

For Technical Intern Trainees

ぎ のう じっ しゅう せい む
技能実習生向け

Ensuring Safety in Construction Work for Technical Intern Trainees

ぎ のう じっ しゅう せい けん せつ さ ぎょう
技能実習生が建設作業を
あん ぜん おこな だい いっ ぽ
安全に行うための第一歩



March 2015

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Japan International Trainee & Skilled Worker Cooperation Organization (JITCO)

1. Why Is Safety on the Job Necessary?

第1 安全作業は何のために必要か？

The need for safe working practices

- 1) Being injured or physically disabled in a work-related accident would bring immense worry and difficulties for both you and your family.
- 2) In the terrible event that you should die in an accident, the pain and sadness to your family and friends would be overwhelming.
- 3) It is very important that you pay strict attention to the work you are doing and put safety above all else to avoid getting injured on the job.

Japanese to Remember—Safety Signs and Instructions

① 安全第一 (あんぜん だいいち)

◆どんなときでも あんぜんを いちばんに かんがえる。

1) Anzen daiichi

Safety first. In every situation, safety comes first.



② 危険 (きけん)

◆あんぜん ではない。あぶない。

2) Kiken

Danger. Not safe.



③ 危険を知らせる日本語 (きけんを しらせる にほんご)

3) Japanese words that mean danger

あぶない！
Danger!



はいるな！
Do not enter!



さわるな！
Do not touch!



おちる！
Falling!



いくな！
Don't go in/over there!



くるな！
Do not come in here!



2. What Makes a Construction Site Different from Other Workplaces?

第2 建設現場はどのような特徴があるか？

The need for safety measures

Construction sites are very different from workplaces in other industries, and it is important to understand what makes them different before you begin working.

Special features of the construction site

- 1) General contractors and sub-contractors (affiliated companies) work closely together on a site. To prevent work-related injuries and accidents, each party should conduct its own specific health and safety activities.
- 2) The areas of the site that are dangerous change daily as construction work progresses.
- 3) Many large machines operate on construction sites, and getting caught in these machines or colliding with them can cause major injury and even death.
- 4) People engaged in many different occupations work together on the same site, and the type of work being done at a given time changes frequently as construction work progresses.
- 5) Work is affected by weather conditions such as rain, wind, and snow.
- 6) Accidents involving falling objects or people and machinery such as construction equipment and cranes occur frequently. You must also be careful to avoid traffic accidents on the construction site, as well as while commuting to and from work.

Japanese to Remember

① 職長 (しよくちよう)

◆ さぎょうを ちよくせつ しきかんとくする しよくばの せきにんしゃ。

1) Shokucho

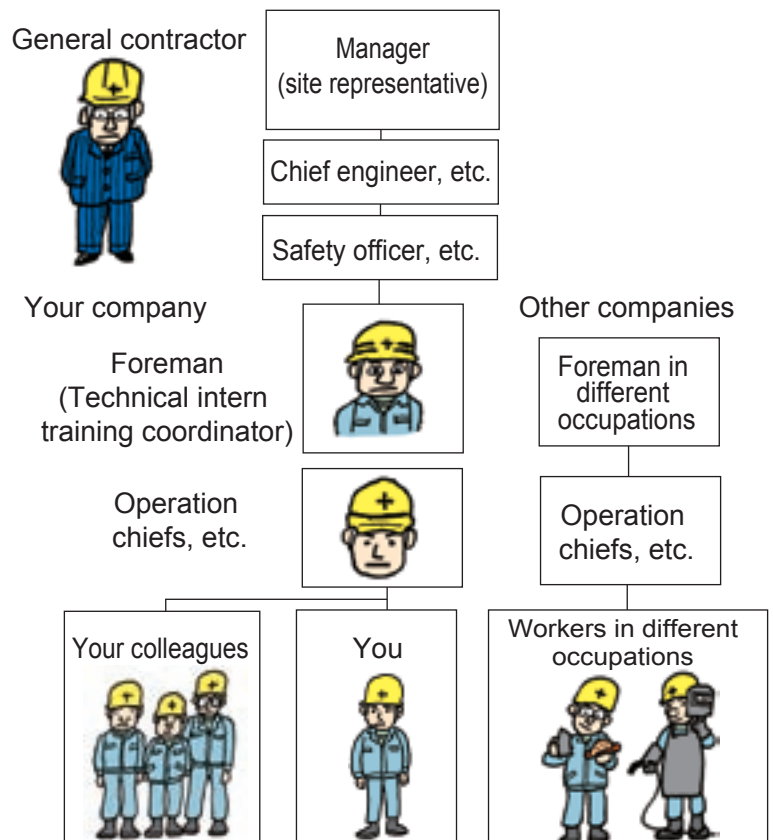
The shokucho (foreman) gives instructions to workers, oversees the work done, and is the one responsible for the construction site.

