

# Safety and your rights on the factory floor

How not to get hurt, and how to get what you are owed

For everyone starting work at a manufacturing site in Busan, Ulsan or Gyeongnam

|                   |            |
|-------------------|------------|
| Name              | Company    |
| <hr/>             | <hr/>      |
| Department · Role | Start date |
| <hr/>             | <hr/>      |

Issued 2026-08-18 · about 30 pages · biz360.kr

This translation was produced by AI and has not been reviewed by a human. If you spot an error, please tell us at biz360.kr/contact — we will fix it in the next edition. For safety rules, follow the Korean original and on-site instructions.

# Contents

## Part 1 · Safety and your rights

— Basic Industrial Safety · Fire Prevention and Fire Safety · Electrical safety · Environmental management basics · Chemical Substance Safety Management · Workers' Rights and Labor Law

### About this book

This book carries all six safety and rights modules in full, with nothing cut. The content is the same as the Korean edition. Settling-in paperwork and job-specific training are in the other editions at [biz360.kr/guidebook](http://biz360.kr/guidebook).

Rules and deadlines are stated as of the issue date. For safety, on-site instructions and your workplace rules take precedence. This book is not legal advice.

# Safety and your rights

Not getting hurt comes first. Getting what you are owed comes next.

---

## Safety and your rights

From the rights the Occupational Safety and Health Act gives you, through protective equipment, fire, electricity, chemicals and the environment.

### Basic Industrial Safety

Safety is not a choice but a duty.

#### What you will learn

- Understand the basic contents of the Industrial Safety and Health Act
- Wear Personal Protective Equipment (PPE) correctly
- Learn how to deal with dangerous situations

### Overview of the Industrial Safety and Health Act

You will learn about workers' rights and obligations, the employer's safety care duties, the procedure for reporting industrial accidents, and the requirements for completing safety and health training.

### Why Should You Know the Industrial Safety and Health Act?

Everyone working in a manufacturing site is protected by the Industrial Safety and Health Act (ISHA). This law has been amended many times since its enactment in 1981, and has helped reduce accidents in Korean industrial sites. Even if you're new, there are four key points you must know within your first week of employment.

#### 1. Workers' Four Major Rights

- **Right to Know:** The right to know about chemicals used in the workplace, hazardous machinery, and accident statistics. The company must post MSDS (Material Safety Data Sheet) and results of workplace environment measurements.
- **Right to Participate:** The right to voice opinions through the Industrial Safety and Health Committee and labor-management consultation meetings. Companies with 50 or more employees must hold these meetings once per quarter.
- **Right to Refuse:** The right to refuse work when there is an immediate danger. You will not face any disadvantages for doing so (Article 52 of the ISHA).
- **Right to Health Checkups:** The right to receive general health checkups (once per year) and special health checkups (every 6 months to 1 year when exposed to noise, dust, or organic solvents) at the company's expense.

#### 2. Workers' Obligations

You are not only entitled to rights, but also have the following obligations:

- Complete safety and health training (8 hours upon hiring, 2 hours of monthly regular training)
- Wear personal protective equipment (PPE)
- Follow work procedures during hazardous tasks
- Immediately report accidents or near misses

### 3. Employer's Duty to Ensure Safety

A company is not only required to pay wages, but also has the **duty to provide a safe working environment** (Article 655 of the Civil Code + Article 5 of the ISHA). If this duty is violated and an accident occurs:

- **Industrial Accident Compensation Insurance** covers the worker's medical expenses and compensation for time off work
- The employer may face criminal penalties (after the implementation of the Major Industrial Accident Penalty Act, imprisonment of more than one year for fatal accidents)
- Safety management costs must be separately allocated (1.5 to 2.5% of the construction cost)

### 4. Reporting Procedure in Case of Industrial Accident

[Accident Occurs]

↓

Immediately call 119 and notify the internal safety manager

↓

If work stoppage lasts 3 days or more → the company must submit the Industrial Accident Investigation Report to the Ministry of Employment and Labor within one month

↓

In case of death or major accident → mandatory report to the local labor office within 24 hours

↓

Submit an industrial accident claim to the Korea Workers' Compensation & Welfare Service (directly by the worker)

#### Definition of Major Industrial Accident (Article 3 of the ISHA Enforcement Decree):

- 1 or more fatalities
- 2 or more workers with injuries requiring care for 3 months or more
- 10 or more workers with occupational diseases at the same time

### 5. New Employee First Week Checklist

- ☐ Complete 8 hours of safety and health training upon hiring (keep the certificate)
- ☐ Confirm the location of emergency exits, fire extinguishers, and AEDs in the workplace
- ☐ Note down the name and contact information of the responsible safety manager
- ☐ Measure and receive the appropriate size of PPE
- ☐ Locate the internal industrial accident reporting form

Sources: Occupational Safety and Health Act (National Law Information Center) (<https://law.go.kr/법령/산업안전보건법>) · Korea Occupational Safety and Health Authority (KOSHA) (<https://www.kosha.or.kr>) · Occupational Safety and Health Authority Workers' Compensation Insurance (<https://www.comwel.or.kr>)

### Types and Wearing Methods of Personal Protective Equipment (PPE)

Learn the correct way to wear and inspect safety helmets, safety shoes, safety goggles, earplugs, dust masks, and safety gloves.

#### PPE is the Last Line of Defense

Making the work environment itself safe is the best option (engineering controls), but any remaining risks are blocked by **Personal Protective Equipment (PPE)**. Protective equipment is not about "having it" but about "wearing it correctly."

## 6 Essential PPE Items

### 1. Hard Hat (Safety Helmet)

- **When:** All work areas where there is a risk of objects falling on the head (shipyards, construction sites, warehouses, factory receiving areas)

- **Wearing Check:**

- Brim facing forward (do not wear it backward) - Chin strap adjustment — should allow two fingers to fit - Adjust the hammock straps inside the helmet

- **Lifespan:** **3 years** from the date of manufacture (discard immediately after impact, also discard if there is cracking, discoloration, or deformation)

### 2. Safety Shoes

- **Types:**

- **S1:** General work (anti-static, slip-resistant) - **S3:** Toe protection + ankle protection - **S5:** Insulation (electrical work)

- **Inspection:** Check for deformation of the toe cap (steel cap), sole wear, and loose laces

### 3. Safety Glasses / Face Shield

- **Usage:**

- Safety Glasses: Protection from flying debris and dust (machining, grinding) - Face Shield: Protection from strong impact, chemicals, and heat (welding, grinding, chemical processes)

- **Note:** Regular glasses are not PPE! Wear over-glasses on top of the glasses or purchase prescription safety glasses separately

### 4. Hearing Protection (Earpieces / Earmuffs)

- **Wearing Criteria:** Work areas with noise **85dB or higher** (hearing loss from long-term exposure)

- **Selection:**

- Earpieces (foam, silicone): Light and inexpensive, NRR 25~33dB - Earmuffs (headphone type): Easy to remove, NRR 22~30dB -

**High noise (110dB+):** Wear **both earpieces and earmuffs** together

### 5. Respiratory Protection (Dust Mask / Gas Mask)

| Type                       | Purpose                        | Rating                                   |
|----------------------------|--------------------------------|------------------------------------------|
| Dust 1st Class (KF80)      | General dust                   | 80% filtration                           |
| Dust 2nd Class (KF94)      | Fine dust, welding fumes       | 94% filtration                           |
| Dust Special Class (KF99)  | Asbestos, heavy metals         | 99% filtration                           |
| Gas Mask (Filter Canister) | Organic solvents, acidic gases | Filter canister color varies by gas type |

**Important:** If you have a beard, the mask will not fit tightly → shave before wearing

### 6. Safety Gloves

- **Material-Specific Use:**

- Cotton gloves: Light work, **absolutely not allowed on rotating machinery** (risk of fingers getting pulled in) - Leather gloves:

Welding, heat, sharp materials - Nitrile/Latex: Chemicals, liquids - Insulating gloves: Electrical work (rated for 1000V~36000V)

## Wearing Order ABC

A – Apparel (work clothes) first  
B – Boots (safety shoes) next  
C – Crown (hard hat) last  
+ Additional PPE depending on the task

## Daily Inspection Checklist (1 minute before starting work)

- ☐ Hard Hat: No cracks, discoloration, or deformation
- ☐ Safety Shoes: Check for loose laces and sole wear
- ☐ PPE: Check expiration date and cleanliness
- ☐ Fit: Not too big or too small

## Common Mistakes

✗ Remove the hard hat because it's hot and work — one head impact can cause a fatal accident ✗ Loosen the laces on the safety shoes for convenience — sole can come off, foot can be injured ✗ Use a disposable mask for a month — filtration performance drops to 90% after one week ✗ Use cotton gloves on rotating machinery — fingers can be sucked in (actual cause of serious injury and death)

Sources: KOSHA Safety and Health Information Center — PPE Guide (<https://www.kosha.or.kr/kosha/data/safetyAndHealthGuide.do>) · Industrial safety helmet KS certification (Korean Industrial Standard) (<https://standard.go.kr>)

## Risk Awareness Training (KYT)

You practice the 4-round KYT (Kiken Yochi Training) technique, which involves identifying potential hazards before work begins and developing countermeasures.

