

## KOSHA NEWS

**Protecting Worker's Life and Health** 



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Protecting Worker's Life and Health

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- Safety Culture Implementation Team publishes a compilation of initiatives.
- Activities include integrating safety messaging into paper bags, shopping carts, and instant coffee mix packets, as well as spearheading safety culture campaigns at local festivals
  - The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) have unveiled a compilation showcasing a diverse array of impactful safety promotion practices undertaken by 39 regional Safety Culture Implementation Teams ("Safety Teams") in 2023.
  - In a strategic move aimed at substantially reducing serious accidents, the government announced the Serious Accident Reduction Roadmap by the close of 2022 and has pivoted from an approach anchored in regulations and punitive measures to a more proactive self-regulatory preventive framework. A nationwide campaign to champion a practice of safety in everyday life was launched in March 2023, recognizing that fostering self-regulatory preventive programs hinges foremost on elevating public safety consciousness and instilling a pervasive safety culture throughout society. This effort, facilitated by collaborative endeavors among public and private entities, saw the establishment of Safety Teams across 39 regions nationwide.
  - The compilation catalogues a rich tapestry of safety culture promotion initiatives led by Safety Teams, targeting both the general public and industrial settings. Notable endeavors include (1) corporate partnerships such as safety habit promotion initiatives utilizing Emart shopping carts in Seoul, (2) safety culture campaigns interwoven with local



festivities such as the Chimac Festival (chicken with beer) in Daegu and Together Day Festival (celebrating people worldwide) in Ansan, (3) collaborative safety culture television campaigns with local media outlets in Gwangju, and (4) the production of concise safety videos in Daejeon.

- Interwoven throughout the compilation are illustrative interviews with key stakeholders directly involved in these endeavors, offering firsthand insights into the initiatives. Ahn Jeong-hoon, a division head at Emart, who played a pivotal role in embedding safety messaging into paper bags and shopping carts, shared his resolve: "I am dedicated to helping foster a society where safety becomes ingrained in everyday life through the ripple effect of Safety Team activities." Similarly, Heo Jeong-sik, Team Leader at Dongsuh Foods, which integrated safety messaging into coffee mix packets popularly consumed in workplaces, expressed optimism: "I trust that encountering safety messaging on our products will naturally prompt individuals to consider safety more consciously."
- Ryu Kyung-hee, Head of the Occupational Safety and Health Office at the Ministry of Employment and Labor, underscored the essence of a genuine culture of safety in everyday life: "True safety is that which is embraced through personal initiative. In the past year, Safety Teams concentrated their efforts on propagating a nationwide safety culture, and this year, we will continue to disseminate practical safety messages centered on workplace environments, actively supporting autonomous safety culture initiatives."
- The compilation of initiatives by the Safety Culture Implementation Team and additional activities spearheaded by Safety Teams are accessible for viewing on the Kosha website (www.kosha.or.kr/safety1team).



**Activity Cases of the Safety Culture Implementation Teams** 

### Seoul

### ■ Joint Campaign to Promote Helmet Wearing

- A focused guidance period for helmet wearing was set, followed by on-site inspections and the distribution of YouTube promotional videos.
- The campaign also involved operating buses wrapped with safety messages for visual advertising.

### ■ Safety Culture Campaign with Citizens

- At the "2023 Seoul Safe Yard," safety culture promotion booths were set up, featuring games like "Whac-A-Mole" to identify potential hazards.
- The "Hazard Assessment Certification Challenge" was launched, utilizing an app to verify hazard assessments. Participants who met the challenge's goals were awarded prizes.

### ■ Safety Culture Campaign for Delivery Workers

• Safety stickers containing safety rules for delivery workers were distributed along with ice water to prevent heat-related illnesses.

### ■ Collaboration with E-Mart to Display Safety Messages Nationwide

- Safety culture messages were displayed on SSG online delivery bags until December 2023, stating "We Commit to Your Safety."
- Safety messages were also attached to shopping carts inside the stores, and banners for heat illness prevention were displayed outside the stores, along with promotional messages in the bottled water sales areas.



