

# NEWS LETTER

Protecting Worker's Life and Health

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## Cover Story

Serious accident prevention for the shipbuilding industry

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# Serious accident prevention for the shipbuilding industry

The Ministry of Employment and Labor and KOSHA co-hosted on Nov. 22 the Shipbuilding Industry OSH Leadership Conference in Busan. The conference was joined by 10 major domestic shipbuilders, the president of KOSHA, and the head of the Industrial Accident Prevention and Compensation Bureau of the MOEL and covered how to prevent serious accidents in the industry.

The conference was first held in 2010 in an effort to prevent accidents in the shipbuilding industry and improve industry's OSH competency with participation from 9 major domestic shipbuilders including Hyundai Heavy Industries and Samsung Heavy Industries.

Sungdong Shipbuilding and Marine Engineering Corporation and SPP Shipbuilding have newly joined this year.

With OSH leaders and functional heads representing each company, the conference this time covered businesses' OSH activities, government's accident prevention policies, effective cooperation between principal employers and subcontractors, and how to improve safety alertness for both management and labor.

The MOEL, in particular, explained government's policies to prevent grave accidents and its commitment to strengthening OSH act enforcement amid a series of grave occupational accidents this year.

The participants adopted a resolution to foster a safety culture at workplace and strengthen prevention support for subcontractors and suppliers in renewing their commitment to accident prevention.

"Recent serious occupational accidents could have been prevented if basic safety rules and regulations had been thoroughly observed," President Baek Hun-ki said. "It takes managements' and workers' commitment to following safety standards to prevent serious accidents at work."



Mr. Baek (right) and other participants are taking an oath.



Mr. Baek (center of front line) is posing during the conference.

# OSH bus from Korea running across Mongolia

KOSHA donates a training-purpose OSH bus to Mongolia and the signing ceremony for the donation was held on Nov. 12 in the General Agency for Specialized Inspection or GASI of Mongolia with Director General Lim Seung-up for Training and Public Relations of KOSHA and Director D. Gunibazar of GASI present.

This is the second OSH training bus KOSHA's offered to Mongolia since 2011. The bus is expected to give more chances for Mongolian workers to take on-site trainings.

The bus, once used in Korea for a training purpose, is equipped with a DVD player, laptop, electric screen, speakers, tables and chairs, and able to give as many as 25 workers an audio-visual training anytime anywhere.

Training material for industry-wise safety standards will be also provided in Mongolian.

Before the signing ceremony, KOSHA and GASI agreed to extend a technical cooperation agreement reached in 2010 for three more years till Nov. 2016.

With the agreement extended, KOSHA will continue to give technical support to Mongolia including technical guidance, training material, and training opportunity in Korea for Mongolian officials.

KOSHA was awarded with a medal from the Mongolian government for its support and guidance as it had been helping, as part of aid program for developing countries, Mongolia for OSH act enactment and technical assistance for work environment measurement and certification.

"To fulfill the purpose of the Government 3.0 plan, KOSHA will strengthen global OSH network by spreading and sharing its OSH know-how and competency with the international community," Mr. Kim declared.



Mr. Lim (left) in front of the bus shakes hands with Mr. D. Gunibazar of GASI



Mr. Lim (left) and Mr. D. Gunibazara are posing during the ceremony



## News

# Scientific research into the causes of serious industrial accidents

There will be a more clear and rigorous investigation into the causes of serious occupational accidents such as collapse of buildings or leaks and explosion at chemical plants.

KOSHA signed a memorandum of understanding (MOU) on Dec. 5 with the National Forensic Service (NFS) at NFS headquarters in Yangcheon-gu, Seoul, to cooperate to identify and research the causes of industrial accidents.

This agreement is designed to establish a coordination system to respond to serious industrial accidents such as fires, explosion, leaks, and collapse of industrial sites, following a series of such accidents last year.

Statistics show that the number of victims of industrial accidents such as fires, explosion, leaks, and collapse of industrial sites recorded 1,846 last year, an increase of 63 on a year on year basis. In particular, the death toll increased by 5.

The number of fire victims increased the most by 64 while that of explosion victims and leaks victims rose by 18 and 59 respectively. By contrast, the number of cave-in victims decreased by 78.

