

# The Beacon of Safety and Health at Work

Korea Occupational Safety and Health Agency

Annual Report 2009



There is a light guiding people into a safer and healthier world. There is a force that moves the economy forward. KOSHA brings happiness to workers in the spirit of respecting lives and bringing satisfaction to customers. KOSHA is working to make a safer world and a better future.

# The Beacon of Safety and Health at Work

Korea Occupational Safety and Health Agency

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Six PERSONS

*The number of precious lives taken away from our industrial sites each day.*



## Respect for life

- 

The spirit of respecting lives is all around in lively workplaces. The spirit is like the heart-touching music that connects people to KOSHA. When there is a respect for life, people share one mind.



## Creativity



Creativity is the foundation for occupational safety and health that will guide people into safe and healthy workplaces. KOSHA's willingness to change and innovate, added by its pioneering spirit, will enrich the lives of customers and make a better future.



## Expertise



There is an invisible force that moves workplaces. Based on the expertise, KOSHA, which opens up the better future faster than others, constantly renews itself by adding more depths into the OSH system.



88.9<sup>Points</sup>

88.9 - KOSHA's score in terms of Public-service Customer Satisfaction Index  
The figures continuously improved from 82.0 (in 2007) → 86.4 (in 2008) → 88.9 (in 2009)



## Customers be moved

- Customers' safety, health and happiness are the ultimate goals of KOSHA. With the firm belief that customers are always the center of its management value, KOSHA is striving to realize customer satisfaction that is beyond expectation.

Bid for the 31st ICOH International Congress

The Korea Occupational Safety and Health Agency (KOSHA) won the bid for the 2015 International Congress on Occupational Health. The International Commission on Occupational Health (ICOH) holds the triennial Congress, which is recognized as the largest global gathering in the field of occupational health. The vote to decide the host ended on March 26th, 2009 following the fierce competition with other candidates—Australia and Ireland.

The number of votes: Korea 172, Australia 127, Ireland 64

KOSHA will use its best endeavors to successfully hold the 31st ICOH Congress in Seoul in 2015. We believe that the ICOH Congress will elevate the international status of not only KOSHA but also Korea as a whole as the Seoul World Congress on Occupational Safety and Health did in 2008. In addition, Director General Kang Seong-kyu of the Occupational Safety and Health Research Institute became the first Korean ICOH board member. He will serve for the next three years.

The 30th Congress is scheduled to take place in Monterrey, Mexico in 2012.

**Introduction to KOSHA** + 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 workers. Toward this end, it shall efficiently implement the following projects: promotion of industrial accident prevention technologies, provision of technical assistance, training on occupational safety at work, and diagnosis and inspection of harmful and dangerous facilities and equipment, R&D, etc.

KOSHA opened the Memorial Hall for the Seoul Declaration and held the 1st anniversary of the Seoul Declaration on Safety and Health at Work

The Memorial Hall for the Seoul Declaration opened on April 30, 2009. The memorial hall aims to disseminate the objectives of the Seoul Declaration, which was adopted during the 18th World Congress on Safety and Health at Work

The memorial hall is comprised of 15 sections. Documents, published materials, and commemorative on the Seoul Declaration enable visitors to easily understand the significance and the outcomes of the World Congress on Safety and Health at Work. The exhibits on display include video clips from past meetings, the list of host countries, the full-text of Seoul Declaration on Safety and Health at Work, photos, and so on.

To commemorate the successful hosting of the 18th World Congress on Safety and Health at Work (June 29 ~ July 2, 2008) in COEX, Seoul, and to disseminate the objectives of the Seoul Declaration on Safety and Health at Work, a ceremony to mark the first anniversary of the publication of the Seoul Declaration was hosted on June 29, 2009 at COEX Convention Center. The ceremony was co-organized by the International Labor Organization and the International Social Security Association, and officials from the OSH sector were present at the event.

KOSHA won an award for Anti-corruption

Korea’s Anti-corruption & Civil Rights Commission conducted anti-corruption evaluation on 478 public agencies in 2009. KOSHA earned the Outstanding Award in the ‘government and public agencies’ category.



Promoting OSH  
values to the  
Global Community

*“The right to a safe and healthy working environment should be recognized as  
a fundamental human right and that globalization must go hand in hand  
with preventative measures to ensure the safety and health of all at work”*

Safety and Health at Work is a Global Task

“The right to a safe and healthy working environment should be recognized as a fundamental human right and that globalization must go hand in hand with preventative measures to ensure the safety and health of all at work,” said the Seoul Declaration on Safety and Health at Work-the world’s first global charter on occupational safety and health.

With scientific and technological developments, the global economy has been changing at the speed of light. Since industries began being sophisticated, workers around the world have been exposed to unprecedented risks. Consequently, new types of occupational injuries and illnesses are coming into being on a daily basis.

According to the International Labour Organization (ILO), a whopping 270 million workers fall victim to occupational injuries and illnesses, leading to 2.3 million death cases annually. Against this backdrop, every social member should work towards better safety and health at work-an impending global task.

KOSHA Joins Hands with the Global Community for Better Safety and Health at Work

The Korea Occupational Safety and Health Agency (KOSHA) always strives to protect workers’ lives, secure safety at work, and establish healthy society. To this end, the agency has been forging partnerships with diverse nations to raise awareness on the importance of occupational safety and health in the international community. In 2008, KOSHA successfully held the 18th World Congress on Safety and Health at Work, which adopted the Seoul Declaration.

A growing number of nations and regions are sending support for the Declaration. For example, in March, 2009, Spain announced the Statement of Support for the Seoul Declaration in the Canary Islands, followed by the Düsseldorf Statement in Germany in November. In 2010, KOSHA is planning to continue making relentless efforts to disseminate the Declaration across the world in cooperation with the ILO and the International Social Security Association (ISSA).

KOSHA also contributes to global OSH by building a network with its counterparts in other nations and by running support programs for developing countries including technical consultations and invitation training programs. In addition, we are making thorough preparations for organizing the International Congress on Occupational Health, which will take place in Seoul in 2015.

KOSHA Annual Report Helps Share the Global OSH Values

Safety and health at work should have no national and racial boundaries whatsoever.

KOSHA has been sparing no effort in promoting the global community to recognize the importance of occupational safety and health. This Annual Report will help you understand our hard work over the past year.

I sincerely hope that this report will make contributions towards raising the international OSH values and ultimately creating safe and healthy working environments for all across the world.

Noh, Min-ki

President **Noh, Min-ki**  
Korea Occupational Safety and Health Agency

Visiting industrial sites, creating safe and healthy workplaces for workers and their families, and making enjoyable and beautiful workplaces, are the starting points of a happy world KOSHA will create.



Objectives and Directions of 2009 Projects for Occupational Accidents Prevention

- In 2009, KOSHA aimed to substantially lower occupational injuries and illnesses, establish a risk management system, advance safety culture, lay the ground for OSH research and strengthen the partnerships with its international counterparts. These plans were parts of our 2009 business objective to lower the national industrial accident rate below 0.7%.
- KOSHA's 2009 business activities in detail are as follows:  
First, KOSHA visited high-risk worksites and provided accident prevention technologies in order to dramatically reduce accidents. For small- and medium-sized workplaces, which have unfavorable working conditions, KOSHA extended funding for the improvement of facilities to eliminate harmful factors and create pleasant working environment.  
Second, to steadily reduce occupational illnesses, KOSHA offered worksites with support for work environment improvements, management of workers' health, and prevention of musculoskeletal disorders.  
Third, to build a risk management system, KOSHA helped petrochemical plants with the high risks of major accidents like fire, explosion, and leakage to establish process safety management systems.  
Fourth, to promote safety culture, KOSHA carried out OSH training programs for workers, supervisors, managers and executives, and developed various training materials. In addition, it signed MOUs with 139 related organizations for promoting safety culture nationwide.  
Fifth, KOSHA conducted various research projects in various fields including legal institutious, safety systems, working environment, and industrial hygiene to advance the support basis of OSH research, in addition, the agencydelivered high-quality epidemiological surveys and provided database on hazards and risks.  
Sixth, the agency concluded technical arrangements with its international counterparts to support developing nations in Asia. It also operated workshops on improvement of working conditions in cooperation with the ILO. Furthermore, the agency succeeded in the bid to host the 31st ICOH Congress in 2015.

The light that shines a  
safer and healthier world.



Safety & Health

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Safety & Health



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*Safety saves your life. KOSHA works to build safer workplaces and healthier societies by putting the idea of “Respect for Life” as its priority.*

”

Roh, Sung-hwan \_ Senior Manager



## 1. OSH Support for Vulnerable SMEs

KOSHA operates ‘The Clean Workplace Program’, in which SMEs with high risk of accidents have access to OSH consulting services and financial support for improvement of work environments.

Since small-sized worksites with below 50 employees account for over 70% of the manufacturing industry, KOSHA focuses mainly on the small-scale businesses in terms of the financial support.

Medium-sized enterprises with below 300 employees were provided with financial support for facility improvement according to ‘Financial Subsidy for the Improvement of Working Environment in Harmful Processes’ program. Moreover, the enterprises were given access to loan services to encourage more investment in OSH facilities.

