

Vol
129

JUNE
2024

KOSHA NEWS

Protecting Worker's Life and Health

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Accident Fatality Rate in 2023 Drops to a Record Low of 0.39‰

- **In 2023, the number of approved survivor benefits for accident fatalities decreased by 62 to 812 compared to the previous year.**
- **Decreases were mainly observed in the construction (46 fewer) and manufacturing (19 fewer) sectors, particularly among businesses with fewer than 50 employees (70 fewer).**

- The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) has announced the 2023 statistics on accident fatalities based on the approval of survivor benefits under industrial accident compensation statistics. The number of approved accident fatalities in 2023 was 812, a decrease of 62 from 2022 (874). The accident fatality rate per ten thousand employees also decreased by 0.04‰ points to 0.39‰. This marks the first time since 2014 that the rate has fallen into the 0.3‰ range, having previously stagnated between 0.4‰ and 0.5‰.
- By industry, the highest number of fatalities occurred in the construction sector with 356 cases (43.8%), followed by manufacturing with 165 cases (20.3%); service industries with 140 cases (17.2%); and transportation, storage, and communications with 111 cases (13.7%). Notably, fatalities decreased in the construction (46 fewer), manufacturing (19 fewer), and service industries (10 fewer), while the transportation, storage, and communications sector saw an increase (7 more).

* The increase in the transportation, storage, and communications sector was primarily due to traffic accidents outside the workplace (77 cases, 10 more) and among labor providers such as truck owner-operators (20 cases, 13 more).

Accident Fatality Rate in 2023 Drops to a Record Low of 0.39‰

- ▶ Regarding types of accidents, falls were the most common cause of fatalities with 286 cases (35.2%), followed by being caught in or between objects with 88 cases (10.8%), traffic accidents outside the workplace with 86 cases (10.6%), collisions with objects with 69 cases (8.5%), and being struck by objects with 68 cases (8.4%).
- ▶ Although falls (36 fewer), collisions with objects (23 fewer), and being caught in or between objects (2 fewer), which have historically accounted for about half of all fatalities and are known as the “three major types of accidents,” have decreased, traffic accidents outside the workplace (9 more) have increased, making it one of the top three causes for the first time.

* Breakdown by size: 5 to 49 employees (359 cases, 44.2%), fewer than 5 employees (278 cases, 34.2%), 50 to 299 employees (130 cases, 16.0%), 300 or more employees (45 cases, 5.5%).

- ▶ Minister of Employment and Labor Lee Jung-sik stated: “The achievement of entering the 0.3‰ range, the lowest since the survey began, can be attributed to the widespread implementation of easy and simple risk assessments, proactive financial and technical support, and the efforts of the Safety Culture Promotion Task Force to internalize a culture of safety awareness. This, combined with heightened vigilance through measures such as the major accident siren, has brought about this significant improvement.”

Kickstart Safety and Health Management in Small Businesses with Industry-Specific Guides

• Practical and User-Friendly Content for 23 Industries, Developed in Collaboration with 31 Associations

- “We had requested key materials to prepare for the Serious Accidents Punishment Act from our member companies. The timing was perfect, as we were able to collaborate with the MOEL to create these industry-specific guides. Our members appreciate the practical reflection of on-site situations.” (Secretary-General of XYZ Association)
- “While it is challenging to cover all risk factors and preventive measures applicable to every production process, the guides focus on frequent accidents and provide easy-to-understand explanations, which have been very helpful.” (CEO of ABC Company)
- “The guides intuitively explain what needs to be done to establish a previously unfamiliar and abstract safety and health management system. Now that we understand what needs to be done, we will proceed with implementation.” (CEO of DEF Company)
- The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik) has received positive feedback from small businesses and industry associations regarding the newly produced and distributed “Industry-Specific Customized Safety and Health Guides.”
- In response to concerns and confusion arising from the upcoming expansion of the Serious Accidents Punishment Act to businesses with fewer than 50 employees in January 2024, the MOEL developed a total of 23 tailored safety and health guides. These guides, distributed from April 22 to May 20, aim to help small businesses establish effective safety and health management systems.