Joint Campaign to Promote Helmet Wearing



2023 Seoul Safe Yard



Safety Culture Campaign for Collaboration with E-Mart **Delivery Workers** 







### Participant Interview

### An Jeong-hoon, Director at E-Mart

I thought promoting safety culture to the customers visiting our stores would be effective, so I decided to join the Safety Team E-Mart implemented safety culture messaging by creating stickers for shopping carts and rice packaging, and inserting safety phrases into paper shopping bags delivered to homes, spreading safety culture both online and offline. Moving forward, I am committed to continuing to spread safety culture with the mindset that all our employees are part of the Safety Team. I aim to create a ripple effect with our Safety Team activities, making safety a part of everyday life and contributing to a safer society.

### Busan

### ■ Safety Culture Campaign at Sajik Baseball Stadium

- The Safety Team displayed banners at the stadium to prevent heat-related illnesses.
- They also enhanced the spread of safety culture messages by distributing wet wipes and fans to spectators during baseball games.

### ■ Collaborative Promotion with Busan Education Office to Spread Safety Culture

- The Safety Team conducted site inspections and risk assessment training in vocational high schools, specifically focusing on automotive maintenance and parts processing workshops.
- They delivered safety culture messages using audiovisual materials tailored to the students' level of understanding.

### ■ Creation of Safety Culture Emojis

- The Safety Team developed and distributed KakaoTalk emojis, which feature the Safety and Health Organization character 'Anzel-yi' and the Busan Metropolitan City character 'Boogi', to enhance familiarity with safety concepts.
- Collaboration with Korea Racing Association for National Broadcast of Safety Culture **Slogan Videos**



• Safety culture promotional videos were broadcast across large screens and monitors located at various racing venues: five screens and 1,600 monitors at the Seoul Racecourse, four screens and 800 monitors at the Busan Racecourse, and one screen and 362 monitors at the Jeju Racecourse.







Risk Assessment Training in Vocational High Schools



Creation and Distribution of Safety Culture Emojis



Collaboration with Korea Racing Association



### **Participant Interview**

Song Dae-young, Branch Manager at Busan-Gyeongnam Branch of Korea Racing Association

We have been participating in safety culture campaigns since the launch of the Safety Team in the Busan area. KRA has embraced the slogan "If it's not safe, we don't work," to build consensus on safety culture and firmly establish safety consciousness internally. Moreover, in collaboration with the Busan Safety Team, we have actively promoted safety culture messages on large electronic billboards and conducted thorough inspections at racecourses to spread safety awareness. We will continue to vigorously support and invest in workplace safety and strive to create a safe working environment. I promise to continue collaborating with the Busan Safety Team to relentlessly spread safety culture.

### Daegu

### ■ Children's Safety Experience Camp

- The camp provided education on how to wear protective gear, including fun activities like dressing up games and helmet-wearing experiences, aimed at familiarizing children with the use of protective equipment and raising awareness about the importance of safety.
- An adapted video of the traditional tale "The Sun and the Moon Became Siblings" was used to educate about the importance of protective equipment in preventing fall accidents.



### ■ Safety Culture Campaign Linked to Regional Festivals

- At the "2023 Powerful Daegu Festival," safety banners were used in a street march and the Safety Team introduced itself and provided safety materials through a promotional booth.
- During the "Daegu Chicken & Beer Festival," safety culture stickers were placed and safety rules promoted in densely populated areas such as nearby restaurants and restrooms.

### ■ Campaign for Risk Assessment Awareness and Site Inspections

· Safety messages were displayed using banners at the busy four-way intersection in Nongong-eup, and participants from the Safety Team, wearing sashes, spread the importance of risk assessments to workers and citizens.

### ■ Collaboration with Daesung Energy

 In a partnership with Daesung Energy, safety messages were inserted into the gas bills of approximately 1.05 million households in Daegu, Gyeongsan, and Goryeong, using both paper and KakaoTalk billing platforms.



Children's Safety Experience Camp



"Powerful Daegu" street march



Safety Culture Campaign with Daegu Chicken & Beer Festival



Collaboration with Daesung Energy



### Participant Interview

### Lee Jae-won, Team Manager at Daesung Energy

While considering the safety of our internal workers and the safe usage of city gas by citizens, we were contacted by the Daegu Safety Team. Our company also launched the 'Daegu Citizens' City Gas Safety Culture Campaign' at Dongdaegu Station to spread safety awareness. I believe that participating in the Safety Team's activities and promoting safety culture are crucial for the company's progress. We will continue to maintain a close network with the Daegu Safety Team, exchange a lot of safety-related information, and fulfill our role as community safety quardians!