### What is KYT?

KYT(危険予知トレーニング, Kiken Yochi Training) = "**Risk Awareness Training**". A Japanese accident prevention technique that involves team members identifying risks and deciding on countermeasures 5 to 10 minutes before starting work.

In Korea, many companies implement it as **TBM-KY** (Tool Box Meeting + KY) during daily work meetings in the morning.

## KYT 4 Rounds (Most Standard Format)

### 1st Round: Fact Identification — "What is the situation?"

Look at photos or blueprints of the work and **list only objective facts**. No guesses or evaluations.

#### Example (Welding work site photo in a shipyard):

- Worker is welding inside a narrow curved block
- Oxygen concentration meter is located near the entrance
- Welding mask is not worn, and the chin strap is facing backward
- Two hoses are lying on the floor
- Hot work permit is not posted

### 2nd Round: Root Cause Analysis — "What are the risk factors?"

Extract **potential risks** from the facts in Round 1. Use the form of "There is a possibility of ~".

- Oxygen deficiency → Asphyxiation accident
- No welding mask → Corneal burn from intense light

- Hose → Tripping over the hose
- No hot work permit → Procedure violation + Fire risk

### 3rd Round: Countermeasure Planning — "How can we prevent it?"

Decide on **specific countermeasures** for each risk. Only actionable ones.

| Risk               | Countermeasure                                                                                              | Responsible       |
|--------------------|-------------------------------------------------------------------------------------------------------------|-------------------|
| Oxygen deficiency  | Confirm oxygen concentration is above 19.5% before starting work, install a ventilation fan at the entrance | Worker themselves |
| Light burn         | Immediately wear welding mask, use a shade #10 or higher                                                    | Worker themselves |
| Tripping over hose | Organize and secure the hose, ensure clear passage                                                          | Team leader       |
| No hot work permit | Issue and post the hot work permit before starting work                                                     | Safety manager    |

### 4th Round: Goal Setting — "What is our action goal today?"

The team creates a **one-line slogan that everyone shouts together**. Keep it short and specific.

> **"Measure oxygen before entering a narrow space — one, two, three!"** ← All team members shout loudly

### Why do we shout the slogan?

According to brain science, **the recall rate of information spoken aloud is 35% higher than reading silently** (Hopper, 1976).

When facing a risky situation during work, the slogan will come to mind.

### TBM-KY Implementation Process (Every morning, 5 minutes)

```

08:55 Start of work meeting
↓
Team leader shares today's work content (1 minute)
↓
KYT 4 Rounds (3 minutes)
↓
Assign roles + slogan chanting (1 minute)
↓
09:00 Start of work

```

### How Newcomers Can Do KYT Well

1. **Doubt places you often see visually** — Familiarity can make you overlook risks
2. **Ask "Is this risky?" first** — Questions save lives more than silence
3. **Listen to experienced workers' stories** — Past accident or near-miss cases
4. **Create a checklist** — Write down 5 risks in your work area and check them daily

### Top 3 Key Risks in KYT by Industry in Gyeonggi, Chungcheong, and Jeolla

- **Shipbuilding/Offshore:** Oxygen deficiency in confined spaces / Falling / Hot work explosion
- **Automotive Parts:** Entanglement in rotating machinery / Not using both hands on press / Foot injury during transportation
- **Construction/Civil Engineering:** Falling / Falling objects / Electric shock
- **Chemical/Materials:** Chemical leakage / Static electricity explosion / Not wearing respiratory protection

Detailed KYT modules for each industry are available in the respective category.

## Basic First Aid

Learn the initial response procedures for burns, scalds, electric shocks, and crush injuries, and how to use an AED.

### The Golden 4 Minutes of First Aid

There is a saying that **the first 4 minutes decide life or death** in cases of cardiac arrest or severe bleeding. How a colleague responds before the 119 ambulance arrives can change the outcome. Even new employees must know these four types of accidents.

## 1. Burn

### Classification

| Degree | Depth               | Symptoms                          | First Aid                                                                  |
|--------|---------------------|-----------------------------------|----------------------------------------------------------------------------|
| 1st    | Epidermis           | Redness and pain                  | Cold water for 15–20 minutes                                               |
| 2nd    | Dermis              | Blisters and severe pain          | Do not pop blisters, cover with a towel and go to the hospital immediately |
| 3rd    | Subcutaneous tissue | Loss of sensation, blackened skin | Do not remove clothing, call 119                                           |

### Immediate First Aid

1. **Cold running water** for 15–20 minutes (do not use ice directly — risk of frostbite)
2. Remove watches, rings, and metal items (before swelling)
3. If clothing is stuck to the skin, **do not remove it** — go to the hospital as is
4. For chemical burns (acid or alkali), **rinse with a large amount of water for over 20 minutes**

## 2. Cut (Laceration)

### Based on the Amount of Bleeding

- **Minor bleeding (oozing)**: Apply clean cloth for 5 minutes, disinfect, and apply a bandage
- **Moderate bleeding (dripping)**: Apply pressure + elevate the wound above the heart, call 119 if bleeding doesn't stop after 10 minutes
- **Severe bleeding (flowing like a fountain)**: Possible arterial damage. **Apply direct pressure + call 119**, tourniquet is the last resort

### Amputation Accidents (Fingers/Toes)

1. Apply pressure to the bleeding area
2. Place the amputated part on a clean cloth → plastic bag → **float in cold water** (do not touch ice directly)
3. Suturing is possible within 6 hours (time is life)

## 3. Electric Shock

### Absolute Principle: Turn off the power first

⚠ Do not touch the **electrically shocked person with bare hands** — you may also get shocked. Follow this order:

1. **Turn off the circuit breaker or plug first**
2. If not possible, use a **dry wooden stick or plastic** to separate the patient from the power source
3. Check the patient's consciousness and breathing
4. If no breathing, perform **CPR (Cardiopulmonary Resuscitation)** + call 119

## CPR 30:2

30 chest compressions (100–120 per minute, depth 5–6 cm)

↓

2 breaths

↓

Repeat (until the ambulance arrives)

## 4. Crush / Pinch Accidents

When hands or clothing get caught in rotating machinery or presses:

1. **Immediately stop the machine (Emergency Stop)** — all machines have a red emergency stop button
2. Do not **forcibly pull the trapped part** — risk of greater injury
3. If possible, remove it by reversing the machine (call the team leader or maintenance staff)
4. Until 119 and medical staff arrive, **maintain body temperature** and keep the patient conscious

## AED (Automated External Defibrillator) Usage

AEDs are installed in most industrial complexes and public facilities in the Gyeonggi and Busan areas. Anyone can use them, and there is legal immunity.

### 4 Steps

1. **Turn on the AED** — audio instructions begin
2. **Attach the pads** — below the right clavicle + beside the left rib (as shown in the diagram)
3. **Wait for analysis** — instruction: "Step away from the patient." Everyone must stay away from the patient
4. **Shock button** — press the red button when prompted. Immediately restart CPR after the shock

⚠ **Do not attach pads to wet skin, metal, or medication patches** — risk of burns or electrical dispersion

## What to Do After First Aid

- Note the **time and situation of the accident** (needed for hospital diagnosis and workers' compensation application)
- Immediately report to the **safety manager**
- Take **photos of the workplace** (for site preservation)
- Workers' compensation application guide (refer to Module 1: Overview of the Industrial Safety and Health Act)

## What to Prepare in Advance Within the Company

- ☐ Post the **emergency contact list** (safety manager, 119, nearby emergency room) in the workplace
- ☐ Check the **location and contents** of the first aid kit (monthly)
- ☐ Ensure all employees know the **location of AEDs**
- ☐ Complete **in-house first aid training** (free KOSHA training available)

Sources: Korea Cardiopulmonary Resuscitation Association — CPR Guide (<https://www.kacpr.org>) · Emergency Medical Portal (E-gen) (<https://www.e-gen.or.kr>) · KOSHA First Aid Training (<https://www.kosha.or.kr>)

### Try this on site

- Personal Protective Equipment (PPE) Wear Self-Checklist
- KYT 4-Round Mock Training
- AED Usage Simulation

## Fire Prevention and Fire Safety

The initial phase reduces damage by 90%

### What you will learn

- You can choose fire extinguishers based on the type of fire.
- Know the evacuation routes

## Fire classes

Learn about the classification of A-class (general), B-class (flammable liquids), C-class (electrical), D-class (metal), and K-class (kitchen) fires and the appropriate fire extinguishers for each.

