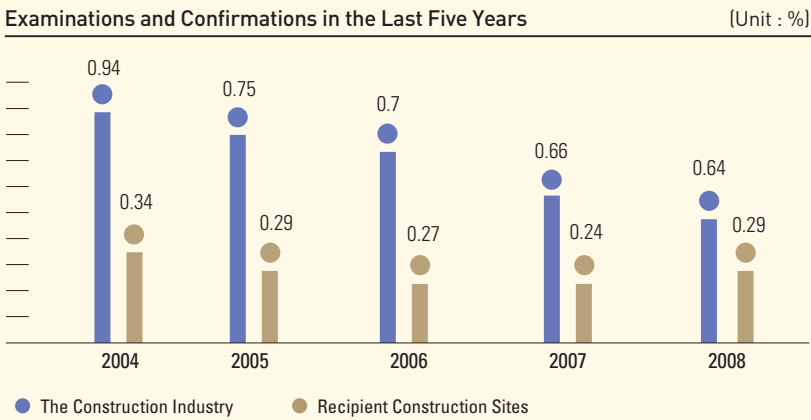


● Technical Support for Large Construction Sites

To secure the fundamental safety for construction works more than a certain size, the examination system for the plan to prevent hazard and danger is being executed as an advance safety inspection system. According to this system, the owner of a project must submit the plan to prevent hazard and danger before the start of the construction works to be reviewed for the design and safety measures and take necessary safety and health measures. In addition, during the period of the construction works, it is regularly checked whether the safety and health measures are implemented as stated in the plan to make continuous efforts to prevent industrial accidents that may occur during the construction works.

Examinations and Confirmations in the Last Five Years					
(Unit : site)					
Item	2008	2007	2006	2005	2004
Review	1,729	2,254	1,928	1,524	2,084
Confirmation	7,265	7,025	5,895	6,619	8,915

At the work sites given technical support, the accident rate is a meager 38.7% of the average. This shows that the support program is effective.



● Technical Support for Medium - Sized Construction Sites

The workers in medium sized construction sites of which invoice is less than KRW12 billion lack in safety awareness, safety management system and self-regulated safety management activities in comparison to large construction sites.

Therefore, KOSHA inspected such medium sized construction sites in cooperation with MOL and spotted dangerous elements that can cause accidents and suggested measures for technical improvement. In addition, measures were taken to eliminate the possible causes of accidents such as the collapse of soil and mold posts, inundation, electric shock and fire before the start of the vulnerable thawing seasons, rainy seasons and winter seasons.

Technical Support for Medium - Sized Construction Sites in the Last Five Years (Unit : site)					
Project Name	2008	2007	2006	2005	2004
Technical Support for the Inspection & Supervision of Construction Sites	3,614	3,326	3,132	3,735	3,338
Technical Support for the sites with the risk of Large Accidents	865	512	543	245	276

● Technical Support to Small Construction Sites with Many Accidents

KOSHA provided continuing technical support to small construction sites whose contract amount is less than KRW 300 million and where safety awareness of employees and safety technology levels are relatively low even as many accidents have already been recorded. As a result of such efforts, the level of safety awareness among the concerned people in these sites has been improved.

Technical Support to Small Construction Sites in the Last Five Years (Unit : site)					
Project Name	2008	2007	2006	2005	2004
Technical Support to Small Construction Sites	12,323	13,179	15,378	15,515	12,467

● Promotion of Self-regulated Safety and Health

Unlike manufacturing industry, the construction industry has a separate head office and construction sites and thus it is necessary to promote self-regulated safety and health activities by establishing organic safety management system on company level instead of individual site management for effective safety management.

Therefore, KOSHA is distributing and certifying the ‘KOSHA 18001 Program for Construction Industry,’ a kind of safety and health management system, to the clients of construction projects, contractors, and subcontractors to enhance the level of self-regulated safety & health activities among construction companies. Furthermore, to assist the safety & health activities in construction companies with poor organization for safety management, comprehensive technical support for self-regulated safety was made for the head offices and construction sites after receiving applications from construction companies for technical support.



Comprehensive Technical Assistance for Self-regulated Safety in Construction in the Last Five Years (Unit : site)					
Project Name	2008	2007	2006	2005	2004
Comprehensive Technical Assistance for Self-regulated Safety in Construction	1,504	1,693	1,435	1,180	1,171

MANAGEMENT AND IMPROVEMENT OF HAZARDOUS WORKING ENVIRONMENT TO PREVENT OCCUPATIONAL DISEASES

A management system for chemical substances was established to improve the hazardous work environment and prevent occupational diseases caused by acute and chronic intoxication due to exposure to chemicals.

Based on data on industrial accident insurance, 6 of the chemicals that have caused occupational diseases in Korea were chosen, and their usage and treatment in 515 workplaces were investigated. The actual status of exposure among workers exposed to them and the highly risky and harmful processes were analyzed and effective control was suggested. ※ Chemicals chosen in 2008: benzene, cadmium, acrylonitrile, manganese compound, chromium compounds, dye and pigment

The results of the investigation were used as basic data for the development of the ‘Korean Control Banding & Control Toolkits for Chemicals’ to aid in understanding the danger of chemical substances and control for their management. This data is available at the agency’s website(www.kosha.net). ※ Korean Control Banding & Control Toolkits for Chemicals : A web program that assists with the self-regulated evaluation of the risk of the treatment process of the chemicals materials by company owners or workers and the procurement of the information on the hazard of chemicals and control for improvement.

Health management pocketbooks were issued to workers (accumulated number of persons: 5,050 as of the end of 2008) to monitor the workers exposed to carcinogens such as asbestos for more than a certain period. The workers currently exposed to carcinogenic chemicals are evaluated and recorded in 5 levels according to their exposure level and technical support was provided to reduce the exposure level. In addition, retired workers are supported for special health check-up once a year for continuous health management and the early diagnosis of occupational diseases.

To improve the reliability of the results of the work environment monitoring conducted by each of the 100 workplaces, such results were evaluated and analyzed comparatively. Through such process, problems in the appropriateness of the work environment monitoring and reliability of the exposure level were identified, and improvement measures, suggested to enhance the reliability of the results of the work environment monitoring.

The Workplace Health Partner Program was implemented in 163 workplaces to provide consultation and technical assistance by the voluntary request of the workers or company owners. The technical assistance was provided in 3 levels (information assistance, on-site evaluation assistance and precise assistance) according to the contents of the requests and the level of problem solution. Through the program, the causes of health problems were found and measures for the improvement of working environment were provided.

Assistance for the improvement of working environment was given to 380 workplaces including hospitals, small construction sites and the workplaces with dangerous processes that can cause suffocation by lack of oxygen. Especially, In accordance with the MOU closed with the Gyeong-gi municipality and the Busan city government in July and November of 2007 respectively, KOSHA has provided these regions with training programs on how to protect workers in confined space from suffocation and prevention facilities. Thanks to these measures, the number of deaths due to suffocation fell sharply from 31 in 2007 to 14 in 2008.

The Number of Occupational Diseases for the Past Five Years

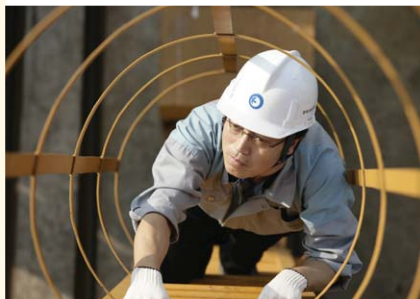
2008	2007	2006	2005	2004
1,653	1,964	2,173	2,527	2,492

PROMOTION OF WORKERS' HEALTH AND PROJECTS TO PREVENT CARDIO-CEREBROVASCULAR DISEASES

Health promotion programs for workers were implemented to prevent occupational diseases such as cardio-cerebrovascular diseases caused by the aging of workforce, changes in diet and lack of exercise, elevation of job stress and changes in lifestyle.

Health education, especially a smoking cessation program, was offered to 1,500 work sites with over 50 employees which have had cardiovascular cases. As a result, 16.6% of the participants stopped smoking for more than 100 days. In addition, the agency delivered medical check-ups and health consultations for employees with history of hypertension, hyperlipidemia and other cardiovascular diseases. This work lowered the risk of the diseases among the employees by 44.9%.

KOSHA provided 207 work sites with support for a voluntary health promotion program in which 17,927 employees received various services including physical strength tests, work-out guidelines and health management. Thanks to the program, 33.7% of the participants quit smoking (for more than 100 days) and the number of overweight or obese workers fell by 26.5%.



For medium and small enterprises in the industrial complex, 1 pilot regional occupational health center was opened to provide a program for the prevention of occupational diseases and health promotion at the level of large company. Professional manpower composed of industrial medicine, hygiene, nursing, physical training and nutrition experts provided comprehensive technical assistance and consulting for the workers of 321 workplaces and suggested a new model for industrial health service.

PROGRAM FOR PREVENTING MUSCULOSKELETAL DISORDERS

For the prevention of musculoskeletal disorders due to the increase in the number of repeated works as a result of automation, awkward posture, and handling of heavy materials, programs such as the examination of risk factors, technical support according to the characteristics of each workplace, and establishment of a prevention and management system were implemented.

Workplaces that did not conduct an inspection of risk factors deemed to cause musculoskeletal disorders were assisted in the examination of risk factors and establishment of improvement plans (440 workplaces). On the other hand, those that performed an examination of risk factors were supported differently based on the evaluation of reliability of the examination results (162 workplaces).