② 墜落・転落災害 (ついらく・てんらくさいがい)

◆ けんちくぶつ あしば はしごかいだん などから おちて おきる けが。

2) Tsuiraku/Tenraku saigai

Injury involving a person or object falling from a building, scaffolding, ladder, stairs, or other equipment



You may be working for a second-tier or third-tier subcontractor.

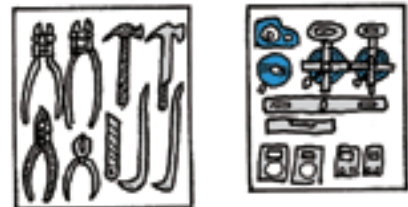
3. What Are the Safety Rules for Construction Work?

第3 建設作業における安全ルールとは？

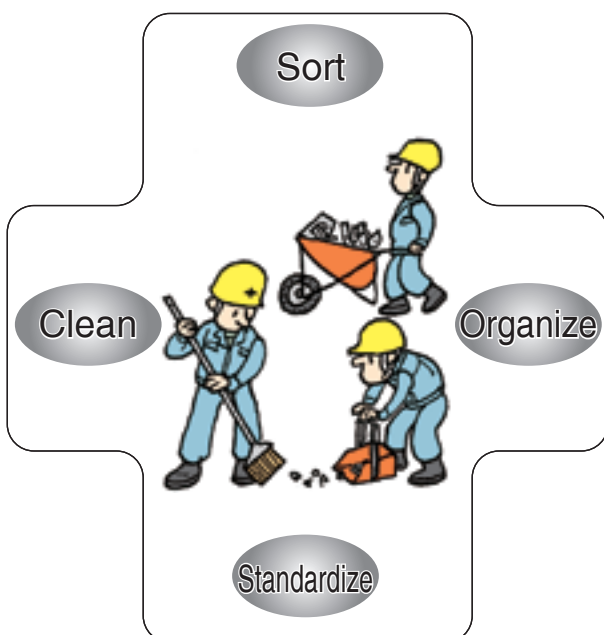
Wear safety gear



4S Campaign



Arrange tools to make them easy to use next time.



Industrial waste becomes garbage if mixed together; it becomes resources if sorted for recycling.



Sort waste and put each type in its designated place.

Need for safety measures

Just as there are traffic rules for safe driving, there are also rules for safe working practices on a construction site. Always follow all rules on the job.

Basic safety rules

- 1) Follow all rules and work procedures for the construction site.
- 2) Follow all instructions given by the foreman, technical intern training coordinator, and others in charge.
- 3) Always wear the required protective headgear (helmet), safety belt (lifeline), dust mask, and other safety gear in the proper manner.
- 4) Do not remove railing and other safety equipment without permission.
- 5) Keep your own workspace sorted, organized, standardized, and cleaned so that it is spic and span ("4S" campaign).

Japanese to Remember—Safety Signs and Instructions

①安全ルール (あんぜん るーる)

◆あんぜんに はたらく ための しょくばの きまり。

1) Anzen ruuru

Safety rules. Regulations on a construction site to ensure work safety

②作業手順 (さぎょう てしゅん)

◆しごとを きめられた とおり あんぜんに おこなうための じゅんじょ。

2) Sagyo tejun

Work procedures to follow to ensure safety.

③保護具 (ほごぐ)

→けがや びょうきから じぶんの みを まもるため もちいる どうぐ。

3) Hogogu

Protective gear used to protect workers from injury or illness

④保護帽着用 (ほごぼう ちゃくよう)

◆けが しないよう あたまに かぶり みを まもる。

4) Hogobou chakuyou

Wear a safety helmet to prevent injury and protect yourself.



⑤安全帯使用 (あんぜんたい しよう)

◆ゆかや てすりが ない こうしょで さぎょうするとき ついらく しないよう いのちづな つき べるとを もちいる。

5) Anzentai shiyou

Use a safety belt to prevent falls when working in high places with no work floors or railing.