## Not All Fires Are the Same

Fires are categorized based on the **burning material**. Using the wrong extinguisher without knowing the category could not only fail to put out the fire but also **make it larger or cause electric shock**. That is why extinguishers have mandatory fire category labels such as "A-B-C" on their bodies.

## 5 Fire Categories

| Grade   | Name                  | Burning Material            | On-site Examples                      | Extinguisher Indicator Color |
|---------|-----------------------|-----------------------------|---------------------------------------|------------------------------|
| A-grade | General Fire          | Wood, paper, fiber, plastic | Packing boxes, pallets, work clothes  | White                        |
| B-grade | Flammable Liquid Fire | Oil, paint, thinner, LPG    | Cutting oil, cleaning oil, paint      | Yellow                       |
| C-grade | Electrical Fire       | Equipment with electricity  | Distribution panel, motor, cable      | Blue                         |
| D-grade | Metal Fire            | Magnesium, aluminum powder  | Machining chips (chip), grinding dust | Colorless                    |
| K-grade | Kitchen Fire          | Edible oil                  | Cafeteria deep fryer                  | —                            |

## Why Fire Suppression Methods Differ by Grade

- **A-grade** fires respond best to water. Water lowers the temperature enough to extinguish the fire source.
- **Never spray water on B-grade fires.** Oil floats on water, causing the fire to spread in all directions. Use foam or powder to **cover** and block oxygen.
- **Spraying water on C-grade fires causes electric shock.** Use non-conductive CO<sub>2</sub> or powder, and **turn off the circuit breaker** if possible.
- **Water on D-grade fires causes explosions.** Metal powder reacts with water to produce hydrogen. Use specialized metal fire extinguishing agents (D-grade powder) or dry sand.
- **K-grade** fires involve edible oil at temperatures above the flash point, so even if temporarily extinguished, they **reignite**. Use a specialized K-grade extinguisher to create a barrier on the oil surface.

## Most Common Extinguishers on Site

**ABC dry chemical extinguisher** is the standard. It can be used for A, B, and C grades, so it is placed throughout the factory. However, remember that **it cannot be used for D or K grades**.

Machining areas where chips accumulate and cafeterias with deep fryers **must have separate extinguishers**.

## Check These Items During Your First Week at Work

- ☐ Location of the nearest extinguisher in your work area (usually within 20m)
- ☐ Fire category label on that extinguisher (A, B, or C)
- ☐ Fire category that could occur in your process (e.g., B-grade if using cutting oil, C-grade if near a distribution panel)

☐ Whether the extinguisher pressure gauge needle is within the **green range** (report immediately if red)

Sources: Fire Department — National Disaster Safety Portal Fire Extinguisher Usage (<https://www.safekorea.go.kr>) · Korea Fire Safety Institute — Fire Safety Education (<https://www.kfsi.or.kr>) · KOSHA — Fire and Explosion Prevention Materials (<https://www.kosha.or.kr>)

## How to use a fire extinguisher

Practice the three-step method for using powder, CO<sub>2</sub>, and foam fire extinguishers: pin → nozzle → discharge.

### Fire extinguishers are only useful if you know how to use them

No matter how many fire extinguishers are in the factory, if your hands freeze up when a fire breaks out, they are useless. In real fires, the time to extinguish with a fire extinguisher is **within the first 2 minutes**. Memorize the steps so your body remembers them.

### Basic 4 Steps — "Safety Pin · Nozzle · Handle · Sweep"

1. **Remove the safety pin** — Do not pull it while holding the handle. **Remove the pin by holding only the pin**, keeping your hand away from the handle.
2. **Aim the nozzle (hose) toward the fire** — Grip the end of the nozzle. If you only lift the body and spray, it will go to the wrong place.
3. **Grip the handle firmly** — If you grip it gently, the agent will not come out.
4. **Sweep left and right like mopping** — **Target the base of the fire (fuel surface), not the flames**. Shooting at the flames will just make the agent fly away.

### Precautions by Type

| Type                                   | Features                                                          | Precautions                                                                                                      |
|----------------------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Dry Powder (ABC)</b>                | Most common, spray time 10~15 seconds                             | Vision becomes obscured by white — <b>stand with your back to the escape route</b> before spraying               |
| <b>CO<sub>2</sub> (Carbon Dioxide)</b> | No residue, suitable for electrical rooms and precision equipment | Nozzle is <b>-78°C</b> — <b>frostbite</b> if held with bare hands. <b>Risk of suffocation</b> in enclosed spaces |
| <b>Foam</b>                            | Strong against oil fires                                          | <b>Risk of electric shock</b> if used on electrical fires                                                        |

### 3 Must-Follow Rules

- **Stand with your back to it**. Always face the fire with your back to the entrance/escape route. If you face the fire, your escape route will be blocked.
- **Face the wind**. If outdoors, face the wind so the agent and heat do not reach you.
- **If it does not go out within 2 minutes, give up and evacuate**. The spray time of one fire extinguisher is about 15 seconds. If the flames **rise above your height**, you are already out of the fire extinguisher's range.

### Shout "Fire!" First

Many people try to put it out alone and end up being too late. The order is ① **Announce loudly** → ② **Call 119** → ③ **Initial suppression**. If there are people around, divide the roles.

> You must **specifically assign someone** like "Person OO, please call 119!" for actual action.

### Practical Checklist

- ☐ Checked removing the safety pin without holding the handle
- ☐ Grasped the nozzle end and aimed
- ☐ Swept left and right at the base of the fire

- ☐ Stood with back to the escape route

Sources: Fire Department — Fire Extinguisher Usage Guide (<https://www.nfa.go.kr>) · Korea Fire Safety and Technology Research Institute — Practical Training on Fire Facilities (<https://www.kfsi.or.kr>) · KOSHA — Workplace Initial Response Manual (<https://www.kosha.or.kr>)

## Evacuation drills

Confirm the location of emergency exits, evacuation routes, assembly points, and fire emergency contact network.

## Smoke Spreads Faster Than Fire

Most fire-related deaths are not caused by burns but by **smoke inhalation**. Smoke spreads at a speed of **vertically 3–5 m, horizontally 0.5–1 m** per second. It moves up stairwells faster than a person can run.

That is why evacuation must begin **immediately upon hearing the alarm**, not **after seeing the fire**.

## 4 Principles of Evacuation

1. **Crawl low** — Smoke rises, so fresh air remains near the floor. Crawl on your knees to move.
2. **Cover your mouth and nose with a wet cloth** — If none is available, use a sleeve from your clothing. This filters out some toxic gases.
3. **Hold onto a wall and move in one direction** — Smoke obscures visibility. By keeping your hand on a wall, you will reach the exit.
4. **Never use elevators** — Power outages can trap you, and elevator shafts become smoke chimneys. **Use the stairs only.**

## Once You Leave, Do Not Return

The most dangerous moment is when you go back to retrieve something you left behind. Anything you left behind must be abandoned.

## Confirm Personnel at the Assembly Point

The final step of evacuation is to confirm "**Has everyone evacuated?**" Gather at the assembly point, count personnel by team/section, and if someone is missing, **do not go looking yourself**. Instead, inform the fire department of their location.

## Four Things to Confirm on Your First Day

- ☐ **Two nearest emergency exits from your workstation** (There may be one blocked, so confirm two locations)
- ☐ **Location of the assembly point** (Usually the parking lot or open space in front of the main gate)
- ☐ **What the alarm sound is like** (Siren or broadcast)
- ☐ **Emergency contact information** — Contact details of the safety manager and fire safety officer

## Common Mistakes

| Mistake                                        | Why It's Dangerous                                                                                              |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Stacking materials in front of emergency exits | The door may not open when needed — <b>Fire Safety Act violation, subject to fines</b>                          |
| Leaving fire doors open                        | Fire doors must remain closed to block smoke. Securing them with a hold-open device renders them useless        |
| Assuming an alarm is a false alarm             | Delaying action by thinking "It's probably another false alarm" is dangerous. Leave immediately and check later |

> Fire drills are mandatory at least once a year (Fire Safety Act). Do not just go through the motions — **walk your actual route during the drill**.

#### Try this on site

- Fire Extinguisher Usage Practice
- Check Emergency Evacuation Route

## Electrical safety

Electrocution is a moment, the aftermath is a lifetime.

#### What you will learn

- Know the causes and prevention methods of electric shock accidents
- Familiarize yourself with the electrical work safety rules.

## The danger of electric shock

Learn about the risk levels based on the path of electric current through the human body and the amount of current (fatal above 30mA), and the role of grounding.