Through specific support adjusted on the results of evaluation of the probability of workplaces recording incidences of musculoskeletal disorders (602 workplaces), the number of patients decreased by 85.6% from the previous year following the identification of dangerous elements and the administrative and engineering improvements.

To control the increasing low back injuries due to mishandling of heavy objects, the agency launched a prevention campaign and offered technical support to 601 work sites.

KOSHA developed industry-specific manuals on musculoskeletal disorders. These differentiated guidelines were distributed to various industries including finance, insurance, education, hygiene, construction, and transportation.

In addition, the agency delivered campaigns to promote the labor and management to take the initiative in preventing musculoskeletal disorders (35 rounds), hosted academic seminars (3 rounds), and education programs to foster prevention experts specialized in the retail and wholesale industries (3 rounds).

DEVELOPMENT OF GUIDELINES FOR SAFETY AND HEALTH TECHNIQUES : KOSHA CODES

To meet the requirements for the development and distribution of the technical criteria for safety and health as appropriate for each situation at workplaces, KOSHA organized the technical standards committee according to the technical guidelines and standards for working environment as added to the Industrial Safety and Health Act in Jan., 1990.

The technical standards committee consists of 8 sub-committees on general industrial safety, mechanical safety, electrical safety, chemical safety, construction safety, industrial health management, industrial medicine, and industrial hygiene as well as a supervising committee. Each sub-committee consists of less than 20 members from government, industry and academe possessing expert knowledge in safety and health.

Among the resolutions of the committee, those which must be observed without fail are recommended to the Minister of MOL for public announcement while the others are announced by the president of KOSHA as KOSHA Code to be utilized at workplaces.

Currently, 325 items of the KOSHA Code have been enacted and disseminated through leaflets or website. The KOSHA Code is revised every 5 years to reflect the technical developments in safety and health.

Registration of KOSHA Code per Area (1995~2008)								
(Unit : case)								
Total	General Safety	Machinery	Chemical	Electricity	Construction	Health Care	Hygiene	Medicine
325	10	88	82	44	39	14	24	24

Moreover, since international standards are increasingly adopted as national standards, related international standards have been referred to at the time of development of these technical guidelines such that they correspond to international standards. KOSHA participates as the representative of Korea’s professional committees in conventions on crane (ISO/TC 96), mechanical vibration (ISO/TC 108), air quality (ISO/TC 146), explosion-proof electrical equipment (IEC/TC 31), electrical safety of industrial mechanical devices (IEC/TC 44), etc.

03.

Test, Examination, Approval, and Certification

SUPPORT FOR THE ESTABLISHMENT OF OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT SYSTEM : KOSHA 18001

The Occupational Safety and Health Management System (KOSHA 18001) is a system wherein the business owner reflects the safety and health policies on the management principles of the company and defines detailed guidelines and standards to enable workers to follow.

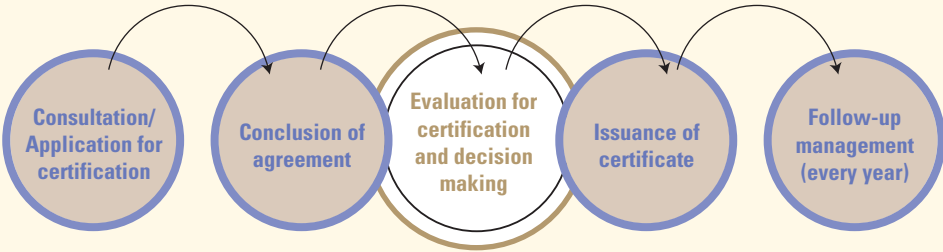
The management conducts a periodic self-evaluation of the safety and health management plan for continual improvement.

To promote such an occupational safety and health management systems, KOSHA started implementing the ‘KOSHA 18001’ certification system in July, 1999 for compliance by all workplaces.

In the KOSHA 18001 certification system, a certificate and a plaque of certification are awarded if the requirements of the certification standard are met following the evaluation of the safety and health management system at the workplace.

The occupational safety and health management system of KOSHA 18001 consists of the review of the initial status of the workplace, safety and health policy, planning, implementation, checking and correction, and audit by the management. However, the details of the application of each component and implementation are decided at the discretion of the company considering the overall situation such as the size of the workplace, management goal, managerial circumstances, and potential risks.

● Application Procedure



● Performance

In 2007, KOSHA evaluated the applications for certification of good safety and health management establishment and granted KOSHA 18001 certificates to 34 workplaces deemed to be above a certain level. As of the end of 2008, a total of 425 workplaces nationwide have been certified.

PSM, QUANTITATIVE RISK MANAGEMENT, AND TECHNICAL SUPPORT FOR RISK-BASED INSPECTION

● Evaluation and Confirmation of PSM

Any major industrial accident, e.g., fire, explosion or leakage at a single oil refinery or a petrochemical plant wields huge adverse impact on residents and environment in the vicinity of the plant, not to mention the workers inside the plant.

The Process Safety Management (PSM) system is a system that requires workplaces operating hazardous and harmful facilities to submit process safety reports to KOSHA for deliberation and approval. The system has been implemented since Jan. 1, 1996.

A total of 872 workplaces have been subjected to the Process Safety Management (PSM) system including 186 in harmful and dangerous industries such as crude oil refinery business and 686 that process one or more of the 21 hazardous and harmful substances such as chlorine and phosgene beyond the prescribed quantities.

● Quantitative Risk Management, and Technical Support for Risk-based Inspection

To prevent accidents at chemical factories and mitigate damage in case of accidents, KOSHA is distributing to workplaces the quantitative risk assessment program it developed. It is also offering technical assistance to enable the assessment of risks and preparation of inspection plans considering the probability of accidents and extent of damage depending on the facilities, e.g., fixed facilities and piping in the manufacturing process of a chemical factory, using KOSHA-RBI, an exclusive program for Risk-Based Inspection (RBI).

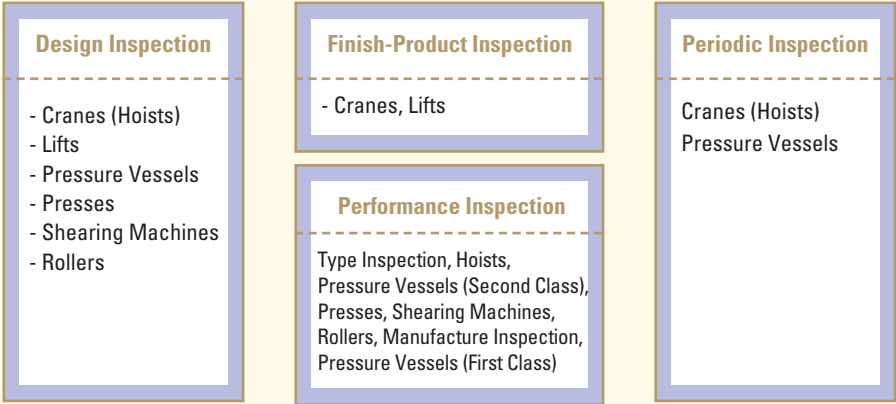
INSPECTION OF DANGEROUS OR HAZARDOUS MACHINERY, EQUIPMENT, AND FACILITIES

Since July 1, 1991, KOSHA has been conducting inspection on the 6 types of dangerous machines and equipment including cranes, lifts, pressure vessels, presses, rollers, and shearing machines with high risk potential of accidents pursuant to the Article 34 of the Industrial Safety and Health Act. Without undergoing this inspection, any dangerous machine and equipment cannot be manufactured, imported, transferred, lent or used. This inspection system consists of 3 stages: design inspection prior to manufacture, finish-product or performance inspection upon manufacture (or inspection during the manufacturing process), and periodic inspections in every 2 years during use. Thanks to the implementation of the inspection system, accidents due to dangerous machinery, equipment, and facilities continue



to decrease. In addition, workers’ lives are saved and the stoppage of production due to unexpected breakdown can also be prevented by the periodic inspection and maintenance system.