### **Central region**

### ■ Safety Culture Booths at the Ansan Global Festival

 The festival featured a VR experience booth where visitors could engage in augmented reality simulations to indirectly experience industrial accident scenarios. Additionally, health consultation booths were set up to perform body composition analyses and distribute safety-related souvenirs.

### ■ Safety Campaign for Foreign Workers in Uijeongbu

• Safety education and campaigns were conducted for workers participating in the "Cambodian Traditional Festival (Chol Chnam)" as well as for migrant workers and multicultural families attending the "HaHa Festival."

### ■ Safety Culture Campaign at Incheon International Airport

• To prevent various safety accidents that could occur in multi-use facilities, safety rules were promoted, and awareness campaigns were conducted to internalize safety consciousness. Safety messages were also displayed on the airport's website, SNS, and passenger terminal screens.

### ■ Collaborative Promotion with Dongseo Food

• In a collaboration involving packaging for products like Maxim Mocha Gold Coffee Mix and Kanu, safety messages stating "A cup of coffee, a moment to think about safety" were inserted, enhancing the visibility of safety messages in everyday consumer products.



Safety Culture Booths at the Safety Campaign for Foreign Safety Culture Campaign Ansan Global Festival



Workers in Uijeongbu





Collaborative Promotion with Dongseo Food





### Participant Interview

### Heo Jeong-sik, Team Manager at Dongseo Food

Participant Interview (Heo Jeong-sik, Team Manager at Dongseo Food)

One day, the Safety Team from the Incheon area suggested that we print safety messages on our product packaging to help spread safety culture, and I agreed with the idea. Starting with their flagship product, 'Maxim Mocha Gold Coffee Mix,' we began to print the safety message, "A cup of coffee, a moment to think about safety," on various product boxes. We plan to expand this to more products by early next year. I hope that when citizens see these phrases on our products, it will naturally remind them to think about safety in their everyday lives. I believe this involvement with the Safety Team has begun to establish a culture of prioritizing safety within the company, making this a very meaningful endeavor.

### Gwangju

### Serious Accident Prevention TV Campaign

 The Safety Team collaborated with KBC Gwangju Broadcasting to produce and broadcast a joint TV campaign for serious accident prevention across various media platforms.

### ■ Gwangju 'Safety Champ Golden Bell' Quiz Contest

- The Safety Team hosted a safety quiz contest for teenagers in Gwangju, providing a fun and easy way to acquire safety knowledge.
- They enhanced safety awareness by linking industrial safety VR experiences to the quiz contest.

### Risk Assessment Seminar at Kia Autoland Gwangju Plant

 The seminar was held to inform attendees about updates to risk assessment regulations and to discuss strategies for activating risk assessments, focusing on collaborating with partner companies to build autonomous safety systems.

### ■ Safety Resolution Meeting

 A resolution meeting was conducted in collaboration with public, private, and government entities, where safety management strategies were presented alongside safety workplace creation performances and special safety lectures.



• Safety inspections were performed, targeting over 200 partnering companies following the resolution meeting.









TV Campaign

Serious Accident Prevention Safety Champ Golden Bell

Risk Assessment Seminar

Safety Resolution Meeting



### Participant Interview

Lee Jong-kwan, Director at Korea Electric Power Corporation

We have conducted various activities including safety training for partner companies, joint hazard assessments between the client and contractors, and the creation of safety guidebooks. The "Safety Resolution Meeting" held in July was particularly effective in communicating the importance of safety culture to many people. During this meeting, representatives from approximately 200 partner companies in Gwangju gathered to discuss building self-regulatory prevention systems to prevent major accidents and spread safety culture. The event included the reading of a safety resolution and special safety lectures, emphasizing the importance of safety culture and enhancing safety consciousness. We will continue to engage in various activities to spread safety culture, ensuring that workers can operate safely on-site,

### Daejeon

### ■ Production of Safety Culture Short Videos Parodying Popular Movies

- In collaboration with Daejeon MBC, five episodes of "Safety Culture Shorts" were created, parodying popular films to illustrate safety rules for various environments such as multiuse facilities, manufacturing sites, construction sites, restaurants, and hazard assessment.
- The videos were exposed to approximately 1.2 million people using the promotional infrastructure of participating organizations, including local government bodies, public institution displays, and websites.



### ■ Operation of Safety Culture Youth Supporters

• "Safety Culture Youth Supporters," composed of university students from the Daejeon area, were involved in promoting the importance of safety through hands-on safety education and site visits, and participated in joint campaigns to prevent major accidents.