### 220V Can Kill Humans

The misunderstanding that "only high voltage is dangerous" is the most dangerous. A significant number of electrocution deaths occur from **common household 220V**. What's important is not the voltage, but **the size of the current flowing through the body and the duration**.

#### Human Body Effects by Current Amount

| Current      | What Happens to the Body                                               |
|--------------|------------------------------------------------------------------------|
| 1mA          | Tingling sensation (perception current)                                |
| 5mA          | Pain, surprise causing hand to be released                             |
| 10~20mA      | Muscle stiffness — <b>Unable to release hand (inability to let go)</b> |
| 30mA         | Difficulty breathing, dangerous                                        |
| 50mA or more | <b>Ventricular fibrillation → Death</b>                                |
| 100mA        | Lethal within seconds                                                  |

**If current exceeds 10mA, you cannot release your hand by yourself.** This is why an electrocuted person tightly grips the wire.

#### Risk Seen Through Ohm's Law

Current(I) = Voltage(V) ÷ Resistance(R)

Dry hand resistance Approximately 5,000Ω → 220V ÷ 5,000 = 44mA (Dangerous) Wet hand resistance Approximately 1,000Ω → 220V ÷ 1,000 = 220mA (Lethal)

> **Sweat or moisture reduces resistance to 1/5, increasing risk 5 times.** This is why electrocution accidents are more common in summer.

#### The Path of Current Determines Life or Death

- **Hand → Opposite hand, Hand → Foot:** Current **passes through the heart**. Most lethal.
- **Hand → Same side foot:** Current bypasses the heart, relatively less dangerous.

That's why during electrical work, the habit of **putting one hand in your pocket (one-hand rule)** exists. Using both hands creates a path that goes through the heart.

## Why Grounding Is Important

If insulation on a wire inside equipment is damaged and it touches a metal casing (leakage), the moment a person touches it, **the human body becomes the path for current**.

A grounding wire creates a path for current to flow into **the ground, which has much lower resistance than the human body**. That's why equipment with a broken or disconnected grounding wire is the most dangerous.

## Residual Current Device (ELB/RCD)

This is a device that works with grounding. If incoming and outgoing current differ (= current is leaking somewhere), it **cuts off power within 0.03 seconds**. The reason the rated sensitivity current is **30mA** is directly tied to the danger criteria in the table above.

- **Press the test button (TEST) monthly** to confirm normal operation.
- **Never fix or bypass the circuit breaker if it keeps tripping**. This is a signal that there's a leakage.

## 5 Rules to Follow on Site

- ☐ Do not touch electrical equipment with wet hands
- ☐ Do not use octopus wiring or cables with damaged insulation
- ☐ For portable electric tools, use **grounded plug (3-pin)**
- ☐ Check RCD test button **monthly**
- ☐ If you find an electrocution victim, **never touch them with bare hands**, first **cut off the power** or remove them with a dry wooden or plastic object

Sources: KOSHA — Prevention of Electric Shock Accidents (<https://www.kosha.or.kr>) · Korea Electric Safety Corporation — Electric Safety Information (<https://www.kesco.or.kr>) · National Legislative Information Center — Rules on Occupational Safety and Health Standards (Electrical Work) (<https://www.law.go.kr>)

## Safe electrical work

Learn the principle of confirming the circuit breaker is OFF (LOTO), using a voltage tester, wearing insulating gloves and insulating shoes, and prohibiting live-line work.

### "It must be off" creates accidents

A typical pattern of electrical accidents is like this. A turns off the circuit breaker and goes to work, but B says, "Why is it off?" and turns it back on. **Confirm power-off with your own eyes and hands**.

## 5-Step Power-Off Work Procedure

1. **Confirm the circuit before work** — Check if the diagram matches the actual circuit breaker panel label. Labels are often incorrect.
2. **Turn off the circuit breaker + lockout** — Attach your personal lock and tag (LOTO).
3. **Voltage testing** — **Directly confirm no voltage with a voltage tester**. This step is skipped most often in accidents.
4. **Discharge residual charge** — Capacitors and inverters retain electricity even after power is off. Ground them with a discharge rod.
5. **Short-circuit grounding** — For high-voltage work, ground to prevent unexpected power surges.

## Voltage Tester Usage Rules — "3-Step Confirmation"

If the voltage tester itself is faulty, it may give a false "no power" signal. Therefore, always:

1. **Confirm the voltage tester is working** by testing it on a live circuit
2. **Test the circuit to be worked on** → confirm no response
3. Again **confirm the voltage tester is still working** by testing it on a live circuit

## Protective Equipment

| Protective Equipment        | Standards                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------|
| Insulating gloves           | Distinguish low-voltage/high-voltage use, <b>check for pinholes with air test before use</b> |
| Insulating shoes            | Check for sole damage and moisture                                                           |
| Insulating suit/face shield | Wear in arc flash risk areas                                                                 |
| Insulating tools            | Immediately discard if handle insulation is damaged                                          |

Insulating gloves must undergo **regular insulation testing every 6 months**.

## Live-line work is strictly prohibited

The **Rules on Industrial Safety and Health Standards** mandate **power-off work as a principle**. If live-line work is unavoidable:

- Issue a **work permit** in advance
- **Assign a supervisor** (2-person team, solo work prohibited)
- Install insulating protective gear
- Observe safe approach distances for live-line work

> New employees **must never be assigned live-line work**. If instructed to do so, refuse and inform the safety manager. This is your **right to refuse work** guaranteed by the Labor Safety and Health Act.

## Arc Flash — More Dangerous Than Electric Shock

If a short occurs in a distribution panel, an **arc flash of thousands of degrees** occurs instantly. It injures not by electric shock but by **burns and explosive pressure**.

- When operating a distribution panel, **do not stand in front, operate from the side**
- **Prohibit nylon/polyester workwear** — melts and sticks to skin. **Wear cotton or flame-resistant clothing**

## Work Completion Procedure

Do not immediately restore power after work is done.

1. Retrieve tools/materials, confirm all workers are clear of power area
2. Remove short-circuit grounding
3. **Only the person who locked it must unlock the lockout device** (others must not unlock it)
4. Notify all concerned parties of power restoration
5. Confirm if anything is abnormal after power restoration

Sources: Korea Occupational Safety and Health Authority — Technical Guidelines for Electrical Work Safety and Health (<https://www.kosha.or.kr>)  
· Korea Electric Safety Corporation — Electric Equipment Safety Inspection (<https://www.kesco.or.kr>) · Ministry of Employment and Labor — Rules on Industrial Safety and Health Standards (<https://www.moel.go.kr>)

#### Try this on site

- LOTO Procedure Simulation
- Grounding Resistance Measurement Practical Training

## Environmental management basics

Wastewater, Waste, and Air Management

#### What you will learn

- Understand the basic environmental regulations
- You can sort and dispose of waste.

## Overview of environmental regulations

Learn the basics of environmental impact assessments, emission standards, specific harmful water quality substances, and regulations on air pollutants.

### Environmental violations do not accept "I didn't know"

Violating environmental laws does not end with fines. It can lead to **suspension of operations, revocation of permits, and criminal penalties**. Particularly, **employees who actually handle discharges** can also be penalized, not just the employer.

## 3 Major Media in Manufacturing

### Air

- **Installation and reporting/permitting of air pollution control facilities** required (e.g., paint booths, dryers, boilers, dust collectors)
- Main targets: dust, nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs)
- **Mandatory self-measurement** — semi-annual to monthly, depending on facility type

### Water

- Reporting/permitting of wastewater discharge facilities
- **Specific harmful water pollutants** (e.g., copper, lead, chromium, cadmium, cyanide) are heavily regulated. This applies to electroplating and surface treatment industries.
- If discharged water exceeds quality standards → improvement order → suspension of operations

### Waste

- Reporting of business site waste dischargers
- **Allbaro electronic transfer document** mandatory

### "Discharge Allowance Standards" Vary by Region

Even for the same pollutant, standards differ based on **Clean Zone / General Zone / Non-Zone / Special Zone**. Most industrial complexes in Busan, Ulsan, and Gyeongsangnam-do are in Non-Zones, but areas near water sources are much stricter.

> **Confirm with the environmental officer** exactly which regional standard applies to our factory.

## Common Mistakes for New Employees

| Action                                           | Why It's a Problem                                                                            |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Discharging washing water into stormwater drains | <b>Illegal discharge.</b> Stormwater drains are directly connected to rivers                  |
| Not replacing paint booth filters                | Exceeding discharge standards + fire risk                                                     |
| Turning off dust collector power during work     | <b>Non-operation of pollution prevention facilities</b> — reason for suspension of operations |
| Disposing used oil into general trash            | Illegal disposal of designated waste                                                          |

Learn to **distinguish between stormwater and wastewater drains**. Their covers and markings differ.