Kickstart Safety and Health Management in Small Businesses with Industry-Specific Guides

- › The guides were created through extensive discussions with representatives from 31 industry associations and six university professors beginning in March. They feature numerous accident case studies illustrated with diagrams, highlighting common hazards and preventive measures for each industry. Additionally, the guides include checklists detailing essential safety and health obligations.
- › The guides are available on the MOEL and Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) websites. Additionally, 300,000 copies have been distributed to industry associations for dissemination to small businesses.
- › The MOEL plans to conduct a series of briefings to assist small businesses in establishing and implementing these safety and health management systems. The first briefing took place on May 10, targeting 20 members of the Korea Surface Treatment Industry Cooperative. Future sessions will include regional briefings aimed at members of the Korea Accommodation Association and other relevant organizations, continuing through the end of the year.
- › Choi Tae-ho, Head of the MOEL's Industrial Accident Prevention and Inspection Policy Bureau, urged businesses to utilize these guides: "We have designed these 23 guides based on feedback from diverse industry sites to ensure they are easily understandable for small businesses. We hope businesses will take proactive steps, implementing the practices outlined in the guides one step at a time."

May Safety Initiative: Intensive Inspections for Shipbuilding and Large Manufacturing Businesses

• 10th On-Site Inspection Day Focuses on Shipbuilding, Chemical, Rubber, and Cement Manufacturing

- › May is a critical month for enhancing workplace safety, especially in sectors where accident rates have surged. The shipbuilding industry and manufacturing businesses with 50 or more employees are in urgent need of focused attention. This year, small and medium-sized shipyards have witnessed a series of fatal accidents, including explosions. Similarly, large-scale chemical, rubber, and cement manufacturing plants have experienced severe incidents such as entrapment and crushing.

* Notable accident cases include:

- › Shipbuilding: (April 27) An explosion in a ship's engine room during cleaning operations; (May 13) An explosion during pipe welding on a ship.
 - › Chemical and Rubber Products: (April 10) An employee was crushed between molds while inspecting an injection molding machine.
 - › Cement: (May 9) A worker was buried and killed when a pile of cement raw material collapsed.
- › 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) will embark on intensive safety inspections on May 22, focusing on high-risk industries such as shipbuilding and manufacturing with 50+ employees (chemical, rubber, and cement sectors). These inspections aim to address the three most common types of workplace accidents and mitigate eight critical risk factors.

May Safety Initiative: Intensive Inspections for Shipbuilding and Large Manufacturing Businesses

- ▶ The shipbuilding industry, in particular, frequently faces new hazards caused by changes in processes, especially during high-risk activities: welding, painting, and working at heights or in confined spaces. Therefore, these inspections are crucial. Similarly, in manufacturing businesses with 50 or more employees, accidents involving entrapment and crushing are prevalent. Inspections will prioritize hazardous machinery and equipment, as well as high-risk tasks.

* Key safety measures to be inspected include:

- ▶ **Machinery and Equipment:** Ensuring proper safeguards for conveyors, industrial robots, crushers, shredders, and injection molding machines.
 - ▶ **Work Processes:** Focusing on maintenance, cleaning, inspections, repairs, replacements, and adjustments to prevent accidents.
- ▶ Choi Tae-ho, Head of the MOEL's Industrial Accident Prevention and Inspection Policy Bureau, emphasized the importance of improving on-site safety measures and adhering to critical safety protocols. He stated: "In the shipbuilding industry and manufacturing sectors with 50 or more employees, where serious accidents have increased compared to last year, it is crucial to improve on-site safety conditions and strictly adhere to key safety rules."