### ※ The number of fires, explosion, leaks, and cave-in victims over the past 5 years (Death toll)

Type	2008	2009	2010	2011	2012
Total	2,228(175)	2,322(163)	2,051(144)	1,783(142)	1,846(147)
Fires	440(31)	497(43)	403(30)	385(22)	449(41)
Explosion	481(58)	441(28)	373(36)	353(40)	371(30)
Chemicals leaks	365(23)	407(18)	428(14)	332(9)	391(27)
Cave-ins	942(63)	977(73)	847(64)	713(71)	635(49)

In response to this, KOSHA signed the deal with the NFS to clearly identify the causes of serious occupational accidents such as fires, explosion, leaks, and cave-ins through technical support and information sharing and to utilize the knowledge in drawing up measures to prevent industrial disasters.

Such serious industrial accidents to be jointly investigated include: fires, explosion, and leaks that involve harmful and hazardous substances; collapse and explosion of machinery structures such as tower cranes and pressure vessels; collapse and cave-ins of building s or bridges; electrical fires and electric shocks; and occupational diseases, suffocation, and poisoning.

The agreement enables KOSHA and the NFS to scientifically identify the causes of serious industrial accidents by cooperating in conducting toxicity research on harmful and hazardous substances, supporting examination and analysis, jointly utilizing facilities for examination and research, and sharing technology and information.

Meanwhile, KOSHA is making various efforts to prevent fires, explosion and leaks at chemical plants. KOSHA newly established a task force dedicated to preventing chemical accidents earlier this year, and launched Investigation Committee on Chemical Accidents with outside experts. KOSHA has also signed MOUs with 5 academic societies in Korea including the Korean Society of Safety to come up with more systematic prevention measures, and held meeting with management and front-line workers.

An official of KOSHA said, “KOSHA is focusing its disaster prevention capacities on preventing disasters of fires, explosion, and leaks as evidenced by the MOU with the NFS. I hope that everyone at industrial sites will make efforts to comply with relevant laws and institutions so that we can reduce the number of industrial accidents.”

## Safer rural infrastructure construction

With rural infrastructure construction projects increasing, efforts to safeguard construction workers are coming from many fronts.

KOSHA signed an MOU on construction accident prevention with Korea Rural Community Corporation or KRCC on Nov. 1, a Friday, and promised to step up joint efforts to prevent accidents that may occur at rural infrastructure construction sites.

KRCC is carrying out several construction projects like agricultural water supply system, reclaimed land development, and Saemangeum industrial complex development. The MOU will help lay the foundation for effective accident prevention.

It will also allow KRCC to take a greater responsibility as a government agency by strengthening accident prevention activities for small- and medium-sized construction sites the KRCC's awarded contracts to.

To that end, KOSHA will help KRCC establish OSH management system and implement OSH activities for construction sites the KRCC's contracted out including joint safety inspection and training, joint development of technical material, and sharing of information such as construction safety-related statistics, accident cases, and prevention measures.

“KOSHA will spare no resources to help KRCC, as a government agency, establish systematic OSH management system for safety and health of workers,” President Baek Hun-ki of KOSHA said. “KOSHA will expand its OSH technical support cooperation according to the Government 3.0 plan.”

In an effort to pull OSH resources and step up joint efforts, KOSHA has signed MOUs with 300 different agencies and organizations including 87 on safety, 44 on construction, and 28 on health.



Mr. Baek (center) is posing along with President Lee Sang-moo of KRCC after signing an MOU.



Mr. Baek (4th from the left) is posing along with President Lee Sang-moo of the KRCC after signing an MOU.

# Falls at construction sites are most common at small sized sites

The need to come up with measures to prevent industrial fatalities from falls at construction sites has come to the spotlight.

General Manager Choi Don-heung of North Gyeonggi Area Office of KOSHA has published his analysis of construction worker death toll over the past 5 years in 2013 OSH Research Brief (61st edition), published by the Occupational safety and Health Research Institute (OSHRI) of KOSHA (headed by President Baek Hun-ki).

According to the publication, industrial fatalities occur most frequently from falls at small sized construction sites for a project worth less than 2 billion won. Falls occur most frequently at a height of 3 to 10 meters.

The analysis shows that the construction worker death toll of the past 5 years is 2,728, more than half of which or 1,344 occurred at construction sites for a project worth less than 2 billion won.