When a worksite applies for ‘The Clean Workplace Program’, KOSHA provides consulting services on risk assessments. Based on the results, the OSH facilities are upgraded with the financial support worth up to KRW 30 million. When the renovation work is successfully completed, the worksite is given ‘The Clean Workplace Certificate’ and ‘The Clean Plaque’ is attached to the gate of the worksite.

‘Financial Subsidy for the Improvement of Working Environment in Harmful Processes’ program offers financial support of up to KRW 50 million to enterprises with below 300 workers for improvement of work conditions (for those with below 50 workers, up to KRW 30 million). The hazardous processes include those creating noise, generating dust, handling high-risk chemicals, and causing musculoskeletal disorders.

In addition, enterprises had access to long-term loan services at a low rate for the purchase of OSH equipment and facilities.

### Records of financial support by years

(Unit : site, KRW100 million)

Program	2009	2008	2007	2006	2005	2004	2003
Clean Workplace Program	4,831 (740)	9,794 (1,004)	9,847 (994)	9,508 (1,000)	10,428 (1,110)	5,236 (563)	3,266 (319)
Financial Support for Improving Harmful Processes	584 (100)	531 (96)	470 (91)	446 (67)	510 (77)	208 (25)	-
Loan Services	728 (804)	826 (884)	878 (940)	948 (881)	1,040 (800)	980 (763)	940 (627)

\*Amount of subsidy enclosed in parenthesis

## 2. Technical Support for the Improvement of Occupational Safety and Health

Providing Technical Support for the Improvement of Occupational Safety and Health has always been the most basic role of KOSHA, which was established to contribute to Korea's economic development by enhancing workers' safety and health, and promoting accident prevention activities. To that end, various projects were launched since 1988 in response to change in the industrial environment.

Many projects currently underway include: technical support to prevent the top 3 accident types for creating self-regulatory safety management in all manufacturing workplaces; technical support for safe management of small-scale construction sites (less than KRW 300 million) to prevent conventional accidents, including tripping, collision, and being hit by falling or flying objects; managing working environment and workers' health in order to protect workers from various harmful factors; preventing musculoskeletal disorders caused by handling heavy objects or repetition of simple tasks; and provision KOSHA Code to support OSH activities in workplaces.

### TECHNICAL SUPPORT FOR PREVENTION OF THE TOP 3 ACCIDENTS

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KOSHA helps worksites identify hazards of the three most frequent accidents (crushing, falling and tripping). Based on the research, the worksites can effectively build safety management systems on their own.

Total	2009	2008	(Unit : site)
110,615	102,587	8,028	

### TECHNICAL ASSISTANCE FOR THE SAFETY AND HEALTH AT CONSTRUCTION SITES

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As of November, 2009, the total value of construction orders in Korea stood at KRW 99.6754 trillion, posting a 4.4% increase (KRW 4.244 trillion) year on year.

- The value of construction orders in the public sector was KRW 52.3849 trillion, a 63.5% rise (KRW 20.3455 trillion) year on year.

- The value of construction orders in the private sector was KRW 47.2905 trillion, a 25.4% year on year fall (KRW 16.1015 trillion)

### Value of construction orders

(Unit : KRW100 million)

Program	2005	2006	2007	2008	2009.11
Public sector	318,255	295,192	370,887	418,488	523,849
Private sector	675,585	777,992	908,231	782,363	472,905
Total	993,840	1,073,184	1,279,118	1,200,851	996,754





Over the past nine years, an astounding 19,400 were injured in the construction sector annually. Among them, 682 cases led to deaths. These deplorable figures illustrate that the industrial accident rate in the construction industry has been stagnant, requiring an innovative measure. Against this backdrop, KOSHA offered technical support to 1,800 worksites for the prevention of the top three accident types (falling, tripping, and crushing) on a pilot basis in 2008. This program officially started in 2009, conducting 34,556 rounds of technical support for 29,491 worksites.

Item	Place of business	No. of fatalities	No. of injuries	No. of workers	Rate of injuries and illnesses
2001	147,535	684	17,127	2,449,485	0.70%
2002	187,583	693	20,224	2,779,437	0.73%
2003	168,269	778	23,071	2,642,747	0.87%
2004	102,518	802	19,232	2,019,974	0.95%
2005	125,258	630	16,248	2,137,745	0.76%
2006	154,543	654	18,300	2,558,093	0.72%
2007	198,691	651	19,385	2,899,285	0.67%
2008	302,015	690	20,835	3,259,512	0.64%
2009.11	212,480	554	18,905	3,064,478	0.62%

TECHNICAL SUPPORT FOR LARGE CONSTRUCTION SITES

- The examination system for hazard and risk prevention scheme - a safety inspection system in construction works - is in place to secure the fundamental safety for construction works of more than a certain size. According to this system, the owner of a project shall submit the plan to prevent hazard and risk 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.

Inspections and confirmations each year						
(Unit : site)						
Item	2004	2005	2006	2007	2008	2009
Inspection	2,084	1,524	1,928	2,254	1,729	1,828
Confirmation	8,915	6,619	5,895	7,025	7,265	5,327

The average accident rate of the inspected construction sites was a mere 44.3% of the construction industry as a whole, which means that the management of the worksites that were subject to inspection has been effective.



Inspections and confirmations each year						
(Unit : %)						
Item	2004	2005	2006	2007	2008	2009. 11
The Construction Industry	0.94	0.75	0.7	0.66	0.64	0.62
Recipient Construction Sites	0.34	0.29	0.27	0.24	0.29	0.44

TECHNICAL SUPPORT FOR SMALL AND MEDIUM-SIZED CONSTRUCTION SITES

- Most of the small and medium-sized construction sites with projects worth below KRW 12 billion lack effective OSH management systems while the managers and workers do not have appropriate understanding about safety. Against this backdrop, KOSHA has been providing to small and medium-sized construction sites the support to prevent the three most frequent accidents (falling, crushing, and tripping). Moreover, the small worksites can receive the agency's support for OSH management systems.

PROMOTION OF VOLUNTARY HEALTH AND SAFETY ACTIVITIES

- Unlike the manufacturing industry, the construction industry has two separate worksites; a head office and a building site. Therefore, it is necessary to establish an organic OSH management system at the enterprise level as a whole and promote voluntary OSH activities rather than focusing solely on the building sites. In this context, KOSHA introduced the KOSHA 18001 Certification for the Construction Industry. It has been found that the clients, contractors, and subcontractors that have received the 'KOSHA 18001 Program for Construction Industry' witnessed a significant decrease in accidents.

No. of the KOSHA 18001 certifications issued						
(Unit : site)						
Program	2004	2005	2006	2007	2008	2009
KOSHA 18001 for the Construction Industry	7	17	15	22	29	45

MANAGEMENT OF HAZARDOUS WORKING ENVIRONMENTS TO PREVENT OCCUPATIONAL DISEASES

- KOSHA has taken a survey on 120,000 worksites nationwide with an aim to establish a database on work environments. The survey has dealt with how the worksites handle chemicals and high-risk equipment and facilities. Among the hazardous chemicals that frequently cause occupational diseases, 13 were designated for the survey. KOSHA has studied 543 worksites to find out how the chemicals are used and managed. Based on this survey, the agency has analyzed the workers' exposure levels to 31 chemicals and high-risk processes for four years. Thanks to these relentless efforts, KOSHA has come up with a variety of effective measures to protect workers from chemical hazards.

The list of chemicals inspected

Year	Chemicals inspected	No. of Chemicals
2009	cyclohexanone, methyl ethyl ketone, phthalic anhydride, trichloroethane, xylene, isopropyl alcohol, aluminum, antimony, mercury, cobalt, ethylene oxide, sulfuric acid, talc	13
2008	dye and pigment, acrylonitrile, cadmium, manganese, chrome, benzene	6
2007	lead, nickel, acrylamide, styrene, formaldehyde, toluene	6
2006	N-hexane, diisocyanate, trichloroethylene, crystalline, silica, methyl bromide, dimethylformamide	6

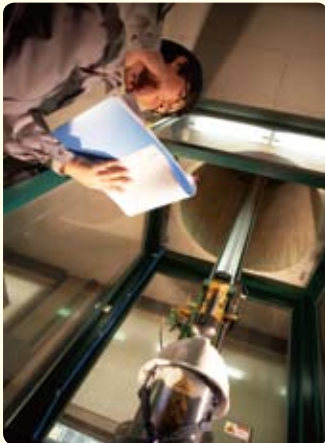
- The results of the survey have been posted in the section of Korean Control Banding & Control Toolkits for Chemicals at the KOSHA website (<http://www.kosha.or.kr>).

\* Korean Control Banding & Control Toolkits for Chemicals: A website-based support program to help employers and workers to find out the risk levels of their chemical processes by giving access to the information on chemical hazards and their management

In order to improve the reliability of the work environment assessments conducted by employers, KOSHA has compared the assessment results of 134 worksites. In doing so, the agency has identified some issues related to the methods and exposure levels of the assessments and presented follow-up measures for improvement.

The agency also operated the 'Workplace Health Partner' program for 273 worksites in cooperation with the Occupational Safety and Health Research Institute (OSHRI). KOSHA visits worksites to evaluate the work environments and the workers' health conditions. Moreover, a hotline was established to provide information on workplace hazards to the vulnerable group including those working for small-scale enterprises, subcontractors and migrant workers.