⑥4S運動 (よんえす うんどう)

◆せいり せいとん せいそう せいけつに とりくむ しょくばの かつどう。

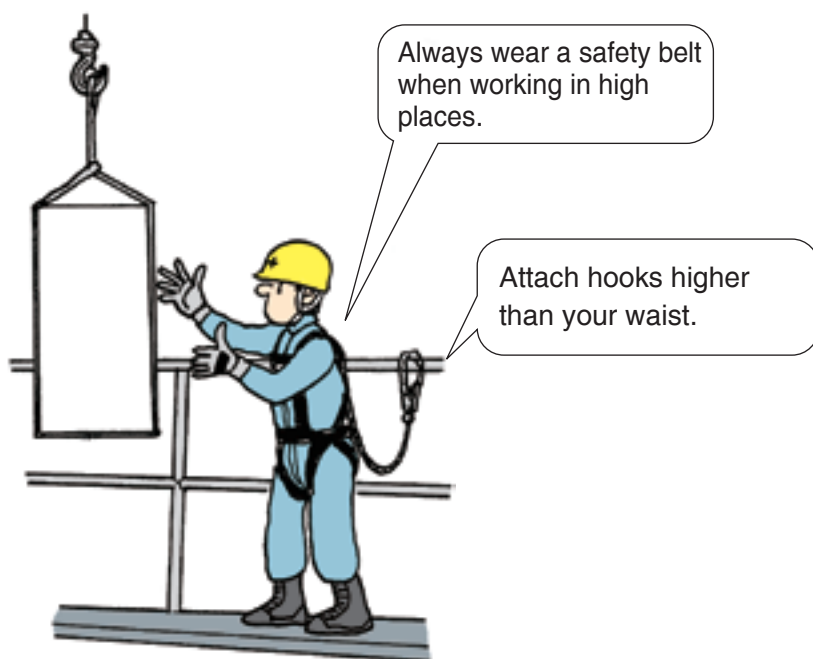
6) Yon esu undou

"4S" campaign at a construction site to seiri (sort), seiton (organized), seisou (clean) and seiketsu (standardize)

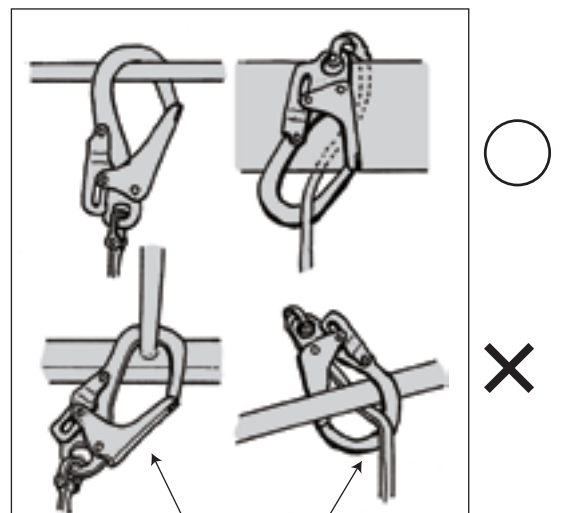


4. What Are the Basics for Work Safety?

だい 第4 さぎょう 作業 あんぜん 安全 おこな 行う きほん 基本は？



Attach hooks directly in a horizontal manner or wrap around the bar.



Do not attach hooks in these manners.

Need for safety measures

The basics are important in all aspects of work. This is especially true for construction work. It is very important that you thoroughly learn the basics of safety and always stay focused on safety at work.

Key points for safe working practices

1) Work clothes

- Wear clean clothes that fit properly.
- Tuck the bottom of your jacket or shirt into your pants, button your cuffs, and be sure that pant legs are not too wide.
- Do not carry anything dangerous or unnecessary in your pockets.

2) Wear protective headgear

- Adjust your headband and chinstrap to make sure that the helmet is adjusted properly to your head.
- Fasten your helmet in the proper manner so that it does not slip to the side or back.
- Put V-shaped parts of chinstrap into your ears for a secure fit.
- Never wear a towel, baseball cap, or anything else under your helmet.
- There are different types of helmets – helmets to protect the head in the event of fall, helmets to protect the head from falling objects, etc.