## ※ Construction worker death toll by construction project size

Classification by project size		Less than 2 billion won	2-12 billion won	12-30 billion won	More than 30 billion won	Unclassified	Total
Aggregates		1,344	536	211	530	107	2,728
Construction worker death toll by year	2008	279	156	45	112	21	613
	2009	236	97	42	137	22	534
	2010	274	89	43	112	24	542
	2011	288	95	38	95	27	543
	2012	267	99	43	74	13	496

Meanwhile, out of 2,728 deaths from construction sites over the past 5 years, 1,389 deaths occurred due to falls, most frequently from a height of 3 meters to 10 meters.

General Manager Choi pointed out that occupational accidents occur at small sized construction sites due to a lack of funding and safety awareness.

In other words, workers conduct their work at a high risk of falling caused by a lack of or inadequate work platforms at small sized construction sites with insufficient funds.

In response to this tragic situation, Mr. Choi suggested that installing safety nets at a height of 3 to 5 meters should be added to the regulations of the Occupational Safety and Health Act, citing the fact that falls occur most frequently from a height of 3 to 10 meters. The law currently mandates that safety nets should be installed within a height of 10 meters.

Mr. Choi also emphasized that KOSHA should make more work environments safe by extending its current financial support for system scaffolding equipped with work platforms and safety guard rails at small sized construction sites for the long run.

Mr. Choi added, "The number of deaths from falls at construction sites accounts for 68% of all the industrial fatalities from falls. As such, we can expect a significant reduction in industrial fatalities by focusing on reducing deaths from falls at construction sites."

# KOSHA helps Vietnam develop OSH competency

Support program for Vietnam's OSH competency, part of the Official Development Aid for developing countries, is now in full swing.

KOSHA and Korea International Cooperation Agency or KOICA on Oct. 23 had a kickoff meeting in Hanoi for a support program named Enhancing Development Capacity of the Occupational Safety and Health Center of Vietnam.

The program is for an occupational safety and health center located in Son Tay, not far from Hanoi, which is now under remodeling. The center will receive KOSHA's support under the program till 2016.

A total of 10 billion won will be injected for the program, 3.8 billion won of which will be from Korea's ODA fund.

Among the items KOSHA will donate to Vietnam are 13 types of facilities for experience training centers, 30 units of industrial equipment for practice, and training bus. KOSHA will also help develop training curriculums and material and nurture lecturers.

At the kickoff meeting, Director General for Training and Public Relations Lim Seung-up from KOSHA gave a report about the project to a 100-strong audience including Vietnam's Deputy Minister of Labor, Invalids, and Social Affairs Bui Hong Linh and KOICA's Vietnamese office head.

"For the spirit of Korea's Government 3.0 plan, KOSHA will step up its efforts to give aid and support to the international community by sharing its experiences and strengthening cooperative relations with other countries," Mr. Lim said.

KOSHA reached a technical cooperation agreement in 2009 with the Ministry of Labor, Invalids, and Social Affairs, Vietnamese counterpart of the Ministry of Employment and Labor of Korea and since then, it has been giving support and aid to Vietnam including inviting Vietnamese public servants to Korea for trainings.

"This program hopefully helps Vietnam learn about Korea's excellent OSH policies and accident prevention know-how and contributes to the safety and health of Vietnamese," Kim In, KOICA's Vietnamese office head, expressed his hope.



Mr. Lim (8th from the left) is posing along with other participants.



# Accident prevention plans for electronic and semiconductor industry

The Ministry of Employment and Labor and KOSHA hosted OSH Leadership Conference with OSH leaders from 11 electronic and semiconductor companies on Oct. 23 in Daejeon.

The conference, also attended by KOSHA president and director of Industrial Accident Prevention and Compensation Bureau of the MOEL, was to discuss major accidents prevention measures.

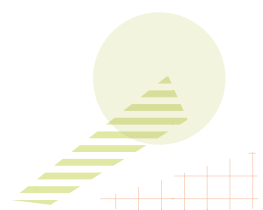
The electronic and semiconductor industries this year have seen a series of major industrial accidents caused by hazardous chemical leakages, making the MOEL host a discussion meeting on May 8 with 31 chief executives from the electronic and semiconductor industries.

Participants of the conference checked results of the pledges from the May discussion meeting and discussed sharing of best practices and future plans.

Among the plans that showed good results in terms of investment and system are fostering a corporate culture of following safety standards, more investment into a safety culture, strengthening safety and health teams, and more involvement in OSH activities by suppliers. Direct participation of chief executives in OSH activities needs to be improved further.