- In order to manage the workers who have been exposed to asbestos and other occupational carcinogens for a certain period of time, Heath Management Pocketbook has been issued (as of the end of 2009, 5,108 copies). In addition, the workers have been categorized into the five groups according to their exposure levels and received technical support to lower the exposure. Moreover, medical check-ups are conducted once per year for the retirees to help diagnose occupational cancer early and stay in good health.
- In accordance with the revision of the Act on Asbestos on August 7th, 2009, KOSHA underwent 550 rounds of technical reviews on asbestos inspection agencies. Moreover, KOSHA reviewed 4,130 applications for approval of reconstruction and asbestos dismantlement. Around 12,500 workers at over 3,000 asbestos dismantlement sites were provided with personal protective equipment.



Technical reviews on application for asbestos dismantlement

(Unit : case)

Year	2009. 8. 6	2008	2007	2006	2005
No. of reviews	4,130	6,303	3,134	817	159

Technical reviews after the revision of the asbestos act (Aug. 7th, 2009)

(Unit : case)

	Total	Technical reviews on asbestos inspection agencies	Technical reviews on registration of asbestos-related businesses	Technical reviews on exemption from asbestos inspection	Technical reviews on application for asbestos dismantlement
No. of reviews	550	18	424	21	87

FINANCIAL SUPPORT FOR WORK ENVIRONMENT ASSESSMENT AND OCCUPATIONAL MEDICAL CHECK-UPS OF SMALL ENTERPRISES

Small enterprises with below 10 workers are entitled to financial support from KOSHA when they conduct work environment assessments and occupational medical check-ups. By doing so, the agency has contributed to upgrading the assessments and medical tests, ultimately improving the health conditions of the vulnerable working group.

- Support for work environment assessment: 4,495 worksites (KRW 1.68 billion)
- Support for occupational medical check-ups: 17,231 workers (KRW 1.294 billion)

Furthermore, KOSHA offered basic medical services to 14,000 medium-sized enterprises with below 50 workers. The medical services include health management instructions, medical consultations, and various tests including blood pressure and cholesterol levels for patients with cardiovascular diseases.

Health support for small-sized enterprises in 2009

Supported worksites	Beneficiaries	Cost	Technical supports
14,000 sites	151,268 workers	KRW 3.322 billion	55,992 rounds

## 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, lack of exercise, elevation of job stress and changes in lifestyle.

- KOSHA operates the Comprehensive Health Promotion Program to help worksites run voluntary health promotion programs. In 2009, a total of 220 worksites applied for the program, and 17,453 underwent physical strength tests and received consultations on exercise. It has been found out that 20.4% of the workers who had joined the smoking cessation program succeeded in breaking the habit and they saw a 49.7% improvement in reducing the risk of cardiovascular diseases.
- Targeting 1,500 worksites with over 50 workers which have witnessed cardiovascular cases, KOSHA provided health promotion supports including health management, smoking cessation programs, and obesity programs.
- The agency operated a health center in an industrial complex to provide high-quality health promotion programs comparable to that of large enterprises. The workforce comprised of occupational doctors and nurses, fitness trainers, nutritionists and hygienists offered comprehensive health services and consultations for workers at 321 SMEs. This project has presented a new model for occupational health services in Korea.



## PROGRAM FOR PREVENTING MUSCULOSKELETAL DISORDERS

To prevent musculo-skeletal disorders (MSDs), which account for a whopping 71% of the total number of work-related diseases, KOSHA studied the volume of high-risk equipment and facilities owned by worksites and the causes for the illness. The workers were also interviewed to analyze their work procedures. Based on the results of the research, diverse ergonomic measures were introduced.

- In 2009, a total of 1,841 worksites received the agency's disease prevention support including MSDs prevention technical support focused on ergonomic improvement (1,505 worksites, 81.7%), technical support for back-pain prevention (293 worksites, 15.9%), and technical support for risk factor assessment focused on legal compliance among workers vulnerable to MSDs (43 worksites, 2.3%).
- Technical support was focused mainly on the manufacturing industry (68.5%) including machinery and non-metal material production, as well as transportation machine production. Other industries, which benefited from the support, were repair service for consumer goods, health, and welfare (26.8%). It was found that the number of workers with MSDs at worksites, who are subject to receive the support, fell by 1,023 - a 78.4% decrease year-on-year.

\* The total number of MSD cases nationwide dropped by 7% year-on-year.

Targeting other MSD-prone industries including building maintenance, wholesale, retail, and catering, the agency organized seven technical seminars and eight round of meetings to raise awareness on the disease and enhance prevention activities.

## 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 Occupational 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 academia possessing expert knowledge in safety and health.

KOSHA has developed 442 OSH technical guidelines, which are distributed both offline and online. Every five years, these guidelines are revised, reflecting new OSH issues.

No. of OSH technical guidelines as of Dec., 2009

(Unit : case)

Total	General Safety	Machinery	Chemical	Electricity	Construction	Health Care	Hygiene	Medicine
442	37	116	113	67	41	15	28	25

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 in compliance with the international standards. KOSHA participates as the representative of Korea's professional committees in conventions on 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.

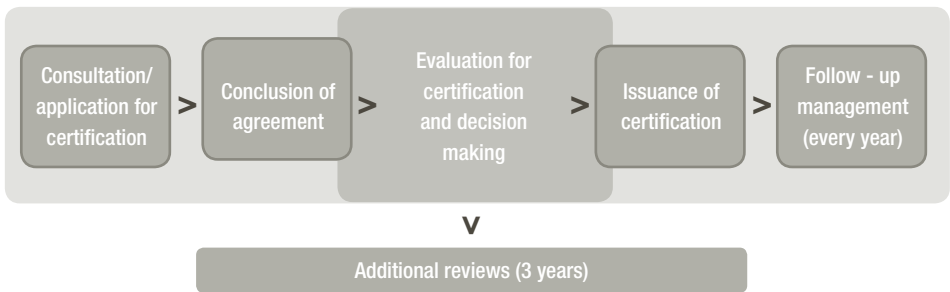


### 3. Test, Examination, Approval, and Certification

#### 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 continuous improvement.
- KOSHA started implementing the 'KOSHA 18001' certification system in July, 1999, to encourage workplaces to comply with such occupational safety and health management system.
- In the KOSHA 18001 certification system, a certificate and a plaque of certification are awarded when the requirements for 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, application details 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



#### 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 - brings about huge adverse effect not only to workers inside the plant, but also to residents and the environment in the vicinity of the plant.



The Process Safety Management (PSM) system 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 hazardous and harmful 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 more than the prescribed quantities.

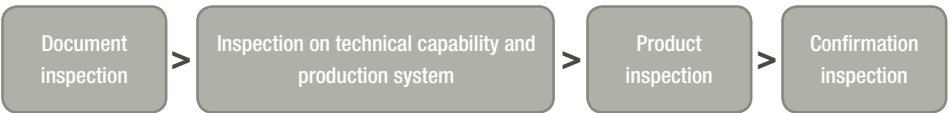
- **Investigation into Major Industrial Accidents and Establishment of Prevention Measures**  
If a major industrial accident breaks out at worksites under the PSM, it is necessary to identify its cause and prevent similar cases in the future.
- To this end, the accidents were immediately summarized and distributed to chemical plants nationwide. Later, detailed reports on the accident cases including their prevention measures were collected for distribution.

#### SAFETY CERTIFICATION AND INSPECTION

- **Safety Certification of High-Risk Machinery and Protective Devices and Equipment**  
The existent certification and inspection system has revealed its limits in securing product safety. Moreover, it became necessary to come up with effective accident preventive measures for injection molding machines, which had been exempt from the inspection system. Against this backdrop, a revised safety certification and inspection system was introduced and implemented on January 1st, 2009.

The mandatory safety certification system inspects the capability and production processes of high-risk machineries, facilities, protective devices, protective devices, and equipment at the manufacturing and installation phases to ensure that all products are safe at the distribution phase.

##### Safety certification procedure



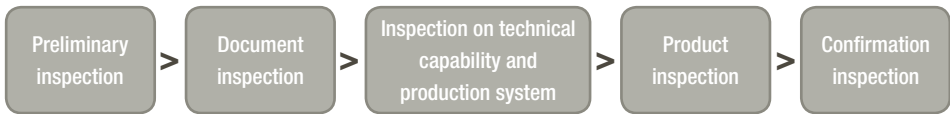
- Documentary inspection: to ensure that specifications and manuals meet the certification standards
- Inspection on technical capability and production system: to assess whether the manufacturers are equipped with adequate technical capability and production systems

- Product inspection: to ensure that products are manufactured in accordance with the specifications and meet the certification standards
- Confirmation inspection: to inspect if the distributed products meet the certification standards on an annual basis

### S Mark Safety Certification

The S Mark Safety Certification System was introduced in November, 1997 to secure safety of industrial machinery and equipment. This system helps manufacturers to make their products safe in the design and production phases.

#### S Mark certification procedure



- Preliminary inspection: to check whether the machineries, equipment and protective equipment require S Mark Certification

#### Safety certification mark



#### Safety Inspection on High-Risk Machinery

Safety inspections are conducted on high-risk machineries and equipment including cranes at the use stage.