### **■** Special Program Production

 In partnership with TJB Daejeon Broadcasting, a safety quiz show was produced, visiting workplaces to educate on accident prevention and safety rules in a series of four episodes.

### ■ Safety Culture Campaign Linked to Regional Festival

• At the "2023 Sejong Festival," a booth was operated to promote safety culture, offering VR safety experiences and promoting safety rules.



Safety Culture Short Videos



Safety Culture Youth Supporters



**Special Program Production** 



Safety Culture Campaign Linked to Regional Festival



### Participant Interview

### Nam Yoo-sik, Announcer at Daejeon MBC

Working as a news anchor, I was constantly exposed to news of accidents and incidents, which heightened my interest in safety. The Daejeon Safety Team appointed me as a promotional ambassador. I took on the role of overseeing various events and participated in the creation of "Safety Culture Shorts," aiming to make safety culture easy and fun to learn using well-known movies as the material. The most memorable experience was shooting a safety video for multiuse facilities, parodying the movie "Parasite." I believe that preventing accidents before they occur is crucial. As an anchor, I will continue to focus on promoting a safe society together with the Daejeon Safety Team.

### The 6th On-Site Inspection Day in 2024 targets measures for preventing fall accidents

- Recent months have witnessed a distressing trend of fatalities resulting from falls off rooftops, ladders, trees, and mobile scaffolds during minor construction endeavors such as springtime facility upgrades and landscaping projects. In response, the Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) have designated March 27, 2024 as the 6th On-Site Inspection Day, focusing on averting falls, which constitute the majority of serious accidents.
  - \* According to the statistics on fatal accidents subject to investigation, there were 251 fatalities attributed to falls in 2023, accounting for a staggering 24 percent of the total 598 fatalities from accidents. [Incident Case Attachment 2]
- These preventable incidents underscore the significance of preemptive measures, including thorough risk assessments and dissemination of safety protocols through safety briefings and toolbox meetings prior to commencing work. Additionally, essential safety precautions including donning safety helmets; installing and using safety rails and harnesses; and deploying work platforms, safety guardrails, and fall protection nets are pivotal in averting such accidents.
- > To heighten awareness and prompt action, the MOEL has activated the serious accident siren, signaling the issuance of a falling accident crisis alert. Businesses are urged to exercise heightened vigilance and participate in the occupational safety assessment, akin to a comprehensive health checkup for workplaces.



Ryu Kyung-hee, Head of the Occupational Safety and Health Office at the Ministry of Employment and Labor, stresses the efficacy of basic safety measures, noting "Many fatalities from falls occur at relatively low heights, around one meter, where adherence to fundamental safety protocols such as wearing safety helmets and utilizing work platforms could have prevented the majority of incidents. I advocate for collaborative risk assessments between labor and management to identify potential hazards and ensure rigorous enforcement of safety protocols and educational initiatives."

### **Attatchment** Fatal Accidents Involving Falls

### ■ Fatal Accident: Fall from a 2-Meter High Ladder

- (Incident Overview) The victim, while using a portable ladder (2 meters) to repair a leaking warehouse roof, fell to their death during the process of descending the ladder after completing the work. The ladder lost its balance and toppled over, causing the victim to fall to their death.
- (Causes) Although it is a principle not to work on ladders,
  - In cases where it is unavoidable to work on a ladder, measures should be taken to prevent the ladder from tipping over or slipping. These precautions were ignored.
  - The victim fell and fatally hit their head while not wearing a safety helmet.

### Key Safety Protocols to Prevent Fatal Falls During Ladder Work

- Use ladders strictly as means of ascent and descent.
- Install ladders on flat, sturdy surfaces without slippery conditions.
- Ensure workers wear and maintain protective equipment such as safety helmets and harnesses.
- Implement supervision for securing ladders, anchoring and anti-slip measures.

### ■ Fatal Accident: Fall While Working on a Roof Without Safety Harness

• (Incident Overview) While conducting roof paneling work at a farm barn for roof maintenance, the worker slipped and fell from the roof, approximately 2.6 meters to the ground, while moving to have lunch.



• (Causes) Despite the worker operating at a height of over 2 meters without safety harness equipment installed, the employer failed to provide or ensure the use of safety harness.