Prepare for Heavy Rains This Year with the “Rainy Season Construction Site Safety Guide”

- **Regularly Check Weather Forecasts and Halt Work During Heavy Rainfall**

- **Extra Caution Needed for Summer Construction Site Accidents: Falls, Collapses, Electrocution, Poisoning, and Suffocation**

- › 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 released the “Rainy Season Construction Site Safety Guide,” which includes accident case studies, safety guidelines, and self-checklists for common summer construction site accidents. This guide is available on the MOEL website (www.moel.go.kr → Policy → Policy Data Room) and aims to enhance safety management at construction sites.
- › This year, rising sea surface temperatures are expected to result in increased moisture and a higher likelihood of heavy rainfall. Additionally, there has been a recent trend of intense downpours occurring over short periods, underscoring the need for thorough safety management. Construction sites near rivers, streams, or in low-lying areas, as well as manhole and drainage facility construction sites, are particularly vulnerable to flooding during heavy rains. These sites must regularly check weather forecasts on the Korea Meteorological Administration’s website (www.weather.go.kr) and the KMA Weather Alert app to prepare for emergency situations.
- › During the rainy season, there is an increased risk of falls from slipping on wet surfaces during steel frame construction. Therefore, work should be halted during rain. Additionally, rainwater can weaken the soil, making collapses more likely in excavation sites. It is crucial to inspect retaining walls and maintain drainage systems to prevent soil erosion.

Prepare for Heavy Rains This Year with the “Rainy Season Construction Site Safety Guide”

- › High humidity and sweat can increase the risk of electrocution, and confined spaces can pose threats of carbon monoxide poisoning from water pumps or toxic gas buildup during manhole and drainage facility construction. Extra caution is needed to prevent these types of accidents.
- › Choi Tae-ho, Head of the MOEL’s Industrial Accident Prevention and Inspection Policy Bureau, emphasized: “Construction site managers should use the Rainy Season Construction Site Safety Guide to identify and mitigate risks associated with heavy rains. It is essential to establish emergency plans for potential flooding and collapses and to monitor weather conditions regularly to halt work during heavy downpours.”

Appendix 1 Major Fatal Accident Cases at Construction Sites During the Rainy Season

■ Drowning: Submersion Due to Heavy Rain Causing Site Flooding

- **(Incident Overview)** While working inside an old water pipe for maintenance, sudden heavy rain caused the pipe to fill with water, trapping and drowning the worker.
- **(Weather Condition)** 43.3 mm of rain on the day of incident.
- **(Causes)**
 1. Failure to check weather forecasts during the rainy season
 2. Not stopping work or evacuating during sudden heavy rain

Key Safety Guidelines to Prevent Drowning Fatalities from Flooding During the Rainy Season:

- Regularly check weather forecasts and stop work if rain is expected.
- Ensure emergency contact systems are in place.

Prepare for Heavy Rains This Year with the “Rainy Season Construction Site Safety Guide”

■ Falls: During Assembly or Dismantling of Steel Structures in the Rain

- **(Incident Overview)** A worker fell and died after being struck by a falling steel structure during dismantling in the rain.
- **(Weather Condition)** Continuous rain with an accumulation of about 8 mm at the time of the incident.
- **(Causes)**
 1. Proceeding with dismantling work despite rain forecasts.
 2. Lack of fall prevention measures for dismantling steel structures.

Key Safety Guidelines to Prevent Fatal Falls During Steel Structure Work in the Rainy Season:

- Regularly check weather forecasts and adjust work schedules if rain is predicted.
- Stop work if rainfall exceeds 1 mm per hour.
- Install fall protection facilities such as fall protection nets and safety harness anchorage systems.
- Ensure workers always wear helmets and safety harnesses.

■ Collapse: Buried in Soil When the Excavation Face Collapsed During Pipeline Construction

- **(Incident Overview)** While working inside the excavation section of a pipeline construction site, the excavation face collapsed, burying and killing the worker under the soil.
- **(Causes)**
 1. Excavation done vertically to a depth of about 3 meters without installing retaining walls
 2. Increased load on the excavation face caused by using heavy construction machinery nearby

Key Safety Guidelines to Prevent Fatal Collapse Accidents During Excavation Work in the Rainy Season:

- Excavate the face at a gentle slope.
- If achieving a gentle slope is difficult, install retaining walls.
- Prohibit placing fill or materials that could increase the load near the top of the excavation face.
- Check for soil erosion or deformation of retaining walls after heavy rains.