#### Safety inspection procedure



## Safety Training & Culture

The warm ray of light  
bringing happiness to workplaces.



Safety Training & Culture

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Safety Training & Culture

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*Customers are the foremost priority at KOSHA.  
KOSHA stands by the customers to create happier  
and safer workplaces.*

”

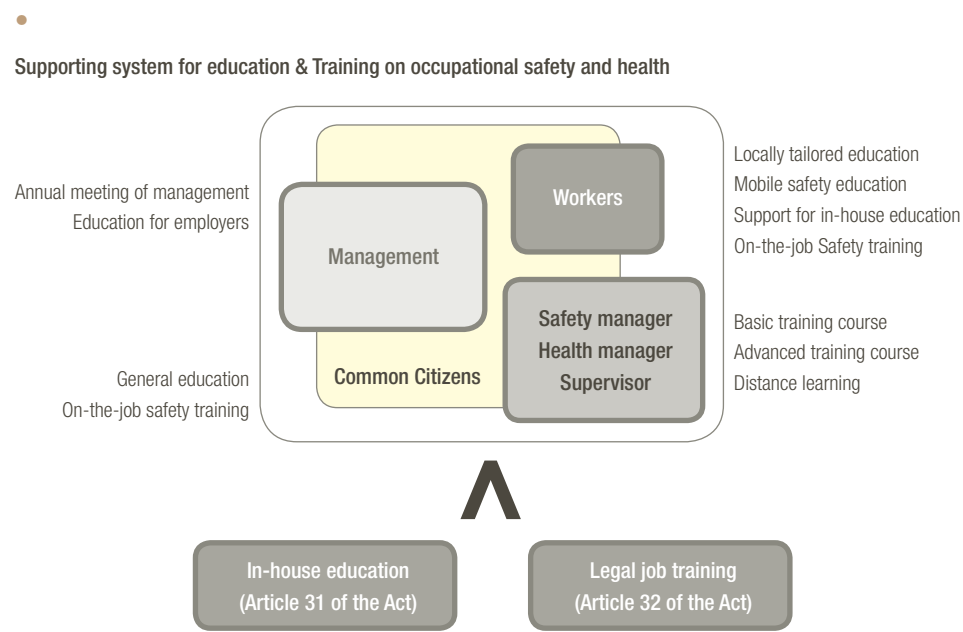
Moon, Hyun-gon \_ Manager



1. 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

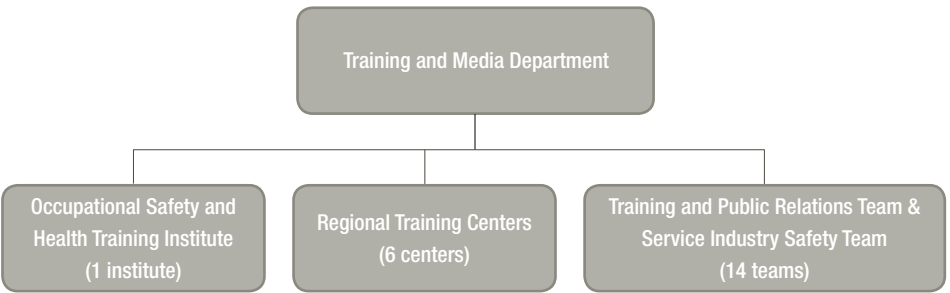


KOSHA has consistently developed and operated education courses on occupational safety and health pursuant to Article 31 (Education on Safety and Health) and Article 32 (Education of Safety and Health Manager) of the Occupational Safety and Health Act. In particular, executives, supervisors, workers, 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 Occupational Safety and Health Institute conducts speciality training program for OSH managers. Also, there are six regional training centers, Training and Public Relations Team, and 14 offices of Service Industry Team, to meet the demand for OSH trainings.



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)

Trainees	2009	2008	2007	2006	2005
Participants in the annual meeting of the entrepreneurs	4,153	4,757	3,080	3,362	2,139
Employers of worksites with below 50 workers	21,994	22,252	22,406	16,849	14,826

**Training Courses for Supervisors**

KOSHA evaluates accident patterns according to each region and industry to develop and operate customized training courses. Since 2006, six regional centers have run practicum courses for supervisors. In addition, based on risk assessments on worksites, the agency provides comprehensive consulting services for its customers.



(Unit : person)

Course	2009	2008	2007	2006	2005
Basics	31,294	37,065	34,799	35,548	23,887
Practicum	20,155	17,612	14,193	8,375	-
Course for honorary inspectors	835	960	812	686	781

Training Courses for Employees

The Training and Public Relations Team and Service Industry Safety Team provide customized training services for manufacturing worksites and construction sites which lack instructors and training rooms, by running a safety shuttle bus equipped with audio-visual training devices. Moreover, SMEs can ask for professional OSH instructors from KOSHA, free of charge. By assessing regional characteristics of accident patterns and customers' needs, KOSHA operates regional training courses.

(Unit : person)

Course	2009	2008	2007	2006	2005
Regional Course (including consulting)	106,808	19,287	31,686	5,936	-
In-house training	259,499	159,436	126,426	80,605	81,610
Safety bus	80,495	105,463	113,764	126,795	109,230

Education for Those Who are Vulnerable to Industrial Accidents

With the increase in the number of migrant workers in workplaces, education on occupational safety and health is done during classes for employment. Also, 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. Furthermore, 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	2009	2008	2007	2006	2005
Safety education for migrant workers	49,492	89,016	105,581	74,213	26,427
Safety education for vocational schools	34,448	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 falling 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, firefighting, and emergency rescue for construction employees and supervisors. The training contributes to enhancing safety awareness among the trainees.

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 Center operated by KOSHA. The Center is linked with the safety training through experience and is popular among the workers, citizens, and students who use the Center.

(Unit : person)

Course	2009	2008	2007	2006	2005
Safety experience training	42,661	49,343	52,039	46,276	72,174

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)

Course	2009	2008	2007	2006	2005
Total	19,089	18,269	15,731	15,225	12,997
Basics	602	934	647	607	396
Advanced	7,969	8,354	8,026	7,612	7,473
Distance learning	10,518	8,981	7,058	7,006	5,128

2. Safety and Health Culture



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

NATIONAL SAFETY CULTURE CAMPAIGN

Since 1995, the Korean government has conducted the National Safety Culture Campaign in cooperation with the public and private sectors with an aim to establish a safety culture in the daily lives of the public.

In April of 1996, the Committee of Safety Culture designated the 4th of every month as Safety Check Day to encourage the public to identify hazards and build a safe living environment on their own.

Furthermore, in partnerships with NGOs, trade unions, and industrial consultation bodies, the agency has developed a variety of safety awareness programs, spreading safety culture nationwide.

Worksites participating in the National Safety Culture Campaign					
Item	2009	2008	2007	2006	2005
Safety Inspection on “Safety Checking Day.”	2,448	2,120	2,707	1,684	345

THE OCCUPATIONAL SAFETY AND HEALTH WEEK

The 1st week of July has been designated as the Occupational Safety and Health Week by KOSHA and the Ministry of Labor to compliment those who have contributed to workers’ safety and health and exchange technologies and knowledge regarding accident prevention.

During the week, the Occupational Safety and Health Day Ceremony is followed by diverse events including technical seminars, presentations on good OSH practices, OSH UCC (user-created contents) show, a contest of children’s safety songs, a quiz show, and exhibitions on PPE, work environment improvement, and fire safety.

The Occupational Safety and Health Week, which marks the 43rd anniversary in 2010, has now become a representative OSH event in Korea, joined by every walk of life including employers, workers, OSH professionals, teachers, students, trade unions, and the general public. The event has contributed to building safety culture nationwide and raising safety awareness among the public.



ZERO-ACCIDENT CAMPAIGN

**Management of Participating Worksites**  
When an employer launches a zero-accident campaign, this should be informed to all of the workers. And, a report on the campaign should be submitted to area offices of KOSHA within 14 days after the start of the campaign.  
KOSHA offers all possible supports to the participating businesses including training materials, training know-hows, and consulting services.  
If a participating worksite has not witnessed any accident for a period set according to business sizes and industries, it receives a certification of zero accident within 60 days after submitting an OSH level assessment to an area office nearby.  
The area office shall inspect whether the OSH level is adequate, and whether the goal (no-accident period) is appropriate in 14 days, before presenting the certification.

Development and Distribution Methodologies for Zero-accident Campaign

KOSHA has developed a variety of methodologies including an OSH assessment, risk management, 4-round risk prediction drill, one-point risk prediction drill, and presentations on near-miss cases for smooth operation of the campaign.