## Environmental Impact Assessment

Businesses of certain scale (e.g., industrial park development, large-scale factory construction/expansion) must obtain an **environmental impact assessment** before starting construction. Smaller-scale businesses are subject to **small-scale environmental impact assessment**.

## Integrated Environmental Permit

This system consolidates multiple permits (air, water, waste, etc.) into one. **Industries with large annual air/water pollutant discharges** (e.g., power generation, refining, chemicals, non-ferrous metals, 19 industries) are targets, and it is reviewed every 5 years.

## First Week Check List

- ☐ What air and water discharge facilities are at our factory
- ☐ Location and operational status of pollution prevention facilities (dust collectors, scrubbers, wastewater treatment plants)
- ☐ Stormwater / Wastewater drain identification markings
- ☐ Who is the environmental officer (environmental technician)

Sources: Ministry of Environment — Environmental Policies and Laws and Regulations (<https://www.me.go.kr>) · Korea Environment Corporation — Workplace Environmental Management (<https://www.keco.or.kr>) · National Legislative Information Center — Air Environment Conservation Act / Water Environment Conservation Act (<https://www.law.go.kr>)

## Waste management

Learn to distinguish between general waste and designated waste, separate disposal, and the waste transfer document (Waste Management Act).

## If You Dispose Improperly, the Disposer Bears Full Responsibility

Disposing of waste does not end just because you handed it over to a disposal company. According to the **Disposer Liability Principle**, if the entrusted company illegally dumps waste, **the company that disposed of it will also be penalized**. That is why verifying the permit of the entrusted company is important.

## Workplace Waste Classification

Workplace Waste | — General Workplace Waste | | — Waste from Pollution Control Facilities (from air/water pollution control facilities) | | — Other Workplace Waste (office trash, packaging materials, etc.) | — Designated Waste ← Requires special management due to its hazardous nature

## Representative Designated Waste Generated in Manufacturing

| Item                                     | Where It Comes From                                            |
|------------------------------------------|----------------------------------------------------------------|
| Used Oil                                 | Replacement of cutting oil, hydraulic oil, and lubricating oil |
| Used Acids/Used Alkalis                  | Cleaning, etching, and plating processes (pH ≤ 2 or ≥ 12.5)    |
| Used Organic Solvents                    | Thinner, cleaning solvents                                     |
| Used Paint/Used Lacquer                  | Painting process, paint booth sludge                           |
| Used Absorbents/Used Absorbent Materials | Oil-stained rags, absorbent pads, filters                      |
| Dust                                     | Dust collected by dust collectors                              |
| Used Fluorescent Lamps/Used Batteries    | Light replacement, forklift batteries                          |

> **Oil-stained gloves and rags are also designated waste (used absorbents).** Throwing them in regular trash bins is a violation. Many people are unaware of this.

## Storage Standards

- **Designated waste can be stored for a maximum of 45 days** (general waste: 90 days)
- **Mandatory signage** — type of waste, allowable storage volume, manager in charge, storage period
- Floor must be **non-permeable material**, roof and walls must block rain and wind
- **Used oil and used acids must be stored within curbing (oil containment berms)**
- **Separate wastes that react with each other** (used acids + used alkalis, used oil + oxidizers)

## Allbaro Electronic Transfer System

When transferring waste, **electronic records are used instead of paper** for transfer and receipt.

1. Disposer inputs transfer information
2. Transporter confirms receipt
3. Disposal company confirms final disposal
4. **System tracks until disposal is completed**

Failing to use the transfer form or falsifying entries is subject to fines.

## Verify These Before Outsourcing

- ☐ **Permit** of the collection/transport company (whether our waste is included in the permitted items)
- ☐ **Permit and disposal capacity** of the final disposal company
- ☐ Contract must specify waste type, quantity, and disposal method
- ☐ Vehicle registration number matches the permit

## Reduction Is the Best Option

Disposal costs are continuously rising. The order is **reduction → reuse → recycling → incineration → landfill**.

- Cutting oil can be **refined and reused**, significantly reducing used oil generation
- Packaging materials should be **converted to reusable containers**
- Proper sorting prevents **recyclable items from mixing with designated waste**, which would lead to costly disposal

## On-Site Mistake Examples

| Mistake                                    | Result                                              |
|--------------------------------------------|-----------------------------------------------------|
| Mixing rags and gloves with used oil drums | Disposal rejected, reclassification costs incurred  |
| Exceeding 45-day storage period            | Fine                                                |
| Missing signage                            | Fine                                                |
| Not completing the transfer form           | Fine + investigation for suspected illegal disposal |

Sources: Korea Environment Corporation — Olbaryo System (Proper Disposal of Waste) (<https://www.allbaro.or.kr>) · Ministry of Environment — Waste Management Policy (<https://www.me.go.kr>) · National Laws and Regulations Information Center — Waste Management Act (<https://www.law.go.kr>)

### Try this on site

- Waste Classification Quiz
- Determination of Waste Disposal Route Based on MSDS

## Chemical Substance Safety Management

Read the MSDS and prevent hazards

### What you will learn

- Understand the 16 sections of the MSDS
- GHS warning labels can be read.

## GHS Classification and Warning Labels

You will learn the meaning of 9 GHS pictograms (explosion, flammable, oxidizing, corrosive, toxic, etc.).

### GHS Makes It Possible to Recognize Hazards Just by Looking at the Pictures

**GHS** (Globally Harmonized System) is a system that unifies the classification and labeling of chemical substances worldwide. It is dangerous to handle imported chemical substances when the labels differ by country.

Korea has adopted GHS under the **Occupational Safety and Health Act** and the **Chemical Substance Control Act**.

## 9 Pictograms

A black image is placed inside a red diamond border.

| Picture                                                                                                 | Meaning                                                     | On-site Example                  |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------|
|  Explosion           | Explosive, self-reactive                                    | Organic peroxides, hardener      |
|  Flame               | <b>Flammable</b> , self-ignitable                           | Syrup, acetone, alcohol          |
|  Flame over a circle | Oxidizing                                                   | Hydrogen peroxide, nitric acid   |
|  Gas cylinder        | High-pressure gas                                           | Oxygen, argon, nitrogen cylinder |
|  Corrosion           | <b>Metal and skin corrosion</b>                             | Sulfuric acid, sodium hydroxide  |
|  Skull               | <b>Acute toxicity (fatal)</b>                               | Cyanide, formaldehyde            |
|  Exclamation mark    | Irritant, mild toxicity                                     | General cleaning agent           |
|  Health hazard       | Carcinogenicity, reproductive toxicity, respiratory allergy | Benzene, crystalline silica      |
|  Environment         | Harmful to aquatic environment                              | Heavy metal-containing chemicals |

> **Skull ☠ and exclamation mark ! both indicate toxicity**, but their intensity differs. If a skull is present, it is lethal even in small amounts.

### Signal Words — "Danger" vs "Warning"

- **Danger:** More severe level
- **Warning:** Relatively less severe level

Even if something is flammable, if the flash point is low, it is labeled "Danger," and if high, "Warning" is used.

### 6 Mandatory Elements on the Warning Label

1. Name (Product name)
2. **Pictogram (Graphic symbol)**
3. **Signal word** (Danger / Warning)
4. **Hazard statement** (H-code, e.g., H225 Highly flammable liquid and vapor)
5. **Precautionary statement** (P-code, e.g., P210 Keep away from heat/sparks)
6. Supplier information (Manufacturer/importer, contact details)

### Labels Are Also Required on Small Containers

**When transferring from a drum to a smaller container, you must also attach a warning label to that container.** Many accidents occur due to not following this rule.

> Putting syrup in a PET bottle is **absolutely prohibited**. There have been repeated incidents of death due to mistaken consumption as beverages.

### On-site Check List

- ☐ Is a warning label attached to the container of the chemical substances I use?
- ☐ Do I know how many pictograms there are and what each means?
- ☐ Is the signal word "Danger" or "Warning"?
- ☐ Have I attached a label to the small container?
- ☐ Is the MSDS **posted or available** in the workplace (legal obligation)

Sources: KOSHA — MSDS/GHS Data Room (<https://msds.kosha.or.kr>) · Chemical Safety Agency — Chemical Information (<https://icis.me.go.kr>) · Ministry of Employment and Labor — Guide on Warning Labels for Chemical Substances (<https://www.moel.go.kr>)

### MSDS 핵심 항목

Learn how to read sections on chemical product identification, hazards and health hazards, emergency measures, handling/storage, and exposure prevention/personal protective equipment.

### MSDS has 16 items, but you only need to see 5 on-site

**MSDS**(Material Safety Data Sheet, now called SDS) consists of 16 items. You don't need to memorize all of them, but you must definitely know how to read the **5 items that you must check before work**.