Prepare for Heavy Rains This Year with the “Rainy Season Construction Site Safety Guide”

■ Electrocution: By Electric Wire During Electrical Work

- **(Incident Overview)** A worker was electrocuted and died while stripping the insulation from a 225V wire to replace a security light and switch.
- **(Weather Condition)** On the day of the incident, the temperature was 33.2°C with 57% humidity.
- **(Causes)**
 1. The power circuit not disconnected before removing the wire insulation
 2. The worker not wearing insulation protective gear while working on a live wire*

* Live Wire: A wire that has electricity flowing through it.

Key Safety Guidelines to Prevent Fatal Electrocution Accidents During Electrical Work in the Rainy Season:

- Be aware that human resistance to electric shock decreases in humid environments and with sweat.
- Disconnect the power circuit before working if there is a risk of electrocution.
- Provide and ensure the use of insulated protective gear for electrical workers.
- Prohibit the placement of extension cords on wet floors.

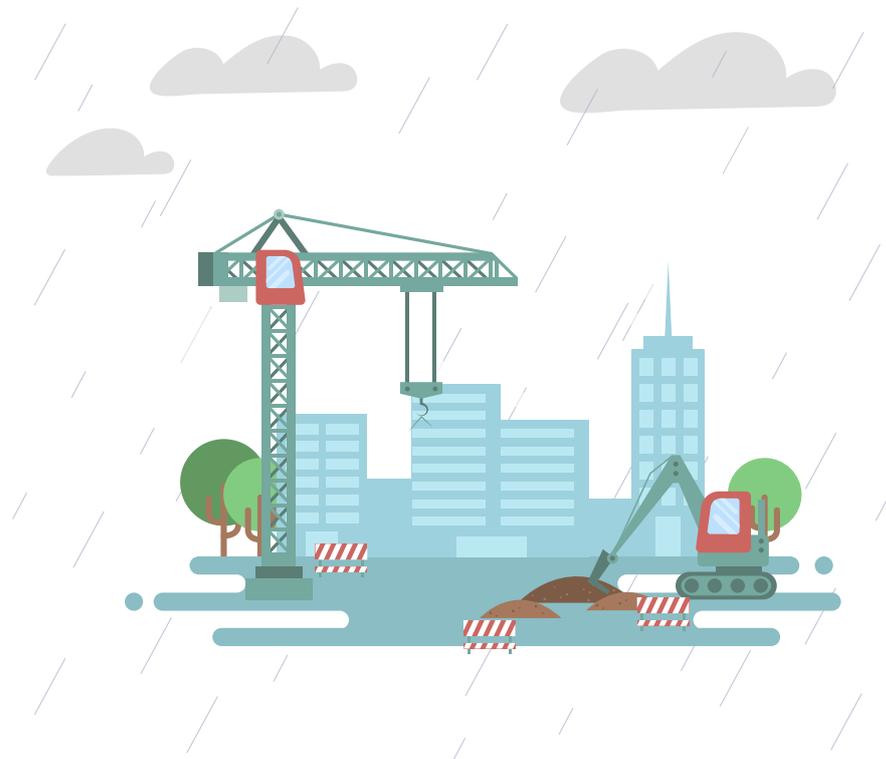
■ Poisoning and Suffocation: By Carbon Monoxide During Basement Pumping work

- **(Incident Overview)** While draining a flooded basement pipe room after heavy rain, the worker was poisoned by carbon monoxide from the water pump, lost consciousness, and drowned in the accumulated water.
- **(Causes)**
 1. Lack of awareness of the carbon monoxide hazards from the water pump
 2. Inadequate ventilation in the confined space despite working in such conditions

Prepare for Heavy Rains This Year with the “Rainy Season Construction Site Safety Guide”

Key Safety Guidelines to Prevent Fatal Carbon Monoxide Poisoning and Suffocation in Confined Spaces During the Rainy Season:

- Inform workers about the risks of carbon monoxide poisoning from water pumps when working in confined spaces such as basements and manholes.
- Ensure proper ventilation and adequate air supply in confined spaces.
- Station a safety monitor outside the confined space to oversee the operation and ensure safety.
- Measure oxygen and toxic gas levels before entering confined spaces and ensure the use of appropriate protective equipment.