Status of Participation in Zero-accident Campaign and Successful Workplaces

Participant worksites as of Dec., 2009					
(Unit : site)					
Item	Total	Less Than 50 Workers	50~99	100~299	300 or More Workers
2009	2,706	1,526	556	496	128
2008	2,841	1,424	626	634	157
2007	2,898	1,525	592	647	134
2006	2,623	1,297	676	549	101
2005	2,658	1,172	765	549	172
2004	2,570	1,294	569	536	171
Up to 2003	104,055	68,212	19,703	12,623	3,517
Total	114,804	73,500	22,305	14,904	4,095



Status of target achieved by year (as of Dec., 2009)

(Unit : site)

Item	Total	50%	100%	Twice	Thrice	four times	Five times	Six times or more
2009	1,610	0	579	239	204	117	117	354
2008	1,591	0	581	257	195	117	119	322
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
2004	1,210	0	604	228	197	0	126	55
Up to 2003	25,352	1,595	12,291	5,666	3,394	644	1,514	248
Total	30,587	1,595	14,666	6,691	4,105	765	2,006	759

EARLY SAFETY TRAINING

Although practical safety training is usually provided by worksites, it is home and school who make children understand the importance of safety. Therefore, early safety training at school is essential in raising children's awareness in safety from childhood.

Against this backdrop, KOSHA supports safety training at kindergartens, elementary, middle and high schools. It has been found that these efforts have helped prevent occupational accident in their adulthood and made the students better aware of safety.

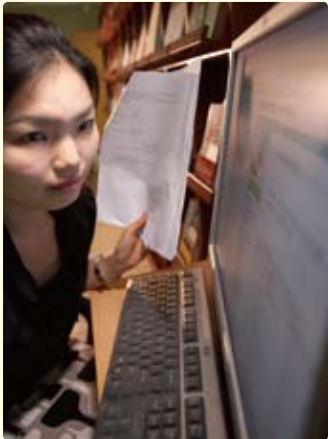
The agency has carried out research on OSH curricula at school, and operated OSH training for teachers and students, and built a safe school and developed training materials.

(Unit : person / school)

Item	2009	2008	2007	2006	2005
Training for safety instructors	1,035	1,156	2,072	1,949	1,691
Operation of pilot schools for safety training	10	32	32	64	64

PROMOTION ACTIVITIES FOR ACCIDENT PREVENTION

KOSHA disseminates information on safety through diverse media channels including TV, radio, and the Internet to raise safety awareness among employers and workers and build a safety culture, nationwide. Moreover, the agency runs Cyber Safety Hall on its website.



Episodes of escaping crises number one sponsored by KOSHA

Division	2009	2008	2007	2006
No. of episodes (OSH episode)	12 times	12 times	12 times	19 times

To communicate with customers, KOSHA operates blogs and runs a number of web events including a blog comment contest and a quiz show.

The Safety Exhibition Room at the KOSHA headquarters shows eye-catching safety materials for visitors including employers, workers, students and OSH managers, to raise safety awareness.

PR Activities

Division	2009	2008	2007	2006	2005
Broadcasting	140 times	156 times	208times	216 times	158 times
Surrounding media	263 sites	560sites	312 sites	248 sites	144 sites
Print media	6,431 times	7,517 times	6,086 times	312 times	4,430 times
Exhibits	(under construction)	8,330 persons	10,012 persons	10,644 persons	14,624 persons



3. Development and Distribution of OSH Media Contents



KOSHA creates a range of OSH contents, which are distributed both online and offline at 1.5 million worksites nationwide. These contents are customized according to each industry and job.

Contents developed in 2009			
	Reader-specific contents (1987~)	Field-specific contents (2006~)	Industry-specific contents (2009~)
Targets	worksites nationwide	trainers	engineers & trainers
Reader/ Contents	<ul style="list-style-type: none"><li>• migrant workers (10 languages)</li><li>• worksites with below 50 workers (posters and stickers)</li><li>• seniors &amp; female workers</li><li>• monthlies, brochures, calenders</li><li>• Website/E-mail</li></ul>	<ul style="list-style-type: none"><li>• Six fields<ul style="list-style-type: none"><li>- machinery</li><li>- electricity</li><li>- chemicals</li><li>- health &amp; hygiene</li><li>- construction</li><li>- industrial safety</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Manufacturing</li><li>• Construction</li><li>• Other industries<ul style="list-style-type: none"><li>- processes</li><li>- procedures</li><li>- equipments</li><li>- hazards</li><li>- risk assessment</li></ul></li></ul>
Format	On/Off-line	On/line-fille	On/line-fille

DEVELOPMENT AND DISTRIBUTION OF OSH TECHNICAL CONTENTS

- **Industry-Specific Contents**  
KOSHA creates OSH technical contents on accident-prone industries. These contents are recognized for its practicality and effectiveness.
  - The agency reaches MOUs with representative enterprises in each sector to jointly develop and distribute OSH contents.

\* 707 types of contents in the 11 sectors (manufacturing, construction, shipbuilding, chemical, forestry, and six major service sectors)

  - Through MOUs with OSH organizations in advanced nations, the agency distributes global materials for domestic enterprises

- **Field-Specific Contents**  
KOSHA creates and disseminates educational contents for six fields (general OSH, machinery, electricity, construction, chemical and industrial hygiene).



(Unit : type)					
Type	2009	2008	2007	2006	2005
Module type	258	54	100	53	51
Sheet type	830	103	200	100	427
Sample material	108	16	21	20	51

OSH Contents for Migrant Workers

KOSHA has been creating OSH contents for enterprises with migrant workers since 2000. Currently, an estimated 600,000 migrant workers are living in Korea. The agency has issued 180,000 copies of 13 types of OSH contents including guidelines, posters, stickers and videos. These materials are translated into ten languages (English, Bengalese, Chinese, Indonesian, Mongolian, Pakistan, Sinhalese, Thai, Uzbek, and Thai).

Periodicals

A monthly magazine, “Safety and Health”, deals with good OSH practices, current prevention technologies, international OSH trends, and major accident cases. The magazine is sent to worksites, honorary OSH inspectors, related organizations, libraries, broadcasting stations, and publishing companies.

Subscription-Based Support Materials

- KOSHA Voluntary Safety Club (for Members)
- The club members mainly safety managers at large construction and manufacturing companies receive training materials (videos, guidelines, material samples, and posters) every month by mail. These products are also available at the KOSHA website.

- Internet Shopping Mall (for all worksites)
- The OSH posters, guidelines, videos and other contents developed by KOSHA can be purchased at the agency’s Internet shopping mall 24 hours a day.

Online OSH Contents

- The OSH content files are distributed through web magazines, e-mail, and blogs to help worksites launch safety and health activities voluntarily.
- A wide range of OSH documentaries, animations, and accident cases are available in a web magazine, “WiSH”. When requested, KOSHA sends OSH contents by e-mail to worksites and the public.
  - KOSHA has opened an OSH blog to provide a variety of interesting OSH contents, videos, and photos to the public.



#### INFORMATION NETWORK FOR ACCIDENT PREVENTION

- KOSHA operates “Nanuri”, an ERP system to help its members and customers to effectively carry out prevention activities by providing wide ranges of information. Other OSH authorities and the general public also have access to information on accident prevention at the KOSHA website.

In 2009, KOSHA renovated its homepage by integrating its branch offices’ website into one single website. The new homepage is characterized by user-friendliness and up-to-dateness.

By collecting OSH databases on various fields at the homepage, KOSHA offers comprehensive OSH portal services. In addition, users can search information according to industries, themes, and media formats. A new function of “RSS (Rich Site Summary, Really Simple Syndication)” sends the users the information with the themes that they want without visiting the website.

The agency’s new ERP system has been recognized as innovative for its comprehensive databases. In addition, its internal and external systems have been linked so that KOSHA members know how the complaints filed by the users of the external website are addressed in real time.



## 4. 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).

#### RESULTS OF WORKERS’ HEALTH CHECKUP

- By collecting the results of workers’ health checkups conducted in accordance with the Occupational 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, 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)

#### SURVEY ON EMPLOYEES’ WORK ENVIRONMENT

- By conducting a national census every four years, KOSHA comprehensively analyzes the structure of the national workforce, work hazards, communications, socio-psychological factors, and demographic characteristics.

\* Legal base: the Statistics Act No. 18 on General Statistics (approval no. 38002)

## Technology and R&D

The light of technology and  
R&D that brightens up workplaces.





Technology and R&D

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52 R&D Activities

53 Other Specialized Fields



Technology and R&D

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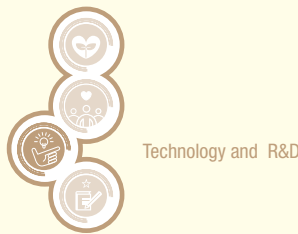
*KOSHA's human-centric creativity is the source of new ideas and technologies that enable safer and happier living.*

”

Lee, Mi-young \_ Senior Researcher



1. R&D Activities on Occupational Safety and Health



Technology and R&D

R&D ACTIVITIES

•

The Occupational Safety and Health Research Institute (OSHRI) was built by the Korean government with an aim to promote workers’ safety and health and support employers’ OSH activities.

OSHRI conducts research on a wide range of fields including related regulations and policies, basic science of work-related injuries and illnesses, and practical prevention measures. In particular, in July, 2009, the institute reviewed its past achievements and declared a strategic vision for sustainable growth, celebrating the 20th anniversary. Based on the vision, OSHRI has been working on various mid and long-term plans for advancing the institute into a world-class one.

OSHRI delivers research projects on diverse fields as follows.

OSHRI has launched **Safety Management and Policy Research**, which includes OSH policies and institutions, social issues and projects commissioned by the Ministry of Labor.