Kinds of Inspection



Types of Inspections Performed in the Last Five Years						(Unit : case)
Year	Inspection Type	Total	Design Inspection	Finish-Product Inspection	Performance Inspection	Periodic Inspection
2008		113,403	13,115	27,752	16,497	56,039
2007		107,817	12,675	27,127	15,527	52,488
2006		99,382	11,309	24,365	14,630	49,078
2005		87,671	9,156	22,263	12,693	43,559
2004		87,148	8,778	23,088	12,404	42,878

Types of Machines Inspected in the Last Five Years							(Unit : case)
Year	Inspection Type	Total	Cranes	Lifts	Pressure Vessels	Periodic and Shearing Machines	Rollers
2008		57,364	31,222	7,553	18,172	408	9
2007		107,817	54,096	7,634	45,266	766	55
2006		99,382	49,008	7,667	42,111	587	9
2005		87,671	42,572	7,620	36,929	527	23
2004		87,148	42,268	8,546	35,693	608	33

PERFORMANCE TEST OF SAFETY DEVICES AND PERSONAL PROTECTIVE EQUIPMENT AND SAFETY CERTIFICATION OF INDUSTRIAL MACHINERY AND FACILITIES

●Performance Test of Safety Devices and Personal Protective Equipment

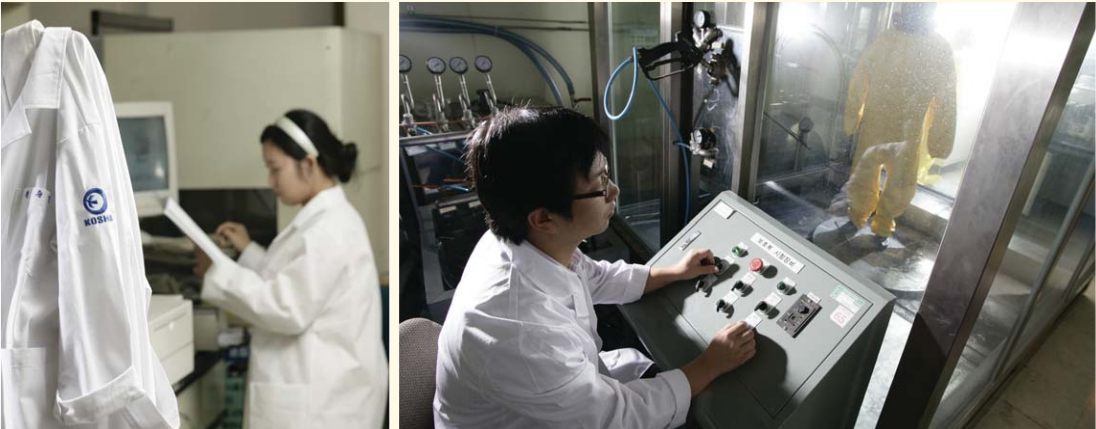


The structure, material, and performance of safety devices and personal protective equipment used for dangerous machinery and equipment are tested. Only the products that are higher than a certain standard are certified. Also, the products being sold in the market are collected for testing to promote the distribution of safe products.

●Safety Certification Mark (‘S’ Mark)



The ‘S’ mark can be attached to the industrial machinery and equipment that are proved for safety and reliability in the stage of design and manufacturing to symbolize their safety and contribute to the prevention of industrial accidents by promoting the sale of safer products.



04.

Education & Training on Prevention of Occupational Accidents

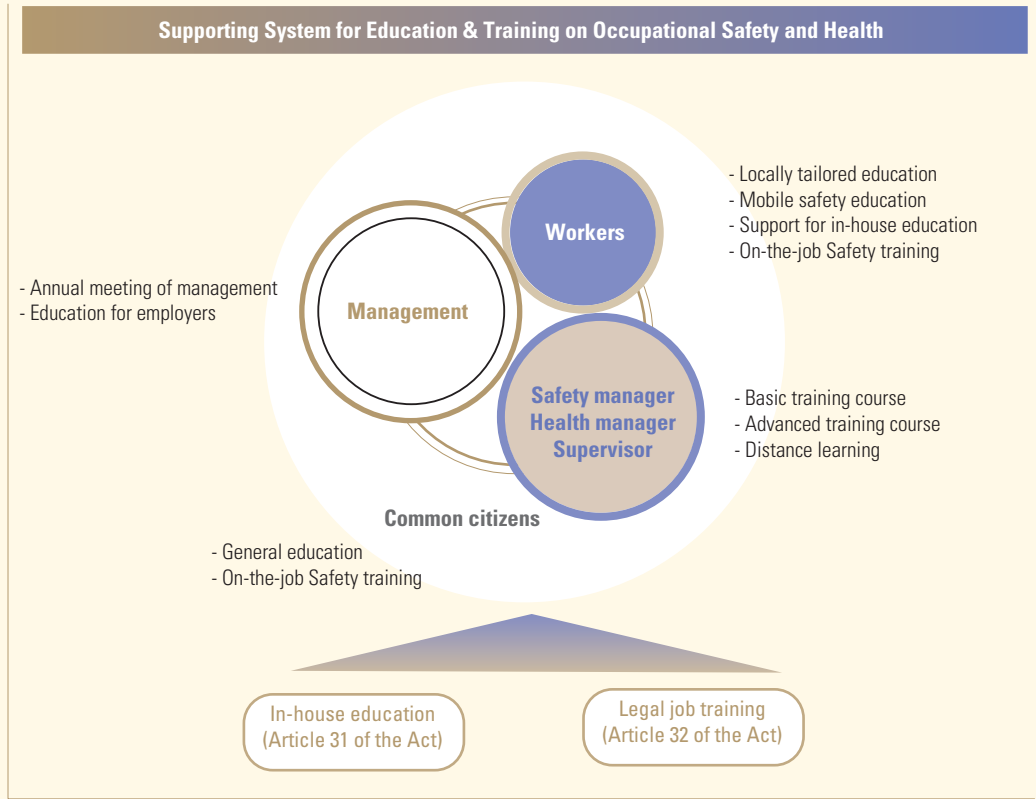
KOSHA has developed and operated a variety of education and training programs pertinent to occupational safety and health appropriate for the respective jobs, accident types, and regions through accident analysis to realize safe, healthy and advanced industrial communities. It has also succeeded in promoting safety awareness and preventing industrial accidents considerably.

SUPPORTING SYSTEMS FOR EDUCATION AND TRAINING ON OCCUPATIONAL SAFETY AND HEALTH

KOSHA has consistently developed and operated education courses on occupational safety and health pursuant to Article 31(Education on Safety and Health) and Article 32 (Education of Safety and Health Manager) of the Industrial Safety and Health Act. In particular, KOSHA has been operating the various education courses it developed as appropriate for management, supervisors, workers, and vulnerable groups to meet the requirements of customers; thus optimizing the effects of education and enhancing customer satisfaction.

ORGANIZATION OF EDUCATION AND TRAINING ON OCCUPATIONAL SAFETY AND HEALTH

KOSHA’ s organization of education and training on occupational safety and health consists of the headquarters’ Training and Safety Culture Department, which is responsible for the development and operation of all training courses, one Occupational Safety and Health Training Institute (OSHTI) for operating expert training courses for safety and health managers, six Regional Training and Information Centers (RTIC) for establishing and operating semi-expert training courses at the respective regions, and twenty Training and Public Relation Teams to provide customized and various training courses. The organization exercises the core functionality for the activation of occupational safety and health training.



SUPPORT FOR CUSTOMIZED TRAINING COURSES FOR CUSTOMERS

● Training Courses for Executives

The annual meeting of the managements of enterprises held by KOSHA is an ideal venue for suggesting good cases of safety to strengthen the competitiveness of enterprises and to guide them in promoting safety awareness and investing in safety systems. Furthermore, KOSHA trains employers of hazardous businesses from among enterprises employing less than 50 workers that suffer from frequent accidents in the respective regions and on various courses including administration and safety, analysis of accident causes, and safety-ensuring measures to help them establish self-regulatory safety management for accident reduction.

(Unit : person)						
Item	2008	2007	2006	2005	2004	2003
Annual meeting of the management	4,757	3,080	3,362	2,139	2,036	1,911
Courses for employers of high-risk work sites	22,252	22,406	16,849	14,826	16,462	20,894

● Training Courses for Supervisor

In order to expand training opportunities for regional work sites, KOSHA has been operating training courses for supervisors and managers through its six regional centers for education and training.

Furthermore, the agency prepared education courses befitting each region through analysis of each region’s industrial structure and accident pattern.

(Unit : person)					
Item	2008	2007	2006	2005	2004
On-the-job training	17,612	14,193	8,375	-	-
Region-Specific Course	37,065	34,799	35,548	23,887	33,643

● Training Courses for Employees

The Training and Public Relation Teams at the 20 area offices provide mobile training services to workers at manufacturing and construction workplaces that are poor in in-house training owing to deficient training circumstances, e.g., training venue and lecturers.

Specifically, buses that are fully equipped with visual and audio training systems are used.

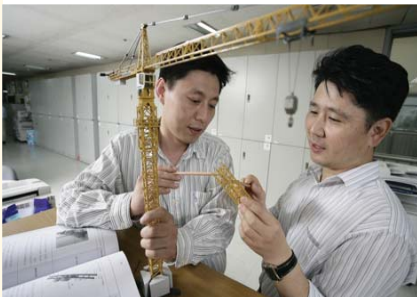
The teams also provide free training courses and lecturers on safety and health at the request of small and medium-sized enterprises that are virtually incapable of executing in-house training courses due to the lack of expertise in safety and health.

In addition, the agency is striving to deliver customized training services based on its risk assessment on each worksite.

(Unit : person)					
Item	2008	2007	2006	2005	2004
Mobile safety education	105,463	113,764	126,795	109,230	106,484
In-house education	159,436	126,426	80,605	81,610	99,863
Customized training services	19,287	31,686	5,936		

● Education for Those Who are Vulnerable to Industrial Accidents

With the increase in the number of migrant workers in workplaces, education on occupational safety is done during the classes for employment and a systematic and comprehensive support for safety education has been established to contribute to the reduction of industrial accidents in the areas densely populated by migrant workers and improve the human rights of migrant workers.



Also, safety education is being done for the students at vocational high schools, Korea University of Technology and Education and Korea Polytechnic Colleges to raise the safety awareness of future industrial manpower and contribute to the prevention of industrial accidents for new employees.