During the conference, the director of the IAPC explained and asked support for the Major Industrial Accidents Prevention Measures, which is mainly about chief executives leading employees to follow safety rules and giving more responsibility to principal employers when they outsource hazardous works.

“KOSHA is committed to major accident prevention. Newly established Major Accident Prevention Department at KOSHA, Accident Investigation Board with scholars and experts, and MOUs with accident prevention organizations are good examples,” Baek Hun-ki, the president of KOSHA, said. “Chief executives and top management need to show stronger commitments to accident prevention and following safety rules.”





# Safeguarding innovation city construction workers

While a host of government agencies will find new home in non-metropolitan areas and construction works to house them are underway in a large number, KOSHA doubles down on construction workers' safety.

President Baek Hun-ki of KOSHA and other officials paid a visit on Nov. 11 and 12 to Ulsan and Daegoo Innovation City, soon-to-be-home to government agencies, to check risks and hazards and to discuss accident prevention plans with project managers.

KOSHA, during a visit to Ulsan, asked the managers to take extra precautions to prevent fall and electric shock accidents as the construction is nearing its end.

Ulsan Innovation City will host 8 government agencies including the Ministry of Employment and Labor's customer service center and KOSHA by the end of next year. New KOSHA headquarters, which consist of 3 buildings in 69 square meter area, is under construction with 90 percent completed.

During a visit to Daegoo Innovation City, which will host 11 agencies including the Korea Gas Corporation, KOSHA saw how construction safety and health were observed and the combined heat and power plant within the city. The visit was joined by 17 construction site managers and discussed newly revised construction OSH legislation and accident prevention plans.

Regional and area offices of KOSHA are giving technical guidance to Innovation City construction sites across the country for accident prevention and waging safety campaigns.

"With many employees from suppliers and subcontractors working for the construction of Innovation Cities, principal employers should take greater responsibility and care for accident prevention," Mr. Baek said. "We all should strictly follow safety standards and refrain from cutting corners simply to shorten the scheduler."

## KOSHA Helps

# KOSHA helps safe construction of Bukhang Bridge

Officials from KOSHA including the president paid a visit on 19 Nov. to Bukhang Bridge construction site to be completed in April 2014 to see how safety and health standards are observed and to discuss accident prevention measures.

The cable-stayed bridge, a structure of cables supporting bridge deck from pylons, is nearing its completion with about 92% completed including waterproofing of the deck and setting-up of protective wall and exiting lamp.

The visit comes after a series of large scale construction accidents like a Banghwa Bridge collapse and a flood in the underground water pipe construction site in July.

During the visit, participants looked around the bridge deck and discussed risk factors and safety measures for each work process.

The visit was followed by a meeting with officials from main and sub contractors to discuss how to strengthen and how KOSHA can support cooperative relations between them to prevent large scale accidents.

The meeting covered effective implementation of safety and health programs for subcontractors, their improvement plans, requests to KOSHA and subcontractors' OSH problems.

"Large scale accidents this year could have been prevented if safety standards had been more thoroughly followed," Baek Hun-ki, president of KOSHA lamented. "I hope Bukhang Bridge construction can be completed with a sense of safety as strong as the bridge itself."

## Accident prevention plans for the steel industry

Answers are indeed in the field: A meeting was arranged to find accident prevention measures for the steel industry with officials from the field.

Officials from KOSHA including President Baek Hun-ki, paid a visit to Posco, No.1 steel maker in Korea, located in Pohang, North Gyeongsan Province on Nov. 5 to see work environment and have a meeting with 19 other steel companies in the region.

The meeting came after the death of 5 people working at a steel factory in Dangjin, South Chungchung Province in May and was to find accident prevention measures for the steel industry.

Pohang, home to about 500 steel companies that handle harmful substances and heavy machines and equipment, are exposed to potential hazards, thus required to come up with safety and health plans for subcontractors engaged in maintenance and repair works.

The meeting, attended by OSH leaders from three major steel makers-Posco, Hyundai Steel, and Dongkuk Steel-and their suppliers, discussed steel makers' OSH support for suppliers and accident prevention activities of suppliers.

This meeting was a follow-up of the OSH leadership conference hosted by the Ministry of Employment and Labor and KOSHA in October where participants discussed serious accident prevention plans and joint OSH program between large companies and their suppliers.

"KOSHA is committed to reducing occupational accidents by sharing relevant information and improvement plans with the field as the Government 3.0 plan dictates us," Mr. Baek said.