### **Key Safety Protocols for Roof Work to Prevent Fatal Falls**

- Install and verify safety equipment for accessing the roof.
- Install sturdy coverings on access platforms and skylights for roof work.
- Install safety harness equipment at the top of slopped roofs, ensuring its use.
- Install safety railings at the edge of the roof; if difficult, install fall arrest nets and safety harness equipment.
- Provide and supervise protective gear such as helmets and safety harnesses for workers.
- Check weather forecasts and halt work in case of forecasted snow, rain, or strong winds.

### ■ Fatal Accident: Fall while Tree Pruning

- (Incident Overview) During maintenance at a landscaping site, a worker utilized an arborist ladder to ascend a tree measuring 3.5 meters. While engaged in pruning to remove obstructive or unnecessary branches, a limb broke, resulting in a fatal fall.
- (Causes) Despite the foreseeable risk of falls during pruning operations, adequate precautions to prevent such accidents, such as securing work platforms, were not implemented. Furthermore, essential personal protective equipment, including helmets and safety harnesses, was not provided to the worker.

### **Key Safety Protocols for Tree Work to Prevent Fatal Falls**

- Ensure strict adherence to the use of personal protective equipment, including helmets and safety harnesses, and conduct regular supervision to ensure compliance.
- Install and maintain secure and stable work platforms, along with appropriate safety railings.
- Utilize sturdy scaffolds and platforms designed for the specific task of tree maintenance.



### ■ Fatal Accident: Fall While Working on a Portable Scaffold

- (Incident Overview) While engaged in the installation of an external ventilation fan, a worker lost balance atop a movable scaffold (1.7 meters). This misstep led to a fatal fall to the ground as the worker slipped while drilling holes into glass panels.
- (Causes) The absence of safety railings on the portable scaffold's upper section, compounded by the failure to provide essential personal protective equipment, such as helmets and safety harnesses, to the worker.

### Key Safety Protocols to Prevent Fatal Falls While Working on Scaffolds

- (Scaffold) Ensure the secure fixation of the scaffold platform and install safety railings at both ends of scaffold decking
- (Scaffold) Safely attach safety harnesses during assembly and disassembly and restrict access to the work area.
- (Portable Scaffold) Install on a level surface and utilize scaffolds of appropriate specifications.
- (Portable Scaffold) Ensure sturdy installation of outriggers and access ladders.
- (Portable scaffold) Enforce the use of personal protective equipment and conduct regular supervision.
- (Suspended Scaffold) Wear safety harnesses and attach safety ropes prior to ascending the work platform.
- (Suspended Scaffold) Fasten ropes to at least two sturdy anchorage points.
- (Suspended Scaffold) Routinely inspect ropes and work platforms for damage and ensure proper attachment of safety harnesses.





# Tailored Safety Information for Door-to-Door Sales/ Maintenance Inspectors

- Taking advantage of location, weather, and day-specific recommendation algorithms for free access for safety information
  - The Smart Occupational Safety & Health Technology Institute of the Korea Occupational Safety and Health Agency (KOSHA) is applying its innovative Occupational Platform Disaster Prevention System to provide door-to-door sales/maintenance inspectors essential information for preventing industrial accidents.
  - This groundbreaking system serves as an information-sharing hub specifically designed to address the unique occupational hazards faced by platform workers, expanding its reach from delivery riders and parcel delivery workers to include door-to-door sales/ maintenance inspectors, a group previously underserved in terms of safety education
  - Door-to-door sales/maintenance inspectors encounter diverse risks during their mobile inspections, yet the nature of their work poses challenges for receiving adequate safety and health information.
  - In response, KOSHA has developed a proactive solution: before commencing work, inspectors can activate their work app to automatically access brief (approx. 15 seconds) safety education videos tailored to their current location, weather conditions, and the day of the week. The system employs sophisticated algorithms to intelligently select videos that address the most relevant safety and health measures, ensuring inspectors receive pertinent guidance for their specific circumstances.
  - These educational videos are made available through an open-API (application programming interface), requiring prior integration of KOSHA's system for access. To streamline



## **Tailored Safety Information for Door-to-Door Sales/ Maintenance Inspectors**

accessibility, companies interested in utilizing this invaluable resource can easily obtain an authentication key through the Occupational Platform Disaster Prevention System website (http://service.kosha.or.kr) and seamlessly integrate it into their existing work apps at no cost.