(Unit : person)					
Item	2008	2007	2006	2005	2004
Safety education for migrant workers	89,016	105,581	74,213	26,427	14,030
Safety education for vocational schools	42,199	40,739	24,056	-	-

SAFETY EDUCATION THROUGH EXPERIENCE

KOSHA provides safety education and training on construction safety to help employees recognize safe work at the sites by letting them experience the danger of fallen objects and falls. Such training through experience (conducted at 6 training centers) involves over 30 construction safety-related facilities including the use of safety belts, breaking tests of fall-prevention nets and safety helmets, and firefighting and emergency rescue for construction employees and supervisors. The training contributes to enhancing safety awareness among the trainees.

(Unit : person)					
Item	2008	2007	2006	2005	2004
Safety Education through Experience	35,223	38,129	32,083	31,780	36,700

In addition, trainees can find out the hazardous elements and the process of accidents using the computer-based virtual reality technology in the Virtual Safety Training Centers operated gratis by KOSHA. The centers are linked with the safety training through experience and are popular for the workers, common citizens, and students who use the centers.

(Unit : person)					
Item	2008	2007	2006	2005	2004
Virtual safety training	14,120	13,910	14,193	40,394	45,985

TRAINING COURSES FOR SAFETY AND HEALTH EXPERT

As part of training for its specialist for industrial safety and health, Occupational and Safety and Health Training Institute provides basic training courses, practice-oriented advanced training courses, and distance learning for safety and health managers and supervisors to prevent industrial accidents and occupational diseases and improve workers’ health. In addition, a mail correspondence program is provided to improve the competency of supervisors; thus making them more aware of safety and health within workplaces and enabling them to keep safety in mind at all times while working. KOSHA has also been offering cyber training programs through the Internet.

(Unit : person)						
Item		2008	2007	2006	2005	2004
Total		18,269	15,734	15,225	12,997	12,412
Basic training course		934	647	607	396	412
Advanced training course		8,354	8,032	7,612	7,473	7,931
Correspondence	Mail	4,120	3,674	3,668	3,666	3,531
Education course	Internet	4,861	3,381	3,338	1,462	538

EARLY SAFETY EDUCATION

Since safety consciousness begins with the education at home and the basis is formed at school education and completed by the education at workplaces, it is extremely essential to enhance early safety education among children and primary, middle, and high school students so that they can develop safety habits during their formative years.

As part of the its efforts to establish early safety education, KOSHA conducts safety education for kindergarten and primary school teachers to nurture them into safety culture instructors possessing the necessary qualifications. It also promotes children’ s safety awareness by supplying safety training materials that are appropriate for students at the kindergarten up to the primary school levels.

In particular, KOSHA is operating model safety schools to prevent accidents in schools, enhance safety awareness, and develop the knowledge and attitude of students through school courses and safety activities. All required teaching materials and aids, training, instructors, safety inspection as well as the necessary funding for the operation of the model school are provided by the agency.

(Unit : person / school)					
Item	2008	2007	2006	2005	2004
Training for safety instructors	1,156	2,072	1,949	1,691	1,698
Operation of designated model schools for safety training	32	32	64	64	64

05. Safety and Health Culture

To enhance safety awareness among employees and employers and to enable the national safety culture to take root, KOSHA implements much PR and campaign activities and safety culture movement through various media.

NATIONAL SAFETY CULTURE MOVEMENT

Since the latter half of 1995, the government has led the safety culture movement with the participation of civilian, government, and other organizations covering all social sectors to establish a pan-national safety culture.

As of April 1996, the safety culture implementation committee declared the 4th (or the following business day if the 4th falls on a holiday) of each month as ‘Safety Checking Day’. The project seeks to enhance public safety awareness and implement monthly accident prevention and risk detection activities.

(Unit : site)					
Item	2008	2007	2006	2005	2004
Safety Inspection on ‘Safety Checking Day’	2,120	2,707	1,684	345	454



THE WEEK OF OCCUPATIONAL SAFETY AND HEALTH

Together with the Ministry of Labor, KOSHA celebrates the ‘The Week of Occupational Safety and Health’ every year pursuant to the Industrial Safety and Health Act. The first week of July of each year has been declared as Occupational Safety and Health Week, during which occupational safety and health personnel are rewarded for their meritorious contributions to the prevention of industrial accidents. Exchanging accident prevention technique and encouraging free discussions enable the creation of an accident prevention atmosphere during this week.

KOSHA holds various events to enhance the safety awareness of employers and workers as well as safety and health experts and common citizens, e.g., meeting on occupational safety and health, exhibition of international safety equipment, working environment and firefighting equipment, essay & PR contests, and the operation of KOSHA’s PR pavilion.

The participants in the events held during the Week of Occupational Safety and Health are expanded from the concerned persons in the area of safety and health to ordinary citizens, women’s organizations, teachers, students and union representatives in order to form a national consensus on occupational safety and health. As a result, the week contributes to the establishment of safety culture in the whole society making safety the absolute value in life.

STRENGTHENING PUBLIC RELATIONS FOR NATIONAL INDUSTRIAL ACCIDENT PREVENTION

KOSHA is providing information in the form of safety and health materials. It conducts various activities on the prevention of industrial accidents via broadcast media such as TV, radio, Internet, and cyber PR center at its website to strengthen safety awareness and spread it to the public.

KOSHA operates a PR center where various safety and health materials are displayed to educate industrial workers, students, and safety and health staff in an efficient manner.

Result of PR activities of KOSHA					
Division	2008	2007	2006	2005	2004
Broadcasting	156 times	208 times	216 times	158 times	113 times
Mass media	595 sites	312 sites	248 sites	144 sites	88 sites
Print media	7,259 times	6,086 times	312 times	4,430 times	6,096 times
Exhibits	8,330 persons	10,012 persons	10,644 persons	14,624 persons	15,625 persons

ACCIDENT-FREE MOVEMENT

● Management of Participating Workplaces

Business owner embarking on an accident-free movement should announce the beginning of the movement to his/her employees and submit a report containing related details to the regional or area offices of KOSHA within 14 days.

KOSHA supports workplaces that manage accident-free movement by providing various necessary educational materials to revitalize the movement.

Once they have achieved their time targets set by business type and size, these workplaces can apply for the certification of their achievements within 60 days at the jurisdiction regional or area office.

The regional or area office investigates within 14 days if the type of business was properly applied, if the time target was appropriately set and calculated, and if there were no industrial accidents. If the goal was achieved properly, an accident-free certificate and the award would be given.

● Method Development and Distribution for the Promotion of the Accident-free Movement

To promote the accident-free movement effectively, various methods such as training on the 4-round danger anticipation, training on one-point danger anticipation, and case studies of near misses are provided to workplaces.

● Status of Participation in the Accident-free Movement and Successful Workplaces

Workplaces Participating in the Accident-Free Movement by Size and Year (As of end of Dec. 2008)					
(Unit : place)					
Item	Total	Less Than 50 Workers	50~99	100~299	300 or More Workers
2008	2,841	1,430	626	633	152
2007	2,898	1,525	592	647	134
2006	2,623	1,297	676	549	101
2005	2,658	1,172	765	549	172
up to 2004	106,625	69,506	20,272	13,159	3,688
Total	117,645	74,930	22,931	15,537	4,247

Status of Target Achievement by Year (As of end of Dec. 2008)								
(Unit : place)								
Item	Total	50%	100%	Twice	Thrice	Four times	Five times	Six times or more
2008	1,591	0	581	257	196	117	119	321
2007	1,516	0	596	281	186	80	116	257
2006	1,324	0	570	278	174	41	123	138
2005	1,201	0	605	238	154	0	127	77
Up to 2004	26,562	1,595	12,895	5,894	3,591	644	1,640	303
Total	32,194	1,595	15,247	6,948	4,301	882	2,125	1,096



06. Development and Dissemination of Media Materials on Safety and Health at Work

ONLINE MATERIALS

● Internet Magazine, WiSH

Internet magazine WiSH is available at wish.kosha.net or by e-mail if requested. As of 2008, the magazine with video materials and accident cases was distributed to about 90,000 workers at manufacturing and construction companies.

● Monthly Safety and Health Media

Over 10,000 copies of a monthly, Safety and Health Media, are distributed to construction and manufacturing companies by e-mail. The magazine is used for workers' training on safety and health.

● Powerpoint Samples

Since 2006, powerpoint samples for training, which are categorized into six different industrial sectors, have been offered at KOSHA's website. In 2008, KOSHA developed and disseminated a total of 170 types of powerpoint materials dealing with major accident cases.

VIDEO MATERIALS

● Education videos

Education videos, which aim for the manufacturing and construction sectors, have been developed and provided. The videos have different sections according to work process units and accident types. In 2008, a total of 44 sections were made.

● Animations

KOSHA developed animations showing major accident cases. 24 hours of Disaster Center introduces major accident cases and their preventive measures. Safety Fairytale aims to educate children. In 2008, a total of 26 animations were developed.

MONTHLY SAFETY AND HEALTH

On a monthly basis, 10,000 copies of Safety and Health are distributed to worksites with subscriptions. The monthly contains related technologies for self-regulatory OSH management, best practices, major accident cases, related laws and regulations, and technical standards.

MODULAR MATERIALS

Since 2006, modular materials, which can be generally used for all training courses at KOSHA, have been available. The materials are categorized into the module type and the sheet type. In 2008, a total of 153 materials (53 module type materials and 100 sheet type materials) were made and distributed.