- Research and study the trend on OSH policies and institutions
- Research on the OSH Act
- Scientific research on safety management

**Safety System Research** presents engineering measures by studying and analyzing hazards caused by machinery, electricity, chemicals, and construction projects.

- Research on prevention measures for frequent accident types
- Research on prevention of accidents caused by machinery, electricity, fire, explosion, and construction equipment
- Survey and analysis on causes of major industrial accidents

**Work Environment Research** handles exposure patterns related to chemical, physical, and biological hazards and measures to improve work environments.

- Research on technologies to measure and assess chemical, physical, and biological hazards
- Research on work environments and the characteristics of exposure to hazards
- Research on health hazards at work
- Research on asbestos and its exposure



**Research on Occupational Illnesses and Workers’ Health** deals with identification, control, and prevention of occupational illnesses, and newly emerged diseases due to social changes.

- Research on identification, control, and prevention of occupational illnesses
- Research on work-related disorders including musculoskeletal diseases, cardio-vascular diseases, and stress

**Research on Hazards and Risks of Chemicals** studies hazards and risks of chemicals to prevent related injuries and illnesses.

- Research on measures to improve the database on chemicals
- Research on GLP toxicology including inhalant-toxicity and genetic toxicity
- Research on risk assessments including analysis of chemicals and fire/explosion

The table below shows the 2009 research performance. In the accident prevention field, OSHRI focused on conventional accident types such as falls, trips, and crushes. In the disease prevention field, priority was placed on health hazards caused by low-concentration, long term exposures and disorders emerged with new industries. In particular, the institute launched a research project on the semi-conductor industry and nano particles.

Research projects (Unit : case)

	Total	Research on prevention of industrial accidents				
		Management & policy	Safety engineering	work environment	Occupational disorders	Toxicology
No.of research project	73 (44)*	17 (15)	14 (7)	10 (6)	16 (7)	16 (9)

\* The parenthesized numbers mean commissioned projects.

OTHER SPECIALIZED FIELDS

•

OSHRI is also actively involved in the fields below to prevent occupational accidents and improve workers’ health

Epidemiological Survey on Work-related Illnesses

OSHRI delivers medical evaluation and work environment assessments to identify the causes of work-related illnesses and present treatment and prevention measures. The epidemiological survey was conducted in accordance with the Article 43 of the OSH Act when requested by workers, employers, and regional labor offices. In addition, OSHRI selects vulnerable sectors and industries and preemptively carries out epidemiological surveys.



Epidemiological surveys for the past 5 years

(Unit : case)

	2005	2006	2007	2008	2009
Total	80	86	92	86	85
Commissioned surveys	74	77	87	82	80
Voluntary surveys (preemptive prevention)	6	9	5	4	5

Quality Control on Private OSH Service Providers

OSHRI runs a Quality Control Program to ensure high quality of private OSH service providers. This program assesses their capability to measure and evaluate work environments. The program is consisted of five parts including blood sampling. The participant providers receive assessments once or twice per year.

Participating Providers of the Quality Control Program

(Unit : site)

Fields	Occupational Medical Tests	Pneumoconi osis	Hearing Tests	Work Environment Assessment	Asbestos
Inspected Service Providers	118	149	127	123	101

\* The Quality Control system was first introduced in 2009 targeting asbestos inspection agencies.

Distribution and Management of the Chemical Data

OSHRI offers MSDS and classifications on 11,377 chemicals which have changed according to GHS (Globally Harmonized System of Classification and Labelling of Chemicals) on the Internet. The MSDS Editing Program, which has been developed by OSHRI, is also available to help classify chemical hazards and make warning signs.

Assessments on Chemical Hazards and Risks

OSHRI conducts tests on the distributed chemical materials, which are suspected to cause health hazards. The toxicity tests are delivered according to a GLP guideline recommended by the OECD. Moreover, the institute operates the KOLAS Certification System an internationally recognized inspection system to create a reliable database on chemicals with the risk of industrial accidents.

Groundwork for OSH Research

OSHRI issues a monthly, "OSH Research Brief" to help policy-makers understand OSH trends at home and abroad. In particular, in 2009, the special English edition was distributed to members of the International Commission on Occupational Health and various occupational research institutes across the world. OSHRI is also planning to launch an English OSH journal(SH@W) which will be based on an open contribution system in 2010.



International Cooperation



The light of a global leader protecting the safety and health of people around the globe.



International Cooperation

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International Cooperation



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*Joint-studies and technological exchanges with the cooperation of 46 international organizations from 22 countries will enable KOSHA to join the ranks of world-class OHS organizations.*

”

Moon, Su-jeoung \_ Manager

# 1. International Cooperation



International Cooperation

In 2009, KOSHA made effort to introduce advanced technologies in the area of occupational safety and health by reinforcing cooperative activities with 46 professional organizations for the prevention of industrial accidents in 22 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

• 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 (EUOSHA) and Asia-Pacific Occupational Safety and Health Organization (APOSHO).

## 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, “Global News on Safety and Health at Work”, consists of various content including latest news and publications released by global OSH organizations, and related events. The weekly collects extensive information and other practical information such as brief news on OSH, recent papers and schedules of related events.

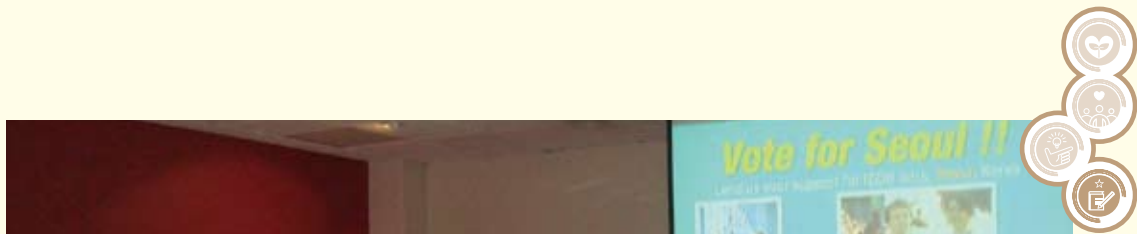


KOSHA published, “Global Trends of Safety and Health at Work”, celebrating the 200th issue of “Global News on Safety and Health at Work” a weekly on global OSH issues and events. This commemorative publication contains global OSH issues with 31 themes in six parts as follows.

- International OSH institutions and policies
- International standards and cooperation
- Industrial safety and construction safety
- Occupational health
- Training and safety culture
- R&D

It also contains good OSH practices in the UK, the US, Germany, Japan, and other advanced nations along with new issues of 34 OSH organizations around the world including the Occupational Safety and Health Agency of the US and the Heath and Safety Executive of the UK. In addition, it offers photos of various OSH events including the 18th World Congress on Safety and Health at Work, which was held in Seoul in 2008.

KOSHA has formed Global Technical Consultation Team for effective OSH support for developing nations. The team is consisted of 44 OSH professionals from KOSHA. In 2009, they published a reference book on OSH institutions and prevention activities in six developing nations in the Asia-Pacific region. The reference contains industrial accident compensation systems, OSH policies, and activities of OSH organizations of the nations. It is expected that the publication will make significant contributions towards the agency’s support projects including invitation training programs and technical consultations.



International Cooperation



①	
②	③
④	
⑤	

- ① KOSHA won the bid for the 31st ICOH in 2015.
- ② The Memorial Hall for the Seoul Declaration opened.
- ③ European Forum : The Seoul Declaration on Safety and Health at work.
- ④ ⑤ The first anniversary of the Seoul Declaration was hosted.



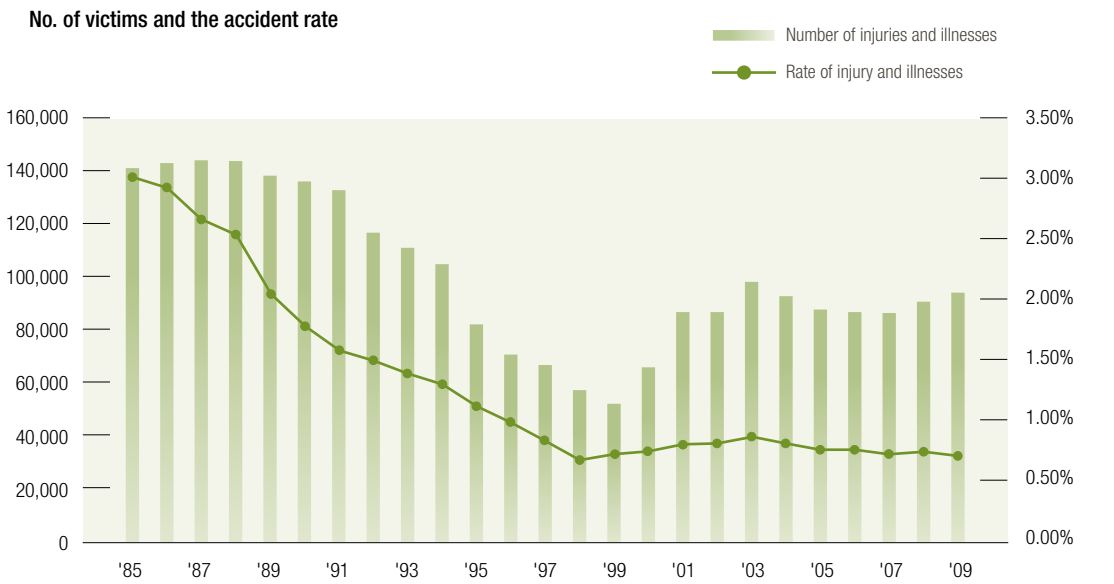
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Statistics on Occupational Accidents in 2009

SUMMARY

- In 2009, out of 13,960,797 workers at 1,548,106 worksites covered by the Industrial Accident Compensation Insurance Act, the number of occupational patients requiring over four-day-long medical treatment was 97,836 - a 0.70% accident rate.
- The year of 2009 witnessed a 3.49% annual increase in the number of workers and a 2.12% rise in occupational injuries, illnesses and deaths while the accident rate dropped by 0.01%.
- Due to a dramatic shift in the nation’s economy under the IMF’s supervision in 1998 and 1999, the number of injuries and illnesses and rates of injury and illnesses fluctuated 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 July 2000.