## Structure of All 16 Items

| Item | Content                                            |
|------|----------------------------------------------------|
| 1    | Information about the chemical product and company |
| 2    | <b>Hazard and Risk</b> ← Required                  |
| 3    | <b>Names and Contents of Components</b> ← Required |
| 4    | <b>Emergency Response Procedures</b> ← Required    |
| 5    | Handling methods in case of explosion or fire      |
| 6    | Handling methods in case of leakage                |
| 7    | <b>Handling and Storage Methods</b> ← Required     |
| 8    | <b>Exposure Prevention and PPE</b> ← Required      |
| 9    | Physical and chemical properties                   |
| 10   | Stability and reactivity                           |
| 11   | Toxicity information                               |
| 12   | Environmental impact                               |
| 13   | Precautions for disposal                           |
| 14   | Information required for transportation            |
| 15   | Legal regulations                                  |
| 16   | Other references                                   |

## How to Read Each Item

### 2 — Hazard and Risk

Pictograms, signal words, and H-phrases are here. If you see a label like "**Carcinogenicity 1A**", it is a specially managed material. You must keep records for **30 years**.

### 3 — Composition

There are cases where **the composition is hidden due to trade secrets**. Even in such cases, components with high hazards must be disclosed. You can search for individual components using **CAS numbers**.

### 4 — Emergency Response

**It is too late to read this after an accident.** Read it in advance.

- If it gets in the eyes: Wash with **running water for at least 15 minutes**
- If it contacts the skin: Immediately remove contaminated clothing and wash
- If inhaled: Move to a place with fresh air

### 7 — Handling and Storage

- Materials that **must not be stored together** (mixing prohibited)
- Storage temperature, ventilation requirements
- Whether grounding is required

### 8 — Exposure Prevention and PPE

This is the most practical item.

- **Exposure limits (TWA, STEL)** — 8-hour average / short-term
- Required **type of respiratory protection** (dust mask or gas mask, type of filter)
- Glove material (**nitrile/neoprene/butyl** — different materials are penetrated by different substances)

> If you wear **latex gloves** with organic solvents, they will permeate within a few minutes. **Always use the material specified in the MSDS.**

## Reading Exposure Limits

TWA (Time-Weighted Average): Average concentration limit for 8-hour work  
STEL (Short-Term Exposure Limit): Maximum concentration allowable for 15 minutes  
C (Ceiling): Value that must not be exceeded even momentarily

Example) Toluene TWA 50ppm / STEL 150ppm

## Legal Obligations (Employer)

- **Post and display MSDS in a place where workers handling the substance can easily see it**
- Attach warning labels
- **Conduct MSDS training** (every time the substance changes or is newly introduced)
- Since 2021, **MSDS submission and non-disclosure approval system** is in operation (KOSHA)

## What New Employees Must Do on Their First Day

- ☐ Confirm the list of chemical substances used in your process
- ☐ Confirm the location of MSDS for each substance (file cabinet or bulletin board)
- ☐ Read items 4 (Emergency Response) and 8 (PPE) in advance
- ☐ Confirm the location of eye wash and emergency shower — **must be reachable within 30 seconds**

Sources: Korea Occupational Safety and Health Agency (KOSHA) — MSDS Search System (<https://msds.kosha.or.kr>) · Ministry of Employment and Labor — Chemical Substance Management Guidelines (<https://www.moel.go.kr>) · Chemical Safety Agency — Comprehensive Information System for Chemical Substances (<https://icis.me.go.kr>)

### Try this on site

- MSDS 3종 읽기 실습
- GHS Pictogram Matching Quiz

## Workers' Rights and Labor Law

You need to know your rights to protect them.

### What you will learn

- Understand basic working conditions
- Know how to respond to unfair treatment

## The employment contract

Learn about the mandatory items to include in employment contracts, working hours, rest periods and holidays, and the legal standards for annual paid leave.

## If You Don't Use a Contract, the Loss Always Falls on the Worker

Because of urgency, because it's someone you know who introduced you, or because of the phrase "we'll write it later," many people still start work without a labor contract. However, if later disputes arise over wages or working hours, **spoken promises have no way of being proven**. Inspectors also have no basis for judgment.

Creating and **delivering** a labor contract is the employer's legal obligation (Labor Standards Act Article 17). Just writing it and having the company keep all copies is also a violation. **One copy must be given to the worker to keep.**

> Not receiving a contract itself is a reportable issue. Take a photo of it, even. When disputing unpaid wages later, the first document requested will be the labor contract.

## Items That Must Be in Writing

| Item                            | What Should Be Written for It to Be Normal                                                    |
|---------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Wages</b>                    | Components (base pay, allowance amounts), calculation method, payment method and payment date |
| <b>Prescribed Working Hours</b> | Start and end times, how many hours per day/week                                              |
| <b>Days Off</b>                 | Which day of the week is the weekly day off, whether public holidays are paid                 |
| <b>Annual Paid Leave</b>        | Criteria for granting                                                                         |
| Workplace                       | Actual factory or workplace where work is performed                                           |
| Job Responsibilities            | The more specific, the better than vague terms like "manufacturing assistance"                |

A contract that only says "**Wages = 000 million won per month**" is a **deficient contract**. If base pay and overtime allowances are not clearly separated, it will be impossible to determine later whether overtime pay has already been received or not.

## Legal Standards for Working Hours, Breaks, and Days Off

| Category                 | Standard                                                                                                        |
|--------------------------|-----------------------------------------------------------------------------------------------------------------|
| Prescribed Working Hours | <b>8 hours per day, 40 hours per week</b> or less                                                               |
| Overtime Work            | Up to <b>12 hours per week</b> by mutual agreement                                                              |
| Breaks                   | 30 minutes or more for 4 hours of work, <b>1 hour or more</b> for 8 hours of work — <b>during working hours</b> |
| Weekly Day Off           | If you work the prescribed working days for a week, you are entitled to <b>at least 1 day of paid leave</b>     |
| Night Work               | <b>10 PM to 6 AM</b>                                                                                            |

**Break time is free time to rest.** Watching machines while eating is not break time but working time. If you cannot leave your post even while waiting, that counts as working time.

## Annual Paid Leave is Accumulated Like This

[Less than 1 year of employment] 1 day for every month worked → Maximum 11 days

[1 year of employment, with at least 80% attendance in the previous year] 15 days

[Continued employment for 3 years or more] 1 additional day for every 2 years beyond the first year 3-4 years: 16 days 5-6 years: 17 days 7-8 years: 18 days ... 21 years or more: 25 days (limit)

Annual leave is **principally used on the day the worker chooses**. The company can only request a change in timing if it causes significant disruption to business operations. Unused annual leave is **principally settled as annual leave pay** (exception if the company follows legal procedures to encourage usage).

## If the Workplace Has Fewer Than 5 Employees, the Standards Are Different

In the Busan, Ulsan, and Gyeongnam regions, there are not a few companies in the second and third-tier subcontractors with fewer than 5 regular employees. **Depending on how many people are in your company, different provisions apply.**

| System                                               | Fewer than 5 Employees | 5 or More Employees |
|------------------------------------------------------|------------------------|---------------------|
| Minimum Wage                                         | Applied                | Applied             |
| Labor Contract Creation and Delivery                 | Applied                | Applied             |
| Weekly Day Off Pay                                   | Applied                | Applied             |
| Severance Pay                                        | Applied                | Applied             |
| Workers' Compensation Insurance                      | Applied                | Applied             |
| Overtime, Night Shift, and Holiday Premium Pay (50%) | Not Applied            | Applied             |
| Annual Paid Leave                                    | Not Applied            | Applied             |
| Weekly 52-Hour Limit                                 | Not Applied            | Applied             |
| Redress for Unfair Dismissal                         | Not Applied            | Applied             |

The number of regular employees is determined by **actual number of employees**, not the employer's personal statement. If you're confused, ask the Korea Labor Welfare Service Customer Consultation Center (**1350** without area code).

### Confirm Who Your "Employer" Is

In shipyards and auto parts manufacturing sites, it's common for multiple internal subcontractors to be inside the main contractor. The company written on the labor contract (your employer) and the person giving instructions on-site may belong to different companies.

- **Subcontracting:** Subcontractor manager gives orders. Normal structure.
- **Dispatching:** Allowed tasks and periods are set under the Dispatch Act, and direct manufacturing processes in manufacturing are **principally prohibited**.

If the main contractor's employee directly gives work instructions and manages attendance, it may be illegal dispatching. Since this is a difficult issue to judge, if you feel something is wrong, consult the Labor Inspection Office first.