MATERIALS FOR MIGRANT WORKERS

Since 2000, education materials have been offered to enterprises with migrant workers. In 2008, approximately 170,000 copies of 41 types of education materials including textbooks, posters, stickers, videos, and powerpoint slides were created and distributed in ten languages (English, Chinese, Indonesian, Bangladeshi, Vietnamese, Thai, Mongolian, Uzbek, Sinhalese, and Pakistani).

MATERIALS FOR VULNERABLE SMES

● Materials for SMEs with Below 50 Employees

Safety and Health Guide is issued on a quarterly basis for SMEs with below 50 employees which cannot afford KOSHA services directly. The free quarterly offers 150,000 enterprises in the manufacturing, construction, transportation, warehousing, and communications industries with OSH information tailored to each industrial sector.

● Materials for SMEs with Below 5 Employees

KOSHA freely offers 10 types of education materials (1 type of a pamphlet, 2 types of posters, and 7 types of stickers) with SMEs hiring less than five workers in high-risk sectors including manufacturing and construction.

NON-FREE MATERIALS

● KOSHA Club for Constructors (non-free membership service)

KOSHA receives applications for membership to KOSHA Club for Constructors annually. The members are offered education materials including videos, textbooks, and posters by mail.



The agency also provides various modular materials through the web. As of 2008, there were 722 members.

● Online Shopping Mall

KOSHA operates an online shopping mall for its publications. As of 2008, 361 materials including textbooks, posters, panels, and videos were available at the website.

INFORMATION NETWORK FOR THE PREVENTION OF INDUSTRIAL ACCIDENTS

KOSHA operates its website and offers KOSHANET services for safety and health personnel, workers, and general public. Specifically, the EIP (Enterprise Information Portal) system is operated to enable internal customers to conduct accident prevention activities more effectively.

The KOSHA website (<http://www.kosha.or.kr>) contains an introduction of KOSHA as well as information on its 68 businesses and various civil services. The agency has also built a database containing domestic and foreign safety and health materials dubbed KOSHANET services (<http://www.kosha.net>) for free distribution to workplaces, workers, and safety and health personnel as well as the general public. Furthermore, the agency has initiated the MSDS service with the GHS system to secure fundamental security for the chemical materials manufactured and distributed in Korea.

In particular, KOSHANET provides information including legislation information related to safety and health, KOSHA-Codes, OPS, accident cases, MSDS/GHS and information on foreign countries. Four multimedia services including foreign streaming data as well as an e-book are also provided via KOSHANET (KOSHANET members as of Dec. 31, 2008: 325,681).

In 2008, 38 contents were added to the Nanuri system including management assessment, the comprehensive OSH system, budget management, security control, and management of workers' health. In addition, the agency significantly upgraded the Internet service system and the web site, sophisticated the customer management system, and established the search engine for industrial accident rate with an aim to provide better quality information to its customers. KOSHA improved its internal work process and customer services by devising the Information Strategy Plan (ISP) and the Information Technology Architecture.

07. Systematic Management of Statistics on Occupational Accidents

KOSHA is contributing to the prevention of industrial accidents by providing the basic data required for the establishment of policies to prevent industrial accidents and for implementation to protect the life and health of workers through the analysis of results of cases of industrial accidents and health checkup of workers per industry category, pattern of occurrence, and reasons for such.

ANALYSIS OF THE REALITIES OF INDUSTRIAL ACCIDENTS

For accidents occurring in workplaces governed by the Industrial Accident Compensation Insurance Act, deaths covered by the law as work-related deaths or illnesses requiring more than 4 days' medical treatment are analyzed in terms of their characteristics per business category, size of business, region, pattern of occurrence, and type of business.

※ Legal basis: General statistics based on Article 8 of the Statistics Law (approval no. 11806)

EXAMINATION OF THE CAUSES OF INDUSTRIAL ACCIDENTS

Accidents in workplaces covered by the Industrial Accident Compensation Insurance Act go through in-depth analysis to investigate their causes according to the fundamental cause, details of work, type of injury, part of injury, and employment type.

Review of the data for the recognized industrial accidents, telephone calls and visiting surveys are conducted for a 10% sample in the case of work-related accidents. In the case of work-related illness, however, review of data, telephone calls, and visiting surveys are performed for all cases (30% sample for lumbago and cerebrovascular diseases).

※ Legal basis: Designated statistics as per Article 8 of the Statistics Law (approval no. 38001)

RESULTS OF WORKERS' HEALTH CHECKUP

By collecting the results of workers' health checkups conducted in accordance with the Industrial Safety and Health Act, analyses are performed to investigate the distribution characteristics of the rate of occurrence of potential illness, harmful element, length of work,

KOSHA ACTIVITIES IN 2008

42+43

KOSHA Annual Report 2008



industry, size of workplace, and post factum measures for diseases(occupational diseases and ordinary diseases) on an annual basis.

※ Legal basis: General statistics as per Article 8 of the Statistics Law (approval no. 11809)

08. R&D Activities on Occupational Safety and Health

As the only public research agency in Korea which conducts the research and development of professional technology and policies on safety & health for the prevention of industrial accidents for employees of workplaces, KOSHA makes researches on the policy and system of industrial safety & health, safety engineering area including machinery, electricity, petrochemical and construction, the area of working environment, occupational diseases and the toxicity of chemical materials. Through such activities, KOSHA contributes to the prevention of industrial accidents ad the development of the national economy by promoting the safety and health of employees and encouraging business owners to take active measures to prevent accidents.

In 2008 in particular, KOSHA focused on the researches that could meet the needs of customers and that could be used more practically for the policies for industrial accident prevention. As a result, the quality of R&D was upgraded and more practical research studies have been activated.

RESEARCH ON SAFETY MANAGEMENT POLICIES

The role of the researches on the policies of industrial safety and health is to provide the basic data and information for the recommendation of effective policies for industrial safety and health and lay the groundwork for the continuous activities for accident prevention by setting a long and mid term goals for the researches on safety and health.

Against this backdrop, KOSHA set three directions for OSH research in 2008.

First, the agency conducted research on policies to reduce industrial accidents in an efficient way. By studying past experiences and performance and predicting new work conditions for

the next decade, KOSHA presented framework for the 3rd 5-year Plan on Prevention of Industrial Accidents. It also launched a research project on the Mid and Long-term Research on OSH Promotion Activities and put forth effective ways to raise public awareness about safety and health at work.

Second, KOSHA's R&D efforts also focus on OSH laws. The agency studied the existing OSH laws and came up with measures to upgrade the OSH system and the penalty system through Research on the Current Penalty System for OSH Laws and Research on Measures to Advance the OSH Legal System.

Lastly, the agency suggested measures to maximize the benefits of OSH training and to improve institutions for vulnerable social groups. Through Research on Measures to Improve Standards and Operation of OSH Training, KOSHA analyzed the current OSH training courses and built measures to promote effective training. Moreover, by delivering Research on Accident Patterns among Special Occupations and Preventive Measures(II), KOSHA devised identified accident types frequently found among special occupations and devised preventive measures.

RESEARCH ON OCCUPATIONAL SAFETY

The research on occupational safety deals with the specific sectors of machinery, electricity, construction and human engineering to develop the technologies for the prevention of industrial accidents and focus capabilities on practical R&D activities to reduce the major types of accidents including fall and overturning effectively.

Especially, academic professionalism and universality are strengthened by joint researches with universities, related research institutes and companies, active international research exchanges and consultation with experts.

In addition, comprehensive preventive measures are presented for the types of serious accidents that have occurred recently by using the state-of-the-art scientific techniques through various experiments and simulations.

Other areas for in-depth researches were: development of the technique for the evaluation of the danger of slipping and the development of a robot to measure the degree of slipping, the development of a monitoring system for the movement of tower cranes by wind, proposal of automatic supply system to fundamentally prevent the accident of circular saws, comparison of the strength characteristics with the alteration of the wire rope sling by pressing and the eye splice incorporation method, development of a program for the identification and analysis of parameters for each element of electric shock, production of experimental human models for the interpretation of the electric shock of human body, development of cheap distribution model leakage indicator, the realities of safety awareness among construction workers, development of the device to confirm the wearing of safety helmet for the prevention of the accidents by fall from around 2.5m height and safe working clothes and the development of safe working stand exclusive for low height. In addition, KOSHA is making hard efforts for the



propagation of safety culture and the technologies for the prevention of accidents in our society by holding research seminars for the themes of increasing social interest.

RESEARCH ON THE PREVENTION OF OCCUPATIONAL DISEASES

KOSHA conducts research on prevention of work-related diseases in order to identify hazards to workers health, and develop technologies to prevent occupational diseases including musculoskeletal disorders (MSDs), job stress, and cardiovascular diseases. In doing so, the agency aims to present a health management model and institutional measures. Due to rapid industrialization and new working conditions, health hazards at work are becoming more complex and severe.

The Center for Occupational Disease Research of the Occupational Safety and Health Research Institute analyzes health hazards and past outbreaks, and devise preventive measures for future outbreaks with its extensive database. The Center delivers various research projects regarding musculoskeletal disorders including risk assessment, risk exposure in each industrial sector, distribution rate, a management level, and ergonomic aspects like the optimal heights of work tables.

It also strives to address the issue of job stress and cardiovascular diseases by identifying risk factors and conducting biomolecular research. Moreover, the center has recently launched a study on biomolecular and biochemical aspects of chemical exposure and metabolic syndrome. It also involves in other various fields including diagnosis and treatment of occupational diseases of special occupations, efficiency of OSH systems, occupational health services and prevention measures for MSDs by advanced nations.