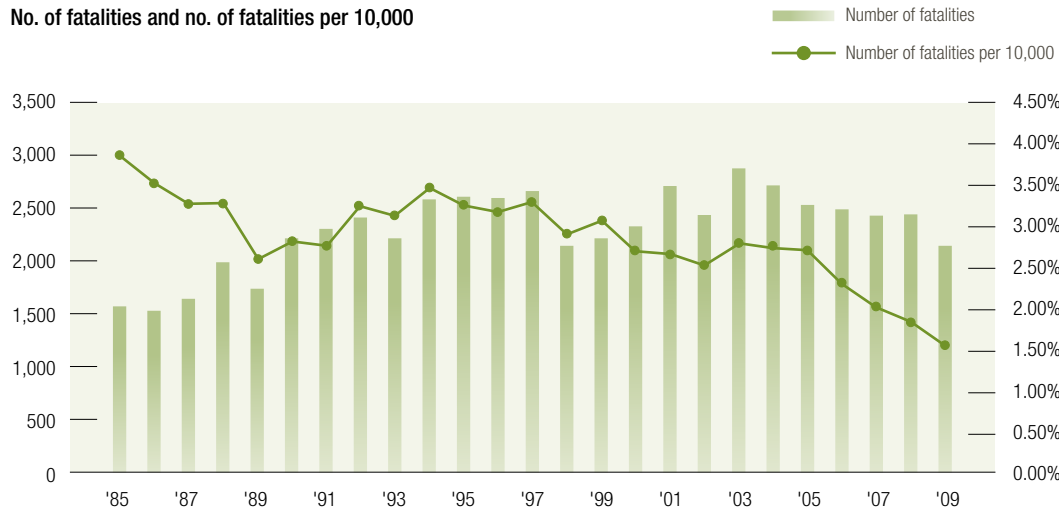


STATUS OF FATAL ACCIDENTS

- In 2009, the number of occupational deaths reached 2,181. Among them, accidental deaths were 1,401 while deaths by occupational illnesses were 780.
- The deaths per 10,000 were 1.56, a 0.24 percentage point decrease. Among them, 450 were owing to fall, pneumoconiosis 397, and cardio-vascular disorder 320.
- 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.

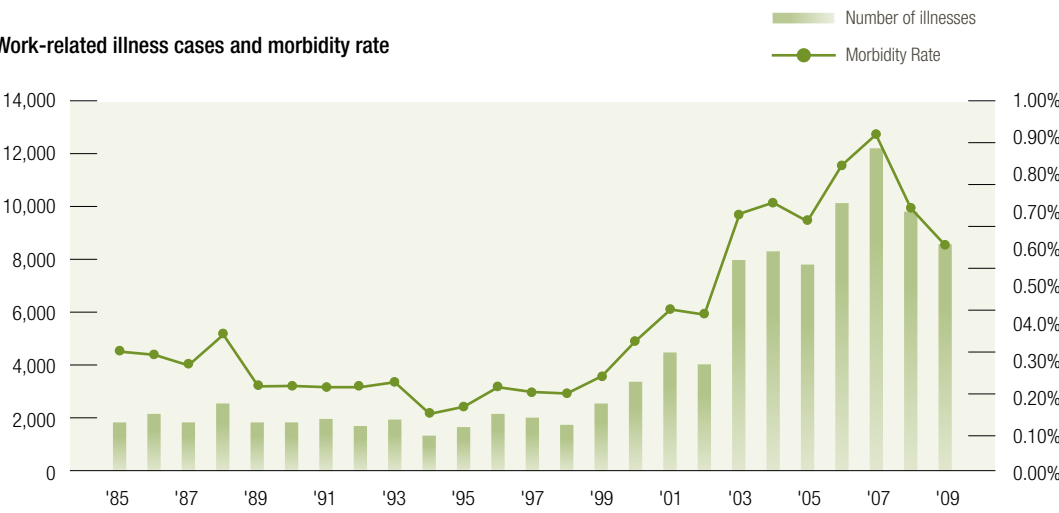
OCCUPATIONAL DISEASES

No. of fatalities and no. of fatalities per 10,000



- In 2009, 8,722 cases of occupational illnesses (including deaths) were reported, a 10.4% decrease from 9,734 in 2008.
- Out of the cases, 1,746 were occupational illnesses, a 5.6% fall (93) from 1,653 in 2008. The number of patients suffering work-related illnesses also dropped to 6,968 from 8,081, a 13.7% decline.
- 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.

Work-related illness cases and morbidity rate



\* 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

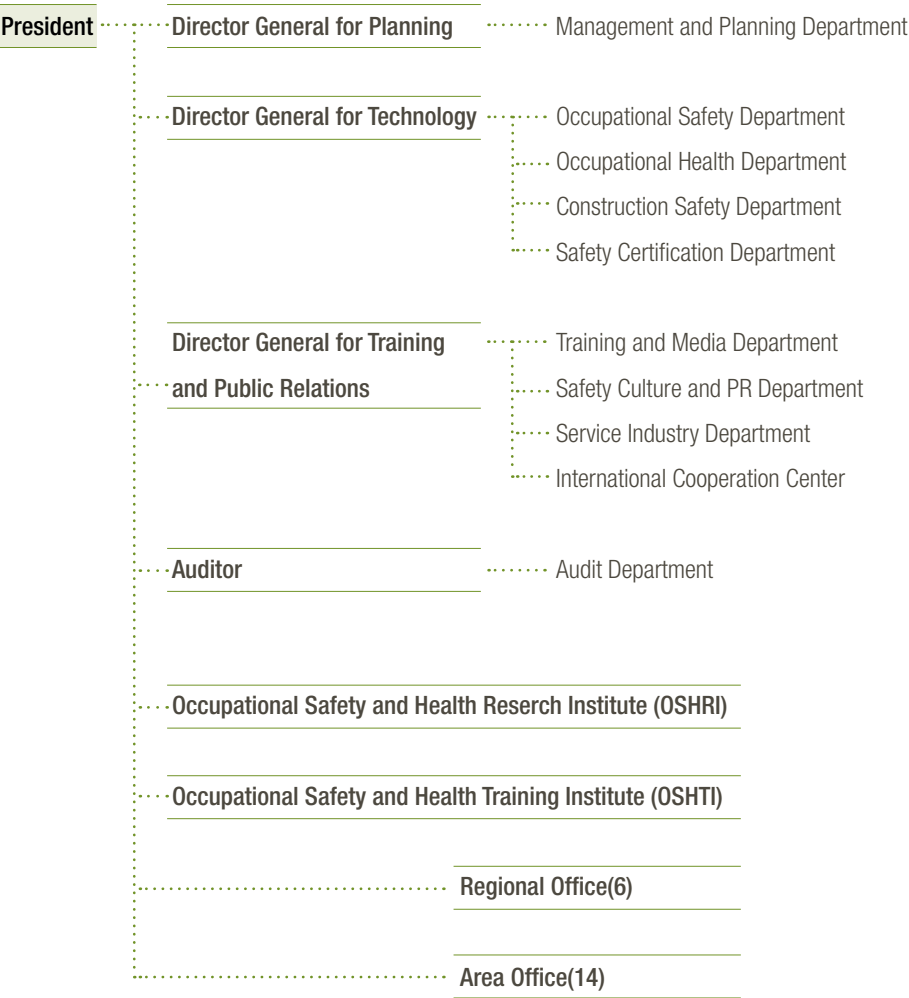
Finance

(Unit : KRW million)

		2008 (2008.1.1-2008.12.31)	2009 (2009.1.1-2009.12.31)
Revenues	Government Donation	149,004	169,725
	Government Subsidy	112,442	84,900
	Share and Transfer Income	-	-
	Consignment, monopoly Income	155	-
	Own Income	14,768	10,083
	Debts	-	-
	The surplus at the beginning of a period	5,476	1,787
	Miscellaneous	-	4,236
	Total Revenue	281,845	270,731
Expenditure	Working Expenses	189,146	173,259
	Staff Costs	70,655	72,031
	Regular operating expenses	20,257	19,612
	Carried forward	1,787	5,829
	Miscellaneous	-	-
	Total Expenditure	281,845	270,731

Organization Chart

- ORGANIZATION : 5 executives, 9 departments, OSHRI, OSHTI, 20 affiliates



\* Affiliated bodies : OSHRI, OSHTI, six regional offices, 14 area offices

Number of Staff

Total	Headquarters	OSHRI	OSHTI	Regional offices(6)	Area offices(14)
1,331	181	140	50	468	492

\* According to the Korean government's plan to streamline government agencies, KOSHA intends to downsize the workforce until 2012. (1,376 (2008)→1,236 (2012))

\* KOSHA has 350 technical experts, 671 certified engineers, 56 doctoral degree holders., 405 master's degree holders and nine occupational doctors.