- \* Open-API: An open-API is an application programming interface (API) that is publicly available for software developers. KOSHA utilizes an open-API to disseminate information, allowing anyone to access and utilize the content provided by KOSHA.
- > Furthermore, users can watch the system's spot education video shortcut on their smartphones, without the need for app modifications. By simply clicking on the link corresponding to their current location, inspectors can instantly access spot education videos tailored to their specific needs.
- In a recent development, Coway Co., Ltd. has committed to providing safety information through its work app starting from April 1, following collaborative consultations with KOSHA.
- Xim Gyu-wan, Director of the Smart Occupational Safety & Health Technology Institute of KOSHA said: "The Occupational Platform Disaster Prevention System delivers timely and tailored information to service providers operating within industrial accident 'blind spots.' Looking ahead, we aim to expand the scope of applicable job categories, ensuring safety and health information remains easily accessible across diverse professions."

### **Attatchment** Demonstration of the Occupational Platform Disaster Prevention System in Use



A Frame from the Introduction Video of the Occupational Platform Disaster Prevention System





A Frame from the Broadcast Video Targeting Door-to-Door Sales/ Maintenance Inspectors of the Occupational Platform Disaster Prevention System



## Best Risk Assessment Practices Selected by Enterprises Themselves

- Join the Risk Assessment Excellence Presentation Competition set for November
- The event has been revamped to focus on local and on-site dynamics, selecting 140 company participants, with 12 Minister Awards to be presented.
  - The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) are inviting submissions of risk assessment best practices from April 8 to August 23. Risk assessment, a collaborative endeavor between employers and workers aimed at identifying and mitigating workplace hazards, stands as the most effective measure for preventing industrial accidents. Companies submitting exemplary cases will progress to the regional preliminaries in October, culminating in the November main event, the Risk Assessment Excellence Presentation Competition.
  - This year, the government's policy target for preventing occupational accidents is described as "Going into the Field." In step, the presentation competition for risk assessment has also shifted from a centralized to a regional and on-site focus. In contrast to the previous year's exclusive central finals, seven metropolitan regional competitions have been introduced. The number of participating companies in regional evaluations has surged more than tenfold, with jury panels predominantly comprising on-site safety and health personnel from participating companies, enhancing practicality right from the evaluation stage.



## **Best Risk Assessment Practices Selected by Enterprises Themselves**

- > Furthermore, scale of awards for finalists has increased dramatically,, with the number of Minister's Awards multiplying from one to twelve. Additionally, for the 16 winning companies in the final round, a post-award exemption from industrial safety and health inspections and supervision for one year will be granted.
  - \* However, in cases of major accidents or other exceptional circumstances, companies will be subject to planning or special supervision.
- While awareness and implementation rates of risk assessment have seen a significant uptick owing to ongoing improvements aimed at streamlining the process, feedback indicates that conducting risk assessments, particularly for small and medium-sized enterprises, remains challenging. The discovery and dissemination of various best risk assessment practices can serve as models for similar enterprises.
  - \* Risk assessment implementation rate: from 33.8% in 2019 to 71.8% in 2024
- Minister Lee Jung-sik stressed: "Operational effectiveness of risk assessment is paramount for a deep reduction in serious accidents. We will continue to unearth and spread innovative examples of risk assessment that can be easily adopted and implemented, even by small and medium-sized enterprises, thereby consistently enhancing the practicality of our industrial accident prevention policy."





### The 7th On-Site Inspection Day is scheduled for April 11, 2024

- Increased industrial and production activities is accompanied by a surge in occupational fatalities, which are often linked to work at heights, entrapments during machinery repairs, and collisions with operating equipment or trees. To address this, the Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) and the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) are launching the 7th round of site inspections on April 11, 2024. The focus will be on mitigating the three major types of accidents: falls, entrapments, and collisions in high-risk workplaces across the nation, including manufacturing and construction sectors. Their meticulous inspections aim to address the eight key risk factors associated with these accidents, identified through comprehensive risk assessments.
  - \* Statistics reveal fatalities from falls (251), collisions (79), and entrapments (54) accounting for a significant 62.4 percent of total occupational accident-related deaths in 2023.
- ▶ Efficient preventive measures involve installing protective devices and preventive equipment on machinery and equipment vulnerable to falls, entrapments, and collisions. In this regard, the government provides financial assistance to small and medium-sized enterprises. Businesses applying for government support, such as the clean workplace development support through the Occupational Safety Assessment program, can receive up to 70 percent of funding for the installation of protective equipment and preventive facilities, with a maximum limit of KRW 30 million. Notably this year, businesses are free to select and apply for safety facilities and equipment, such as fall prevention systems and collision prevention devices.