EPIDEMIOLOGICAL INVESTIGATION OF OCCUPATIONAL DISEASES

Epidemiological inspection is conducted when work-related diseases occur to identify the causality between the disorders and health hazards. The inspection usually takes place at the request by employers, employees, local authorities or Korea Workers' Compensation, and Welfare Service. However, KOSHA also can deliver the inspection if necessary for prevention after the Committee of Epidemiology Inspection deliberates it.

Annually, Korea Workers' Compensation and Welfare Service asks KOSHA to deliberate about 80 applications for medical treatment submitted by workers since it is often difficult to decide whether the disease is work-related. Moreover, the agency carries out preliminary inspection on sectors handling hazardous materials.

Recently, KOSHA has inspected workers at tire manufacturers, cement plants, semiconductor fabs and petrochemical plants of Yeosu, Gwang-yang and retirees who had been exposed to asbestos. The inspection includes assessment of working conditions like exposure to hazards and clinical test on workers.

The results help determine hazards that caused mass outbreaks of work-related diseases

and build institutional measures for prevention. Moreover, this information is used to identify the causes of newly arising diseases. In other words, the inspection provides fundamental database for OSH research.

Number of diagnoses for the past Four Years					(unit : case)
Item	2008	2007	2006	2005	
Total	87	92	86	80	
Industry-wide or hazardous factors	5	5	9	6	
Individual diseases	82	87	77	74	

QUALITY ASSURANCE PROGRAM OF SPECIAL OR PNEUMOCONIOSIS
HEALTH EXAMINATION AGENCIES

Since 1995, KOSHA has been operating regular quality assurance programs to verify the analysis, examination, and judgment capabilities of special or pneumoconiosis health examination agencies for the accurate and reliable health screening of workers. The Quality Assurance Program of KOSHA will guarantee the accuracy and validity of the special or health examination programs for workers.

	Proficiency Test on Biological Monitoring	Pneumoconiosis	Hearing Ability
Content	Evaluation of reliability of the analysis of items in blood and urine for biological monitoring	Enhancing the accuracy and reliability of pneumoconiosis examination for special and pneumoconiosis examination	Standardization and quality improvement of the methods and evaluation of the hearing ability test through specialnoise examination
Type	Special health examination	Special/Pneumoconiosis health examination	Special health examination
Frequency	Twice a year	Once a year for special examination Once a year for pneumoconiosis examination	Once a year
Area	Heavy metals in blood and metaboliteof organic solvent in urine	Taking and reading chest X-ray, examination of vital signs/lung function, and judgment of lung function	Examination and judgment of hearing ability
Evaluation method	Appropriate if the result of the analysis of each item falls within the proper range	Education, evaluation via on-site inspection, inspection of data, and evaluation of reading ability	Education, evaluation via on-site inspection, and inspection of data

MANAGEMENT OF INDUSTRIAL CHEMICALS

The purpose is to contribute to the prevention of industrial accidents and occupational diseases caused by industrial chemicals by providing safety and health information, evaluating the hazard and danger, and supporting the certification and analysis of the toxicity for the early establishment of the area of the research on danger.

● Provision of Material Safety and Data Sheet (MSDS) DB and Information

Experts in their respective areas collect the latest information on the hazard and danger of chemical materials and make the Material Safety and Data Sheet(MSDS) and distribute them through the Internet.

They also conduct the evaluation of the reliability of MSDS on the basis of the analysis of the components of the materials to facilitate the accurate preparation and exhibition of the MSDS at workplaces.

In addition, they are carrying out cyber consultation for the recognition and effective management of dangerous chemical materials at workplaces and dealing with information on chemical materials including the provision of the classification information on the hazard and danger pursuant to the GHS system and the MSDS Editing Program for compound materials.

Number of Usage of MSDS DB for the recent Five Years						(unit : case)
Item	2008	2007	2006	2005	2004	
Number of usage	981,803	762,110	619,668	622,204	341,411	

● Researches on the Toxicity of Chemical Materials

OSHRI creates database in toxicity of chemicals to prevent workers from hazardous materials such as nano particles and asbestos.

This information can be utilized to set occupational standards, identify health hazards, and update MSDS. In addtion, the institute operates the GLP Toxicity Test, which includes research on inhalation, skin illnesses, and genetic issues. It also builds database on the level of toxicity of new and existent chemicals.

OSHRI supports precision analysis on asbestine samples through electronic microscopes. These analyses are scheduled to receive an international certification, NVLAP. The institute is planning to build lab infrastructure for the chronic disorders caused by chemical inhalation to protect workers from hazards of long-time exposure of low-concentration chemical materials.

● Evaluation of the Safety of Chemical Materials and Processes

KOSHA implements the tests and evaluation of the physical & chemical characteristics of chemical materials, fire & explosion, stability and reactivity and establish the measures to prevent chemical accidents through the identification of the causes of accidents and evaluation of danger based on the produced test data.

In addition, KOSHA is contributing to the prevention of industrial accidents caused by chemical materials by providing workplaces with the results of the tests and evaluation of the materials requested to be tested according to the technical support for the workplaces so that they may be utilized for the self-regulated safety management of the workplaces.

09. International Cooperation

In 2008, KOSHA made effort to introduce advanced technologies in the area of occupational safety and health by reinforcing cooperative activities with 32 professional organizations for the prevention of industrial accidents in 14 nations as well as such international agencies as ILO and WHO. It is also providing Asian countries with the technologies for accident prevention to fulfill Korea's responsibilities as a member of OECD.

ENHANCEMENT OF COOPERATIVE ACTIVITIES WITH PROFESSIONAL INSTITUTES WORKING FOR THE PREVENTION OF INDUSTRIAL ACCIDENTS AND INTERNATIONAL AGENCIES

KOSHA has implemented active and cooperative activities with professional institutes in advanced nations such as the National Institute for Occupational Safety and Health (NIOSH), National Security Council (NSC), Japan Industrial Safety and Health Association (JISHA) and Physikalisch Technische Bundesanstalt (PTB) to improve its technical capabilities to prevent industrial accidents and fulfilled its responsibility demanded by the international society as a member of Organization for Economic Cooperation and Development (OECD) by establishing cooperative relationship with such international organizations as International Labor Organization (ILO), International Standards Organization (ISO), Organization for Economic Cooperation and Development (OECD), European Agency for Safety and Health at Work (EU-OSHA) and Asia-Pacific Occupational Safety and Health Organization (APOSHO).



TECHNICAL SUPPORT FOR ASIAN COUNTRIES TO PREVENT ACCIDENTS

KOSHA has actively participated in cooperative activities related to occupational safety and health by reinforcing cooperation with the Asian countries and sharing with them techniques and experiences of Korea related to the prevention of industrial accidents. In 2008, a total of 33 personnel including the government officials in 15 Asian nations were invited to Korea for training. KOSHA also dispatched its experts to 5 nations to provide consulting to improve the technical level for the prevention of industrial accidents in those nations.

OPERATION OF THE INFORMATION CENTER

KOSHA offers latest information on global OSH issues weekly and monthly. This information is open to anyone who is interested in the international OSH trend.

The weekly, International Trend of Occupational Safety and Health, consists of various content including latest news and publications released by global OSH organizations, and related events. The weekly collects extensive information provided by the ILO-CIS. It also includes other practical information such as brief news on OSH, recent papers and schedules of related events.

As an International Partner, KOSHA takes part in EU-OSHA Website Network and shares Korea's OSH issues and good practices.

THE 46TH ANNUAL MEETING OF THE CIS NATIONAL, COLLABORATING, REGIONAL CENTERS AND PRESENTATION ON INFORMATION SEARCH

KOSHA held the 46th Annual Meeting of the CIS National, Collaborating, Regional Centers on June, 29th. The ILO-CIS is a global network for OSH officials. The meeting was co-chaired by Manager Kwon, Jin-young of the International Cooperation Department of KOSHA, Head Gabor Sandi of the ILO-CIS, and Coordinator Annick Virost. The International Cooperation Department introduced the ILO-CIS Occupational Safety and Health Glossary. The glossary has recently been translated in Korean in cooperation with the ILO, adding to English, German, and Spanish versions.

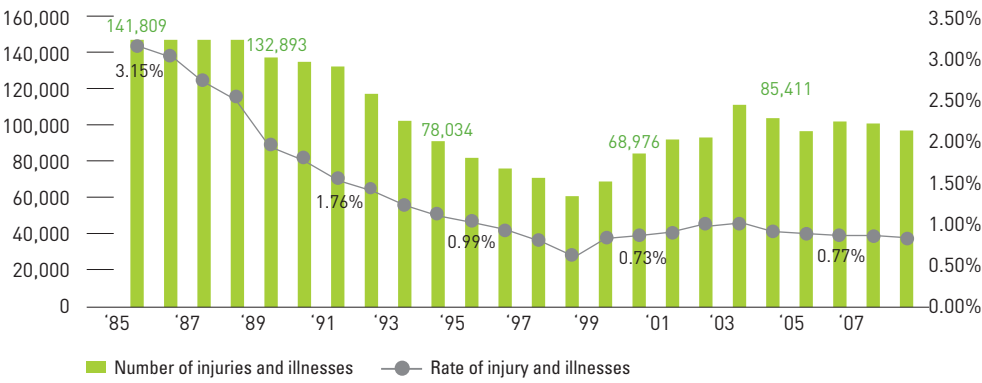
During the meeting, three Campaign videos, which were aired by the Korean Broadcasting System (KBS), drew high interest. The meeting discussed a plan to mark the 50th anniversary of the ILO, dissemination of the Seoul Declaration, and publication of the 5th edition of the ILO OSH Encyclopedia. In addition, the annual report on activities by the ILO-CIS was announced. On June 30th, ILO-CIS Head Gabor Sandi, Senior Document Analyst, made a presentation on how to utilize CIS information and introduced the ILO OSH Encyclopedia, OSH laws of each nation, and related organizations. Irja Laamanen at FIOH (Finnish Institute of Occupational Health) demonstrated how to search information on hazardous chemicals before OSH officials from home and abroad.