Contact Point



Office  • Phone  • Location  • Postal Code
<b>KOSHA (Headquarters)</b>  032)5100-500 34-4 • Gineungdaehak-Gil, Gusan-dong, Bupyeong-gu, Incheon, Korea • 403-711
<b>Occupational Safety and Health Research Institute (OSHRI)</b>  032)5100-901 34-4 • Gineungdaehak-Gil, Gusan-dong, Bupyeong-gu, Incheon, Korea • 403-711
<b>Chemical Substances OSH Center</b>  042)869-0304 104-8 • Munji-dong, Yuseong-gu, Daejeon, Korea • 305-380
<b>Occupational Safety and Health Training Institute (OSHTI)</b>  032)5100-934 34-4 • Gusan-dong, Bupyeong-gu, Incheon, Korea • 403-711
<b>Seoul Regional Office</b>  02)828-1600 • 14~15th floors, Yuhan Building, 49-6, Deabang-dong, Dongjak-gu, Seoul, Korea • 156-754
<b>Northern Seoul Area Office</b>  02)3783-8300 • 7~8th floors, woori Building, 10Bongnae-dong1-ga, Seoul, Korea • 100-161
<b>Gyeonggi-Incheon Regional Office</b>  032)570-7200 491 • Gajeong-dong, Seogu, Incheon, Korea • 404-803
<b>Bucheon OSH Center</b>  032)680-6500 • 2nd floor, Samjin Building, 54-8, Nae-dong, Ojeong-gu, Bucheon, Gyeonggi-do, Korea • 421-805
<b>Southern Gyeonggi Area Office</b>  031)259-7149 • 13th floor, Gyeonggi Medium&Small Business Center,906-5, Yieui-dong,Yeongtong-gu,Suwon,Gyeonggi-do,Korea • 443-766
<b>Seongnam OSH Center</b>  031)785-3300 • 2nd floor, Sogok Hall, 106-2, Geumgok-dong, Bundang-gu. Seongnam, Gyeonggi-do,Korea • 463-804
<b>Northern Gyeonggi Area Office</b>  031)841-4900 • 1st floor, Northern Gyeonggi Chamber of Commerce, 801-1, Singok-dong, Uijeongbu, Gyeonggi-do, Korea • 480-070
<b>Western Gyeonggi Area Office</b>  031)4817-599 • 2nd floor, 729-2, Gojan-dong, Ansan, Gyeonggi-do, Korea • 425-022
<b>Gangwon Area Office</b>  033)815-1004 • 2nd floor, Korea Teacher Mutual Fund Building, 513, Onui-dong, Chuncheon, Gangwon-do, Korea • 200-938
<b>Gangneung OSH Center</b>  033)655-1860 • 15th floor, Gangneung City Hall, 1001, Hongje-dong, Gangneung, Gangwon-do, Korea • 210-703

<b>Busan Regional Office</b>  051)520-0601 • 1486-49, Banyeo 1-dong, Haeundae-gu, Busan, Korea • 612-815
<b>Eastern Gyeongnam Center</b>  055)371-7500 • 4th floor, Yangsan Labor Complex Building, 1440-1, Suk-San Ri, dong myeon, yangsan, Korea • 626-821
<b>Daegu Regional Office</b>  053)609-0500 • 19~20th floors, Hosu Building, 50-3, Dongin-dong2-ga, Jung-gu, Daegu, Korea • 700-732
<b>Ulsan Area Office</b>  052)226-0510 • 2nd & 4th floors, Kookmin Bank Building, 615-8, Dal-dong, Nam-gu, Ulsan, Korea • 680-801
<b>Eastern Gyeongbuk Area Office</b>  054)271-2014 • 124-4, Daedo-dong, Nam-gu, Pohang, Gyeongsangbuk-do, Korea • 790-823
<b>Northern Gyeongbuk Area Office</b>  054)478-8000 • 4~5th floors, Medium & Small Business Center, 92-30, Imsu-dong, Gumi, Gyeongsangbuk-do, Korea • 730-350
<b>Gyeongnam Area Office</b>  055)269-0510 • 7-3, Yongho-dong, Changwon, Gyeongsangnam-do, Korea • 641-727
<b>Gwangju Regional Office</b>  062)949-8700 • 8~9th floors, Trade Hall Building,1589-1, Usan-dong, Gwangsan-gu, Gwangju, Korea • 506-712
<b>Daejeon Regional Office</b>  042)620-5600 • 449-7, Ojeong-dong, Daedeok-gu, Daejeon, Korea • 306-819
<b>Chungbuk Area Office</b>  043)230-7111 • 3rd floor, KT Building, 1171, Gagyeong-dong, Heungdeok-gu, Choingju,Chuncheongbuk-do, Korea • 361-800
<b>Chungnam Area Office</b>  041)570-3400 • 5th floor, Mirae City Building, 725, Buldang-dong, Cheonan, Chungcheongnam-do, Korea • 330-230
<b>Jeonbuk Area Office</b>  063)240-8500 • 807-8, Inhu-dong 1-ga, Deokjin-gu, Jeonju, Korea • 561-708
<b>Eastern Jeonnam Area Office</b>  061)689-4900 • 1285, Sunwon-dong, Yeosu, Jeollanam-do, Korea • 555-801
<b>Jeju Area Office</b>  064)797-7500 • 3-4th floors, Medium & Small Business Center, 495, Yeon-Sam, Jeju, Jeju-do, Korea • 690-732

History

Pre-Development Phase - 1987~1990

- December, 1987 : Korea Occupational Safety and Health Agency (KOSHA) was established
- July, 1989 : Occupational Safety and Health Research Institute was established

Take-Off Phase - 1991~1994

- October, 1991 : Korea-Germany Occupational Safety Cooperation Meeting was held
- February, 1992 : Korea-Japan Cooperative Meeting on Occupational Disease was held
- August, 1992 : Tripartite Meeting to Creating Low-Cost, Highly-Effective Zero-Accident Worksites was held
- August, 1992 : 10,097,600 people participated in Zero-Accident Signature-Seeking Campaign, which sought to mobilize 10 million signers
- July, 1993 : Management Convention for Zero-Accident Campaign
- November, 1993 : The 1st Occupational Safety and Health Award was held

Acceleration Phase - 1995~1998

- 1995 : Recorded Industrial Accident Rate Below 1% / KOSHA's headquarters was transferred to the present location in Bupyeong-gu, Incheon
- December, 1995 : Center for Safety and Health Research was established
- March, 1997 : Plate-Hanging Ceremony of Center for Safety Certification was held
- May, 1997 : Training Center for Construction Safety Experience was completed
- September, 1997 : Industrial Chemicals Research Center was Completed
- April, 1998 : The 14th APOSHO Annual Conference was held in Seoul, Korea

Stabilization Phase - 1999~2008

- December, 1999 : The 12th Anniversary of KOSHA's Establishment / CI Proclamation Ceremony was held
- November, 2000 : KOSHA-BVQI Signed an Arrangement in Mutual Recognition of Occupational Safety and Health Management System
- June, 2003 : Safety Seminar on Cheonggye Stream's Restoration Project
- September, 2004 : KOSHA won the National Productivity Award
- December, 2004 : KOSHA-EU Signed Occupational Safety and Health Arrangement / Chemical Safety & Health Research Center was established
- July, 2006 : "Safety Love" Volunteer Group was created
- August, 2006 : KOSHA began sponsoring "Escaping Crises Number One" of KBS TV Station
- October, 2007 : KOSHA gave the 5,000th Safety Certification Mark ('S' Mark)
- December, 2007 : The 20th Anniversary of KOSHA's Establishment
- June, 2008 : The 18th World Congress on Safety and Health at Work was held / Seoul Declaration on Safety and Health at Work was adopted

Efforts for Renovation : 2009 and Onwards

- A Renovation for a Second Take-off
- Resetting of KOSHA's Vision and Management Strategies
- KOSHA is reinventing itself as an agency that specializes and focuses on occupational accident prevention through active implementation of strategies that promote science, autonomy, and open culture. KOSHA's activities will protect the lives and well-being of workers, thereby creating safe workplaces and healthy society.

The workers at KOSHA harbor the seeds of safety and health. In the hearts of KOSHA workers, who start work at daybreak and get closer to the goal of realizing zero-accident each day, the light of safety and health will never fade away.



Korea Occupational Safety and Health Agency 34-4, Gusan-dong, Bupyeong-gu, Incheon, 403-711, Republic of Korea

- 
- +82-32-5100-500 | [www.kosha.or.kr](http://www.kosha.or.kr)
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Respect for life

- 



Expertise

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Creativity

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Customers be moved

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