- \* Examples include safety railings, covers for openings, protective covers, safety devices for rollers/conveyors, front and rear cameras.
- > Furthermore, complementary initiatives, such as the Hazard Signboard Installation Campaign, have been launched, aiming to reinforce safety practices. This campaign includes directives such as ensuring the thorough use of personal protective equipment, prohibiting the unauthorized removal of covers for openings, enforcing restrictions on operating machinery during inspections, and prohibiting entry below suspended loads. These safety messages are posted and displayed in hazardous areas to promote a culture of safety and awareness among workers.
- > Ryu Kyung-hee, Head of the Occupational Safety and Health Office at the Ministry of Employment and Labor, stressed, "Practical on-site measures in preventing serious accidents are paramount. I urge collaborative efforts between employers and employees to identify and manage risks associated with falls, entrapments, and collisions, emphasizing the proactive implementation of practical safety measures."

### **Attatchment 1** Fatal Accidents Involving Falls

## ■ Fatal Accident: Worker Fatality from Falling Through Broken Skylight While Performing Roof Maintenance

- (Incident Overview) While conducting roof maintenance at a factory, the victim fell to their death when stepping onto a deteriorated skylight, causing it to shatter and leading to a fatal impact on the concrete floor below.
- (Causes) Despite the inherent fall risk associated with roof work, adequate safety measures such as safety railings, fall protection, and skylight covers were not installed.
  - Furthermore, basic safety gear, including helmets, was not provided to the workers.



### **Key Safety Protocols for Roof Work to Prevent Fatal Falls**

- Install and verify safety equipment for accessing the roof.
- Install sturdy coverings on access platforms and skylights for roof work.
- Install safety harness equipment at the top of slopped roofs, ensuring its use.
- Install safety railings at the edge of the roof; if difficult, install fall arrest nets and safety harness equipment.
- Provide and supervise protective gear such as helmets and safety harnesses for workers.
- Check weather forecasts and halt work in case of forecasted snow, rain, or strong winds.

### ■ Fatal Accident: Fall from a Low (60cm) Ladder During Landscaping Work

- (Incident Overview) While engaged in landscaping duties with a portable ladder, the victim suffered a fatal fall when losing balance and falling backward from the second step (60cm) of the ladder, resulting in fatal head trauma upon impact with the ground.
- (Causes) Despite the general principle against working on ladders,
  - Necessary precautions such as working in pairs and wearing protective gear were neglected in this instance.

### **Key Safety Protocols for Landscaping Operations to Prevent Fatal Falls**

- Utilize scaffolds.
- Follow the key safety protocols for ladder work below when ladder usage is unavoidable.

### **Key Safety Protocols to Prevent Fatal Falls During Ladder Work**

- Use ladders strictly as means of ascent and descent.
- Install ladders on flat, sturdy surfaces without slippery conditions.
- Ensure workers wear and maintain protective equipment such as safety helmets and harnesses
- Conduct work in pairs and implement fall prevention measures to ensure ladders are properly secured, anchored, and equipped with anti-slip measures.



### Attatchment 2 Fatal Accidents Involving Entrapment

### ■ Fatality Due to Entrapment During Maintenance Work Without Main Power Shutdown

- (Incident Overview) While performing maintenance tasks such as replacing steel plates on a conveyor within a factory, the victim's body was detected by a sensor, activating the machine and causing them to become entrapped between the conveyor and the machine, resulting in a fatality.
- (Causes) Failure to implement safety measures such as properly disconnecting power sources during machine maintenance.
  - Despite the risk of entrapment to workers, no protective measures were installed at the entrapment hazard zones of the conveyor and machinery.

## Lock the power and attach signage (Lock-OUT and Tag-Out) to prevent entrapment during machine inspection and repair

- Verify the presence of other workers in hazard zones before starting machine operation.
- Ensure machine shutdown (electricity, pneumatics, etc.) during maintenance tasks.
- Install locking devices on moving parts and signage indicating power input prohibition.
- Use safety props or safety blocks during inspection and repair tasks on vehicular construction machinery.