IV.Statistics on Occupational Accidents in 2008

1. SUMMARY

- Out of the 13,489,986 employees working at the 1,594,793 workplaces covered by the Industrial Accident Compensation Insurance Act, casualties requiring medical care for a period of at least 4 days numbered 95,806 as of 2008. The rate of injury and illnesses stood at 0.71%
- The year of 2008 saw a 7.67% increase in workers, a 6.27% rise in accident cases, and a 0.01% fall in the accident rate.
- Due to a dramatic shift in the nation’s economy under the control of IMF in 1998 and 1999, the number of injuries and illnesses and rates of injury and illnesses showed radical decrease and increase after showing a continuous decreasing trend in the early 1990s. The number of injuries and illnesses has increased considerably since 2001 as the coverage of the Industrial Accident Compensation Insurance Act was extended to include those with at least 1 employee in Jul. 2000.

[Table 1] Number of injuries and illnesses and Rate of injury and illnesses by Year



2. STATUS OF FATAL ACCIDENTS

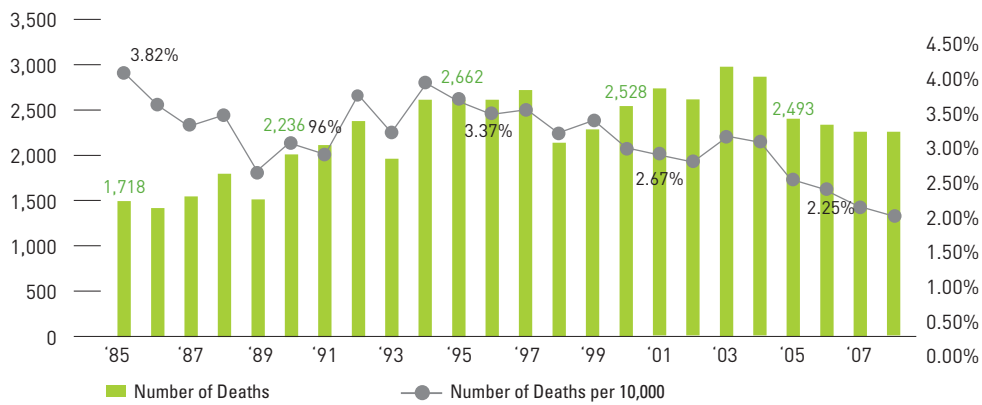
- The number of fatalities (Fatal injuries and deaths from occupational diseases) stood at 2,422. Among them, 1,448 were due to number of fatal injuries and 974 were due to number of fatal illnesses
- Rate of fatalities per 10,000 persons stood at 1.80, decreased 0.12p compared to 1.92 in 2007. The top three causes of fatal accidents include cerebro-cardiovascular disease (511 fatalities), falls (468) and pneumoconiosis (426).
- The number of fatalities has consistently increased since 1998 due to the growing number of fatal illnesses. In contrast, rate of fatalities per 10,000 persons have decreased since 1994.

KOSHA ACTIVITIES IN 2008

50+51

KOSHA Annual Report 2008

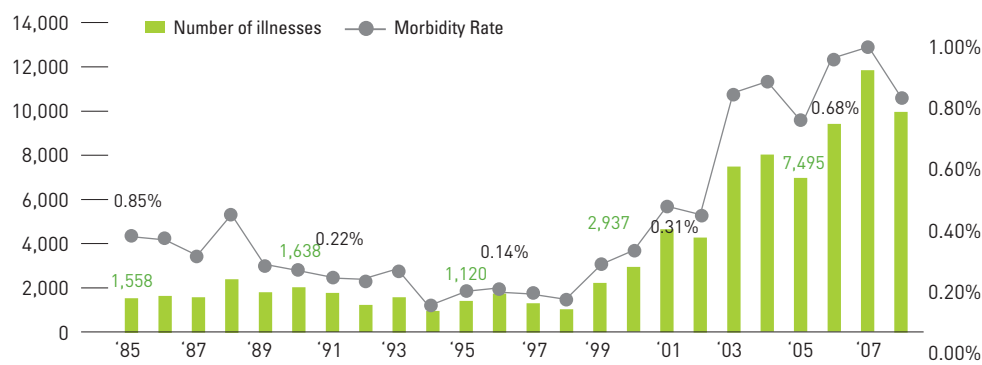
[Table 2] Number of Fatalities and Number of Fatalities Persons by Year



3. OCCUPATIONAL DISEASES

- The number of fatal illnesses in 2008 numbered 9,734, an increase of 1,738 persons (15.1%) compared to the previous year’s 11,472 persons.
- In particular, typical occupational diseases (due to chemical, physical, or biological factors) accounted for 1,653 cases of the total in 2008, representing a decrease of 445 persons (21.2 %) compared to the previous year’s 2,098 persons. The number of patients suffering from work-related diseases stood at 8,081, representing a decrease of 1,293 (13.8%) compared to the previous year’s 9,374 persons.

[Table 3] Number of illnesses and Morbidity Rate by Year

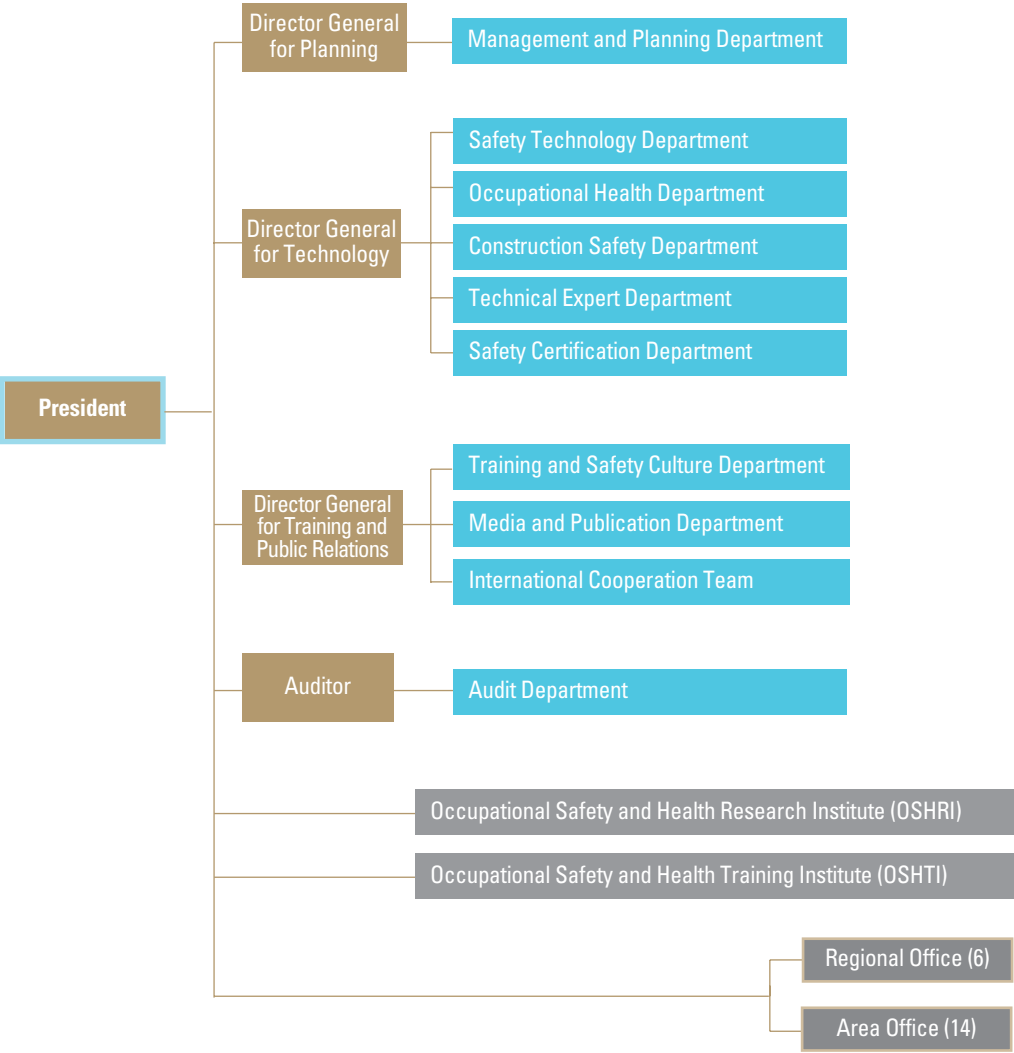


※ Industrial Accidents Indicators

- Rate of injury and illnesses: (Number of injuries and illnesses/Number of workers covered by the Industrial Accident Compensation Insurance) × 100
- Rate of fatalities per 10,000 persons: (Number of fatalities/Number of workers covered by the Industrial Accident Compensation Insurance) × 10,000
- Morbidity rate: (Number of illnesses/Number of workers covered by the Industrial Accident Compensation Insurance) × 1,000