### Additional Checks for Foreign Workers (E-9)

- Use the **Standard Labor Contract**. Keep a translated version in your native language.
- **It is illegal for the company to keep your passport and foreign registration certificate.** Keep them yourself.
- Discriminating wages or working conditions based on nationality violates the Labor Standards Act Article 6. Minimum wage is also **applied equally** to domestic workers.
- Changing workplaces is allowed within a set number of times, but **reasons not related to the worker's responsibility**, such as the employer's violation of working conditions, are **not counted** toward that limit. Check with the Employment Center.
- Consultation for foreign workers: **1577-0071** (Multilingual consultation support)

### Checklist Before Signing

- ☐ Is the wage clearly **separated into base pay and allowances**?
- ☐ Are the start and end times and break time **specifically written**?
- ☐ Is the weekly day off **written as which day of the week**?
- ☐ Did you not sign with **blank spaces**? (**Absolutely prohibit signing with blank spaces**)
- ☐ **Did you receive one copy of the signed contract?**
- ☐ Did you take a photo and save it on your **mobile phone**?

Sources: Ministry of Employment and Labor — Standard Employment Contract Form and Guidelines for Completion (<https://www.moel.go.kr>) · National Legislative Information Center — Labor Standards Act (<https://www.law.go.kr>) · Ministry of Employment and Labor Complaint and Inquiry Forum — Consultation on Working Conditions and Complaint/Petition Submission (<https://minwon.moel.go.kr>)

## Wages and the four major insurances

Learn the basics of minimum wage, regular wages, severance pay, and National Pension, Health Insurance, Employment Insurance, and Industrial Accident Compensation Insurance.

### Knowing How to Read Pay Slips Prevents Losses

Just looking at "how much money came into your account" won't tell you what you're missing out on. Wages are structured as **basic pay + various allowances – deductions (four major insurances, taxes)**, and each item has its own calculation basis.

Since **November 2021**, employers have a **mandatory obligation to provide a wage statement** (Article 48 of the Labor Standards Act). Every time wages are paid, a written or electronic document must be provided that includes the wage components, calculation methods, and deduction details. Failing to do so can result in fines.

### Minimum Wage — Revised Annually

The minimum wage is **determined and announced in early August for the following year**, and it becomes effective **from January 1st of the following year**. Since the amount changes every year, **you must confirm the announced amount for that year**. It is posted on the Ministry of Employment and Labor website and on the workplace notice board.

These are the principles to remember:

- **Applies to all workplaces with one or more employees.** There are no exceptions, even for workplaces with fewer than five employees.
- **Irrespective of nationality.** The same amount applies to E-9 foreign workers as well.
- For workers with a contract of one year or more, **a 10% reduction is allowed during the first three months of training**, but **simple labor occupations specified by the Ministry of Employment and Labor cannot be reduced**.
- The scope of wages included in the minimum wage (whether regular bonuses and welfare benefits are included) has changed gradually due to legal revisions. When calculating whether your wage violates the minimum wage, **check the standard for that year**.

> Whether the minimum wage is violated is determined by **hourly pay**, not the **total monthly salary**. You must divide the monthly salary by the scheduled working hours for that month and compare it.

### Regular Wage and Average Wage — Used in Different Places

| Category            | Definition                                                                                              | Where It Is Used                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Regular Wage</b> | The amount regularly and uniformly paid as compensation for scheduled work                              | Overtime, night shift, holiday, annual leave, and termination notice allowances  |
| <b>Average Wage</b> | The total wage over the previous <b>three months divided by the total number of days in that period</b> | Severance pay, compensation for work-related injury and sick leave, and sick pay |

If the average wage is lower than the regular wage, **the regular wage is considered the average wage**.

The determination of which allowances are included in the regular wage has been continuously clarified by court rulings, and there have been changes in practical standards, such as the treatment of regular bonuses with employment conditions. **Many companies narrow the scope of regular wages and give fewer allowances**, so if the amount seems unreasonable, **consult the Labor Inspection Office**.

### Regular Hourly Rate and Additional Allowance Calculations

In the 40-hour workweek system, the monthly scheduled working hours are usually calculated as **209 hours**.

Monthly scheduled working hours = (40 hours per week + 8 hours of weekly holiday) × 365 days ÷ 7 days ÷ 12 months  
 = 48 × 52.14 ÷ 12  
 ≈ 209 hours

Example) If the monthly salary that qualifies as regular wage is 2,090,000 won,  
 Regular hourly rate = 2,090,000 ÷ 209 = 10,000 won

Overtime 10 hours → 10,000 × 1.5 × 10 = 150,000 won

Night work 8 hours → 10,000 × 0.5 × 8 = 40,000 won (only the additional part)

Holiday work 8 hours → 10,000 × 1.5 × 8 = 120,000 won

Excess hours on holiday 8 hours → 10,000 × 2.0 × excess hours

**If overtime work is also night work (work after 10 PM), the additional allowances overlap.** The 50% overtime rate plus the 50% night work rate makes it double the regular hourly rate. This part is often overlooked in shipbuilding and casting workplaces where night work is common.

## Severance Pay

- **If you have worked continuously for one year or more**, and your **average scheduled working hours per week is 15 hours or more over four weeks**, you are eligible.
- **Applies to all workplaces with one or more employees.** Even workplaces with fewer than five employees are eligible.
- The principle is that it should be paid **within 14 days from the day of resignation**, although it can be extended by agreement.

Severance pay = Average daily wage × 30 days × (Number of continuous working days ÷ 365)

Example) Total wages for the previous three months: 9,200,000 won, total number of days in that period: 92 days  
 Average daily wage = 9,200,000 ÷ 92 = 100,000 won

If you have worked continuously for 1,278 days (about 3 years and 6 months),

Severance pay = 100,000 × 30 × (1,278 ÷ 365)  
 = 3,000,000 × 3.5014  
 ≈ 10,504,000 won

> **A contract stating that "severance pay is included in the monthly salary" (severance pay split agreement) is generally invalid.** You can claim it separately when you resign.

For E-9 foreign workers, severance pay is replaced by **Departure Insurance** that the employer joins. If the insurance payout is less than the legally mandated severance pay, **the employer must cover the difference**. Be sure to compare the amounts.

## Four Major Insurances — Different Parties Bear the Burden

| Insurance                    | What It Covers                                                      | Insurance Premium Burden                                                                                                               |
|------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>National Pension</b>      | Old-age, disability, and survivor pensions                          | Shared equally by the employee and the employer                                                                                        |
| <b>Health Insurance</b>      | Medical and injury treatment costs, long-term care                  | Shared equally by the employee and the employer                                                                                        |
| <b>Employment Insurance</b>  | Unemployment benefits, vocational training, and childcare leave pay | Shared equally for unemployment benefits, <b>fully borne by the employer for employment stability and vocational training programs</b> |
| <b>Work Injury Insurance</b> | Treatment and compensation for work-related injuries                | <b>Fully borne by the employer</b>                                                                                                     |

Insurance premium rates **change annually by announcement**, so check the rate for that year. Just remember the structure accurately.

**Work injury insurance premiums are not paid by the employee at all.** If the work injury insurance premium is deducted on the pay slip, it's incorrect. Also, **work injury insurance is automatically applied if there is at least one employee**, so even if the

company doesn't join, the employee can still receive compensation if injured.

## Four Major Insurances for Foreign Workers

- **Health Insurance and Work Injury Insurance:** Apply.
- **National Pension:** Depending on mutual recognition between countries, the application and eligibility for lump-sum payments vary by nationality. Be sure to confirm based on your nationality.
- **Employment Insurance:** Depending on the stay status, it may be automatically applied or optional.
- In addition, foreign workers have **Departure Insurance, Return Cost Insurance, Accident Insurance, and Wage Arrears Guarantee Insurance** separately. Be sure to check who is joining and when you can receive benefits at the time of the contract.

## What to Check on the Pay Slip

- ☐ Is **basic pay** and each allowance clearly separated by item?
- ☐ Do **overtime, night shift, and holiday working hours** match the actual hours worked?
- ☐ Is **work injury insurance premium** not deducted? (If it is, it's an error)
- ☐ Is **registration for the four major insurances** actually completed? (You can check yourself on the Korea Health Insurance Corporation and National Pension Service websites)
- ☐ Are **monthly pay slips stored as files**? — This is key evidence in disputes over unpaid wages.

Sources: Ministry of Employment and Labor — Minimum Wage and Wage System Guidance (<https://www.moel.go.kr>) · National Legislative Information Center — Minimum Wage Act / Laborer's Pension Guarantee Act (<https://www.law.go.kr>) · Korea Labor Welfare Corporation — Employment and Industrial Accident Insurance Enrollment and Premiums (<https://www.comwel.or.kr>)

## Responding to unfair treatment

We provide contact information and procedures for reporting wage arrears, unfair dismissal, workplace harassment, and industrial accidents.

## While You're Holding Back, Time Is Passing

When you experience unfair treatment, the most common reaction is "Let's just hold back for now." However, labor rights have **deadlines**. Wages claims have a **3-year** statute of limitations, and applications for redress against unfair dismissal have a **3-month** deadline. If you miss these periods, even if your case is justified, you won't be able to pursue it.