Heatwave Protection: New Support for Vulnerable Workplaces with Cooling Equipment

• KOSHA Helps Supply Portable Air Conditioners and Shade Structures to Safeguard Workers from Extreme Heat

- Anticipating an early onset and increased frequency of heatwaves this year driven by the El Niño effect, the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju) has launched a new support program aimed at protecting workers from extreme heat. The Heatwave Emergency Prevention Equipment Support (Facility Improvements for Hazardous Risk Factors) initiative will help construction sites and other outdoor workplaces acquire vital cooling equipment.
- This program is designed to subsidize the purchase of essential cooling items. The goal is to ensure safer, healthier working conditions and to prevent heat-related illnesses and fatalities.
- What's included:
 - Portable air conditioners
 - Shade structures
 - Additional heatwave prevention items that workplaces can apply for independently
- Who Can Apply:
 - Employers must be enrolled in the Industrial Accident Compensation Insurance program and have no outstanding premium payments.
 - Employers must participate in the Comprehensive Occupational Safety Assessment.

Heatwave Protection: New Support for Vulnerable Workplaces with Cooling Equipment

- The program targets employers of businesses with fewer than 50 employees or those classified as small enterprises under the Framework Act on Small and Medium Enterprises.
 - For the construction industry, applications should be made through the construction industry headquarters.
 - Priority is given to construction industry headquarters vulnerable to heatwaves.
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- The program covers up to 70 percent of the cost of the equipment, with a maximum limit of KRW 30 million per applicant. More information can be found on the Clean Workplace Creation Support website (clean.kosha.or.kr).
 - Applications are open from May 7 to May 23, 2024. For further details, interested businesses can call 82-1544-3088 or contact their nearest KOSHA office.
 - KOSHA President Ahn Jong-ju noted: “Preventing heat-related illnesses relies on three key principles: water, shade (breeze), and rest. The Heatwave Emergency Prevention Equipment Support initiative aims to support these principles and play a significant role in creating safer and healthier workplaces.”

Boost Workplace Safety: Join the Hazard Sign Installation Certification Challenge!

• Spread Key Safety Messages and Hazard Signs – Participate in the Certification Event on CashWalk

- ▶ The Ministry of Employment and Labor (MOEL, Minister Lee Jung-sik), along with the Korea Occupational Safety and Health Agency (KOSHA, President Ahn Jong-ju), is launching an innovative certification event designed to enhance workplace safety. This event encourages the installation of “hazard signs” to promote proactive safety measures among workers.
- ▶ The hazard sign installation campaign, running throughout the year in partnership with 39 regional Safety Culture Implementation Teams (“Safety Teams”) across the country, aims to increase the presence of hazard signs in industrial sites and foster a robust safety culture.
- ▶ Starting June 3, the Hazard Sign Installation Certification Challenge will be accessible via the CashWalk mobile app. This challenge invites business owners, safety and health managers, and general workers from industrial sites to participate.
- ▶ Steps to Participate:
 1. Identify hazards and hazardous areas within your workplace.
 2. Take a photo of the area before installing the hazard sign.
 3. Install the hazard sign.
 4. Take a photo of the installed hazard sign and submit it for certification.

Boost Workplace Safety: Join the Hazard Sign Installation Certification Challenge!

- ▶ Participants can (1) use hazard signs and slogans provided by KOSHA, (2) download designs from the KOSHA website, or (3) utilize self-made or purchased signs. Successful participants will receive coffee coupons, available while supplies last.
- ▶ KOSHA President Ahn Jong-ju emphasized the necessity of collective effort: “Fostering a culture of safety requires the participation of everyone in the workplace. We hope that the hazard sign installation campaign will proliferate across industrial sites nationwide, ushering in a solid safety culture.”



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Published by

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