### ■ Fatal Accident: Entrapment Fatality in Screw Due to Absence of Emergency Stop Device

- (Incident Overview) During a task of feeding used jute bags and polypropylene straps into the feed opening of a reclaimer, the victim's hands became ensnared in the rotating screw located beneath the feed opening. This led to entrapment up to the shoulder and resulted in fatality.
- (Causes) Failure to install emergency stop devices to immediately halt machine operation in the event of entrapment of a worker's body in conveyors or machinery posed a significant risk.



### **Key Safety Protocols to Prevent Entrapment When Using Hazardous Machinery**

- Install covers, guards, and bridge ladders on power transmission parts or operating sections of machinery.
- Install appropriate protective devices\* tailored to each machine or apparatus and ensure they are maintained in proper working order.
  - \* Refer to machine manuals, industrial safety and health regulations, and specific machine standards.
- Implement suitable emergency stop devices specific to each machine or apparatus.
- Adhere to safety certification standards, safety inspection standards, and voluntary safety standards when using equipment.

### **Attatchment 3** Fatal Accidents Involving Collision

### ■ Fatal Accident: Collision During Logging Operations

- (Incident Overview) While engaged in log bucking\* tasks at a logging site, the victim collided with a falling tree trunk in an unintended direction, resulting in fatality.
  - \* Cutting logs into specific dimensions for ease of transportation to the consumption site.
- (Causes) Failure to implement measures preventing other tasks within a straight-line distance equal to twice the height of the tree being felled.
  - This was compounded by neglecting to create a proper face cut\*, which ensures trees fall in the intended direction.
    - \* A wedge-shaped cut made near the bottom of the side where the tree is intended to fall, ensuring a clear direction of felling and preventing splitting of the timber.





### **Key Safety Protocol for Collision Prevention During Logging Operations**

- Confirm evacuation of surrounding workers and control access during logging tasks.
- Ensure workers wear safety helmets, safety harnesses, and other protective gear, with supervision.
- Maintain a safe distance around the tree being felled.
- Refrain from working beneath trees caught on other trees.

### ■ Fatal Accident: Collision with Unattended Tractor

- (Incident Overview) The victim, while waiting for the shuttle vehicle in the dock area after completing a shift and donning a black umbrella, collided with an unattended tractor, resulting in fatality.
- (Incident Overview) The failure to prohibit access to areas where there are vehicles endangering a risk of workers, such as transport vehicles for dock operations, contributed to the incident.
  - Additionally, subjective decisions by drivers, including changes in direction and rotations in unspecified areas due to the lack of designated routes outlined in the work plan, further compounded the risk.

### **Key Safety Protocols for Preventing Collisions with Vehicle Operations**

- Enforce access control or deploy guides for workers in areas where vehicleoperated construction machinery (e.g., excavators) is in operation.
- Enforce access control or deploy guides for workers in areas where vehicleoperated cargo transport machinery (e.g., freight trucks) is moving.
- Install rearview detection systems or reverse warning signals with flashing lights on forklifts.
- Prohibit excessive loading and off-center loading of cargo on forklifts to ensure driver visibility.



# KOSHA Achieves Top Rating in Evaluation of Public Institutions' Shared Growth Performance

- Strategic adaptation to small business needs in occupational safety and health earns high acclaim.
  - The Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) has secured the highest rating in the 2023 Evaluation of Shared Growth Performances of Public Institutions. This evaluation is spearheaded by the Ministry of SMEs and Startups and aims to recognize the pivotal role of public institutions in nurturing shared growth and mutually beneficial cooperation initiatives.
  - > The assessment covered 134 public institutions, including 32 public enterprise types and 102 quasi-governmental and other entities. It integrates the advancement of shared growth initiatives with input from collaborating small and medium-sized enterprises, resulting in five grades: Excellent, Good, Satisfactory, Fair, and Needs Improvement. While KOSHA received a Satisfactory rating last year, it has now been upgraded to Excellent.
  - KOSHA's proactive approach of tailoring shared growth strategies to the specific needs of small businesses has garnered significant acclaim. Key initiatives include supporting safety technology startups across various developmental stages, establishing an ecosystem for the smart safety equipment market, and enhancing payment infrastructure to facilitate mutually beneficial transactions.
  - XOSHA President Ahn Jong-ju emphasized, "Our unwavering commitment to social responsibility has been affirmed by our attainment of the Excellent rating. Looking ahead, we remain steadfast in our dedication to cultivating a culture of shared growth through the implementation of diverse support programs grounded in innovative approaches and effective communication."



## KOSHA NEWS Protecting Worker's Life and Health



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