Also, reporting is not something that will harm the company. In most cases, it ends with **correction orders and payment**.

## Most importantly — Gather Evidence

The only thing investigators can rely on is **records**. Keep the following documents on hand at all times.

| Evidence                                                                                              | Why It's Needed                                                            |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Copy of the employment contract                                                                       | Basis for agreed wages and working hours                                   |
| Pay slips, bank deposit records                                                                       | Actual amount paid                                                         |
| <b>In-and-out records</b> (fingerprint or card records, work logs, handwritten notes by the employee) | Key to proving overtime work                                               |
| Captured work instructions via text or messenger                                                      | Content and timing of instructions                                         |
| Audio recordings                                                                                      | <b>Recordings are allowed if you are a participant in the conversation</b> |

> Even handwritten work records can be accepted as evidence if they are **written on the same day** as the event. Records written later are less credible.

## Wages in Arrears

Wages must be paid in full, on time, in cash, and directly to the employee (the **Four Principles of Wage Payment**). In the case of resignation, all wages and severance pay must be settled within **14 days** from the date of resignation.

### Reporting Procedure

- ① Submit a complaint to the local Employment and Labor Office (branch office)

  - Online: Apply for "Wage Arrears Complaint" on the Ministry of Employment and Labor's Citizen Service Platform
  - In-person or by mail is also possible

↓

② Assign a labor inspector → Conduct an on-site investigation (face-to-face with the employee and employer)

↓

③ If arrears are confirmed → Issue a correction order → Employer pays

↓

④ If the employer still does not pay → Issue a Wage Arrears Verification Form

→ Request for lump-sum payment / Civil lawsuit / Criminal prosecution of the employer

- **Jurisdiction:** Based on the location of the workplace. In Busan, Ulsan, and Gyeongnam, the **Busan Employment and Labor Office** and its subordinate branches (Busan East, Busan North, Changwon, Ulsan, Yangsan, Jinju, Tongyeong) are responsible.
- **Lump-sum payment:** When the company is bankrupt or lacks the ability to pay, the **Korea Labor Welfare Corporation** provides payment up to a certain limit. There are set limits and deadlines, so check with the corporation (**1588-0075**).
- **Late interest:** If wages are not paid within 14 days after resignation, a **20% annual interest** is applied from the next day (not applicable for unpaid wages during employment).

## Unfair Dismissal

| Check Item                              | Criteria                                                                                                                                                               |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Written notice of dismissal</b>      | Must be given in <b>writing</b> to be valid (for companies with 5 or more employees). Verbal or text-based dismissal may be invalid                                    |
| <b>Notice period</b>                    | 30 days' notice or <b>at least 30 days' worth of regular wages</b> (dismissal notice pay). Exceptions apply for those with less than 3 months of continuous employment |
| <b>Just cause</b>                       | Companies with 5 or more employees cannot dismiss employees without <b>just cause</b>                                                                                  |
| <b>Deadline for redress application</b> | Must be applied to the local Labor Commission within <b>3 months</b> from the date of dismissal                                                                        |

In Busan, Ulsan, and Gyeongnam, the **Busan Labor Commission, Ulsan Labor Commission, and Gyeongnam Labor Commission** are responsible based on the workplace location (these are separate agencies, so confirm the jurisdiction before submitting your application). **There is no cost** for filing a redress application, and if you meet certain conditions, you may also receive support from a state-appointed labor lawyer.

> Be cautious if asked to **sign a resignation letter**. Signing it may be considered **voluntary resignation**, making it harder to challenge unfair dismissal and affecting unemployment benefits. If you are not satisfied, **do not sign** and seek consultation first.

## Workplace Harassment

Workplace harassment as defined by law occurs when all three of the following conditions are met:

1. Using **superior position or relationship** in the workplace
2. **Exceeding the appropriate limits of work-related behavior**
3. Causing **physical or mental suffering or deteriorating the working environment**

Legitimate work instructions or reprimands are not included. On the other hand, verbal abuse, bullying, not assigning work, personal errands, or mockery based on nationality may fall under this category.

### Handling Procedure

- ① Anyone can report to the employer (not necessarily the victim)  
↓
- ② The employer must investigate immediately  
↓
- ③ During the investigation, the victim must be protected (e.g., changing the workplace, paid leave, etc.)  
→ Measures against the victim's wishes are not allowed  
↓
- ④ If confirmed, the perpetrator must be disciplined or reassigned  
↓
- ⑤ If the company does not investigate or take action → Submit a complaint to the local labor office

> **Harassment or adverse treatment of the complainant or victim is a criminal offense.** This is the key reason why reporting is possible. Applies to workplaces with 5 or more employees.

## Workplace Injury — Don't Just Accept Recommendations for Non-Industrial Accident Handling

It is common to be offered something like, "If you report this as a work injury, the company will be in trouble, so we will pay for your medical expenses." This is called **non-industrial accident handling**. The problem is as follows:

- The money the company provides is usually **only for medical expenses**. **Wage compensation for days not worked** and **disability compensation for after-effects** are not included.
- If after-effects develop later, it will be **difficult to get recognition again** without records.
- **Hiding a work injury is a crime by the employer.** It is not the employee's responsibility to be considerate.

Work injuries can be **applied for directly by the employee to the Korea Labor Welfare Corporation, without the company's approval**. Even if the company refuses to stamp the application, it is still possible to apply.

## Where to Report — Summary Table

| Issue                                                                                                   | Reporting Office                                                                                     | Deadline                                      |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Wages in arrears, minimum wage violations, unpaid overtime pay, failure to provide employment contracts | Submit a complaint to the local <b>Employment and Labor Office</b> (online citizen service platform) | <b>3 years</b> for wage claims                |
| <b>Unfair dismissal or punishment</b>                                                                   | <b>Local Labor Commission</b> for redress application                                                | <b>3 months</b> from the date of dismissal    |
| <b>Workplace harassment</b>                                                                             | Report to the company → If not addressed, submit a complaint to the labor office                     | —                                             |
| <b>Workplace injury</b>                                                                                 | Apply for medical benefits at the <b>Korea Labor Welfare Corporation</b> branch                      | 3 or 5 years depending on the type of benefit |
| Dangerous work instructions, lack of safety measures                                                    | Labor Office's occupational safety department / Korea Occupational Safety and Health Agency          | —                                             |
| General labor law consultation                                                                          | <b>1350</b> Employment and Labor Ministry Customer Service Center                                    | —                                             |
| Consultation for foreign workers (multilingual)                                                         | <b>1577-0071</b>                                                                                     | —                                             |

## What Foreign Workers Should Especially Know

- You **cannot be treated unfairly or forced to leave the country** just because you made a report.
- Violations of working conditions by the employer, wage arrears, or unfair treatment are **valid reasons for changing the workplace**, and in this case, the number of changes is not counted. Report the reason accurately to the employment center.
- Do **not comply** with requests to hand over your **passport or foreign registration certificate**, or to submit your **bankbook or credit card**.
- Consultations can be received in your **mother tongue** at **1350** (with interpretation support) and **1577-0071**.

## Check Today

- ☐ Do I have a **copy of the employment contract**?
- ☐ Am I keeping **pay slips and bank deposit records** for the last **3 months**?
- ☐ Am I **recording my in-and-out times and overtime hours every day**?
- ☐ Do I know **which local Employment and Labor Office** is responsible for my company?
- ☐ Do I know that I can **apply for a work injury claim myself** if I get hurt?

Sources: Ministry of Employment and Labor Citizen Complaint Platform — Filing a Petition for Wage Arrears, etc. (<https://minwon.moel.go.kr>) ·  
Ministry of Employment and Labor — Guidance on Determining, Preventing, and Responding to Workplace Harassment (<https://www.moel.go.kr>)  
· National Legal Information Center — Labor Standards Act (Dismissal and Harassment Provisions) (<https://www.law.go.kr>)

### Try this on site

- Check Key Items in Employment Contract
- Ministry of Employment and Labor Reporting Procedure Confirmation

---

## Who made this book

BIZ360 supports hiring and training for manufacturers in Busan, Ulsan and Gyeongnam. We run, free of charge, on-site information for 2,000 strong small manufacturers, 50 job-specific training modules, and a settling-in guide for the region.

**Web** [biz360.kr](http://biz360.kr)

**Settling-in guide** [biz360.kr/live](http://biz360.kr/live)

**Full training material** [biz360.kr/ojt](http://biz360.kr/ojt)

**Contact** [biz360.kr/contact](http://biz360.kr/contact)

Issued 2026-08-18. Laws, deadlines and programmes are stated as of the issue date and may change. On safety matters, your workplace rules and on-site instructions take precedence. This book is not legal advice. You may copy it as is for in-house training.