Appendices

1. ORGANIZATION CHART : 5 executives, 9 offices and departments



2. NUMBER OF STAFF

(Unit : person)					
Total	Headquarters	OSHRI	OSHTI	Regional Offices(6)	Area Offices(14)
1,376	184	150	54	478	510

3. FINANCE

(Unit : USD1,000)			
		2008 (2008.1.1~2008.12.31)	2009 (2009.1.1~2009.12.31)
Revenues	Government Donation	114,618	126,375
	Government Subsidy	86,493	65,307
	Share and Transfer Income	-	-
	Consignment, monopoly income	119	-
	Own Income	11,360	2,325
	Debts	-	-
	The surplus at the beginning of a period	4,212	1,374
	Miscellaneous	-	-
Expenditure	Total Revenue	216,803	195,383
	Working Expenses	145,496	124,724
	Staff Costs	54,350	55,137
	Regular operating expenses	15,582	15,520
	Carried forward	1,374	-
	Miscellaneous	-	-
	Total Expenditure	216,803	195,383

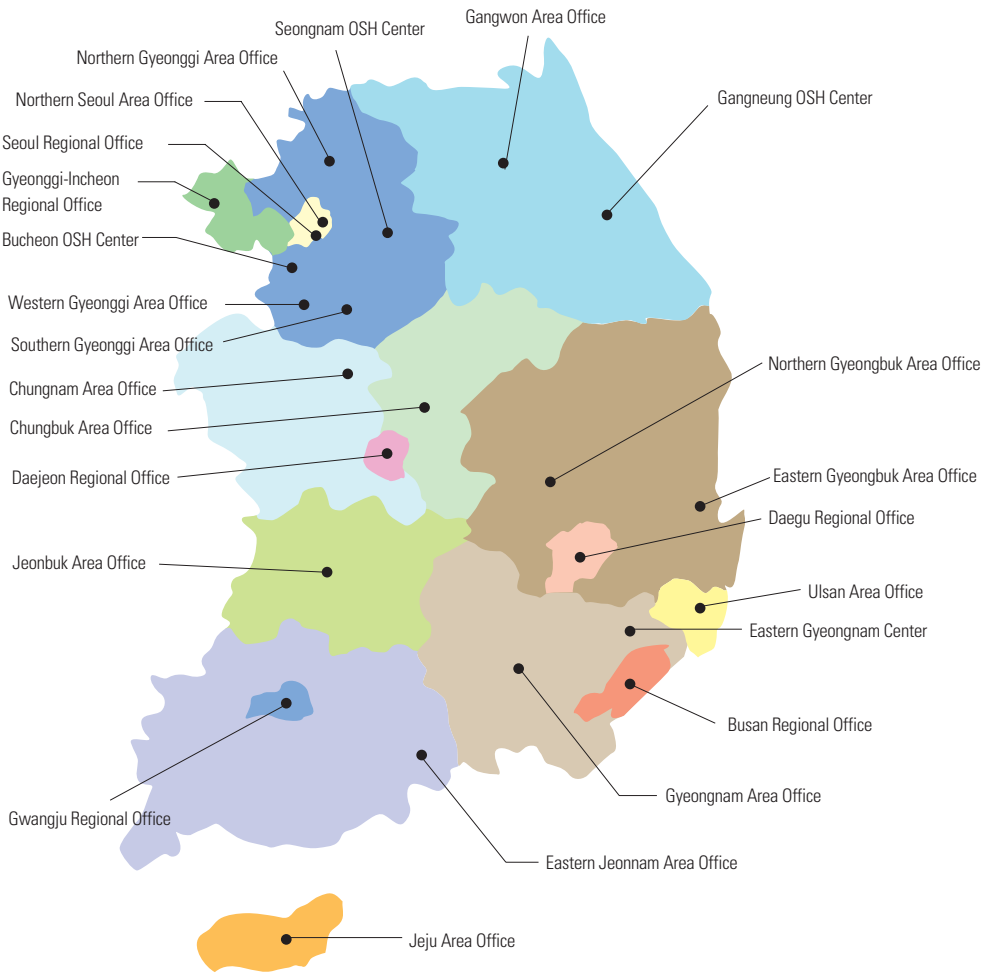
USD 1=KRW 1,300

4. CONTACT POINT

Contact Information

Office	Phone	Location	Postal Code
KOSHA (Headquarters)	032)5100-500	34-4, Gineungdaehak-Gil, Gusan-dong, Bupyeong-gu, Incheon, Korea	403-711
Occupational Safety and Health Research Institute (OSHRI)	032)5100-901	34-4, Gineungdaehak-Gil, Gusan-dong, Bupyeong-gu, Incheon, Korea	403-711
Chemical Substances OSH Center	042)869-0304	104-8, Munji-dong, Yuseong-gu, Daejeon, Korea	305-380
Occupational Safety and Health Training Institute (OSHTI)	032)5100-934	34-4, Gusan-dong, Bupyeong-gu, Incheon, Korea	403-711
Seoul Regional Office	02)828-1600	14~15th floors, Yuhan Building, 49-6, Deabang-dong, Dongjak-gu, Seoul, Korea	156-754
Northern Seoul Area Office	02)3783-8300	7~8th floors, woori Building, 10Bongnae-dong1-ga, Seoul, Korea	100-161
Gyeonggi-Incheon Regional Office	032)570-7200	491, Gajeong-dong, Seogu, Incheon, Korea	404-803
Bucheon OSH Center	032)680-6513	2nd floor, Samjin Building, 54-8, Nae-dong, Ojeong-gu, Bucheon, Gyeonggi-do, Korea	421-805
Southern Gyeonggi Area Office	031)259-7149	13th floor, Gyeonggi Medium&Small Business Center,906-5, Yieui-dong,Yeongtong-gu,Suwon,Gyeonggi-do,Korea	443-766
Seongnam OSH Center	031)785-3300	2nd floor, Sogok Hall, 106-2, Geumgok-dong, Bundang-gu, Seongnam, Gyeonggi-do,Korea	463-804
Northern Gyeonggi Area Office	031)841-4900	1st floor, Northern Gyeonggi Chamber of Commerce, 801-1, Singok-dong, Uijeongbu, Gyeonggi-do, Korea	480-070
Western Gyeonggi Area Office	031)4817-599	2nd floor, 729-2, Gojan-dong, Ansan, Gyeonggi-do, Korea	425-022
Gangwon Area Office	033)815-1004	2nd floor, Korea Teacher’s Mutual Fund Building, 513, Onui-dong, Chuncheon, Gangwon-do, Korea	200-938
Gangneung OSH Center	033)655-1860	15th floor, Gangneung City Hall, 1001, Hongje-dong, Gangneung, Gangwon-do, Korea	210-703
Busan Regional Office	051)520-0510	1486-67, Banyeo 1-dong, Haeundae-gu, Busan, Korea	612-815
Eastern Gyeongnam Center	055)371-7500	6th floor, Grand Building, 483-14, Bukbu-dong, Yangsan, yeongsangnam-do, Korea	626-800
Daegu Regional Office	053)609-0500	19~20th floors, Hosu Building, 50-3, Dongin-dong2-ga, Jung-gu, Daegu, Korea	700-732
Ulsan Area Office	052)226-0510	2nd & 4th floors, Kookmin Bank Building, 615-8, Dal-dong, Nam-gu, Ulsan, Korea	680-801
Eastern Gyeongbuk Area Office	054)271-2014	124-4, Daedo-dong, Nam-gu, Pohang, Gyeongsangbuk-do, Korea	790-823
Northern Gyeongbuk Area Office	054)478-8000	4~5th floors, Medium & Small Business Center, 92-30, Imsu-dong, Gumi, Gyeongsangbuk-do, Korea	730-350
Gyeongnam Area Office	055)269-0510	7-3, Yongho-dong, Changwon, Gyeongsangnam-do, Korea	641-727
Gwangju Regional Office	062)949-8700	8~9th floors, Trade Hall Building,1589-1, Usan-dong, Gwangsan-gu, Gwangju, Korea	506-712
Daejeon Regional Office	042)620-5600	449-7, Ojeong-dong, Daedeok-gu, Daejeon, Korea	306-819
Chungbuk Area Office	043)230-7111	3rd floor, KT Building, 1171, Gagyong-dong, Heungdeok-gu, Choingju, Chuncheongbuk-do, Korea	361-800
Chungnam Area Office	041)570-3400	5th floor, Mirae City Building, 725, Buldang-dong, Cheonan, Chungcheongnam-do, Korea	330-230
Jeonbuk Area Office	063)240-8500	807-8, Inhu-dong 1-ga, Deokjin-gu, Jeonju, Korea	561-708
Eastern Jeonnam Area Office	061)689-4900	1285, Sunwon-dong, Yeosu, Jeollanam-do, Korea	555-801
Jeju Area Office	064)797-7500	2nd floor, Daeshin Securities Building, 251-1, Yeon-dong, Jeju,Jeju-do, Korea	690-813

5. BRANCH OFFICE





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