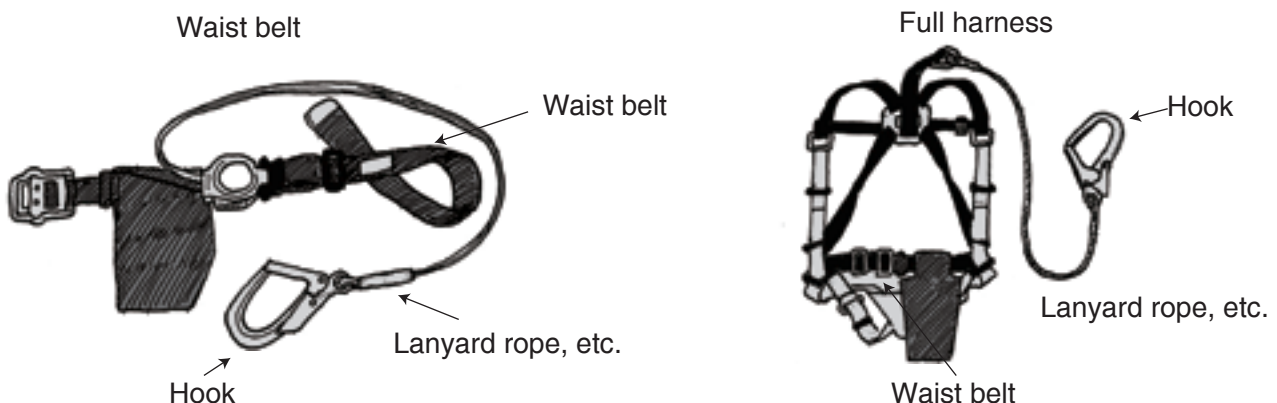
3) Wear safety shoes

- Safety shoes are made to protect your feet from injury in the event that a heavy object falls on them or you step on a nail or other sharp object. Different types of safety shoes are designed for different purposes, such as working in high places or preventing injury from stepping on sharp objects.
- Tie shoelaces properly. Clean and repair shoes weekly and replace seriously damaged shoes.

4) Wear a safety belt

- Use the safety belt when working in high places with no work floors or railing and any other location when you are instructed to do so.
- There are two types of safety belts: waist belts and full harnesses.
- The full harness feels less restrictive than other safety belt devices and distributes the force of impact to reduce physical impact in the event of a fall.
- Carefully check the points where the harness hooks attach and secure the hooks higher than the waist.
- When doing work that requires movement, stretch the main rope tight before hooking the safety belt to it.
- If you find during daily gear inspections that the safety belt, lanyard or other equipment has been damaged, replace with new gear.

Example of a safety belt



5. Check Site Conditions before Beginning Work!

第5 作業に着手する前に現場の状況を確かめよう！

Need for safety measures

The conditions at the construction site and the type of work being done changes daily. This means that the areas that are dangerous can be different every day. It is important for your safety and the safety of others that you inspect conditions at the site before you begin work. Be sure to check conditions in the area where you are working to avoid walking into danger unaware.

Checking conditions at the work site

- 1) Listen carefully to explanations of site conditions by the foreman, technical intern training coordinator, or others and make sure you understand correctly.
- 2) Find out which areas you are not allowed to enter and which areas are dangerous. Check and locate safety walkways and evacuation shelters.
- 3) Check and locate fire extinguishers and other emergency equipment.

Japanese to Remember—Safety Signs and Instructions

① 立入禁止 (たちいり きんし)

◆ そのなかに はいってはいけません。

1) Tachiiri kinshi

Do not enter. You are not allowed to enter the area.



② 安全通路 (あんぜん つうろ)、作業通路 (さぎょう つうろ)

◆ ひとが あんぜんに あるく ことができる つうろ。

2) Anzen tsuuro /Sagyou tsuuro

Safe walkway and work path that are safe for people to walk on



③ 昇降階段 (しょうこう かいだん)

◆ げんばで ひとが のぼり おり する かいだん。

3) Shoukou kaidan

Stairs used by workers to climb up and down a specific construction site



④ 休憩所 (きゅうけいしよ)

◆ きゅうけい じかんに すこす べし。

4) Kyukeisho

Rest area for workers to take a break



⑤ 最大積載荷重 (さいだい せきさい かじゅう)

◆ そのばしょ そのあしに さいだいに のせられる じゅうりょう。

5) Saidai sekisai kajuu

Maximum load to be placed at a location or on scaffolding



⑥ 火気厳禁 (かき げんきん)

◆ ひを つかっては いけません。

6) Kaki genkin

Open flames prohibited



⑦ 喫煙所 (きつえんじよ)

◆ たばこを すっても いい べし。

7) Kitsuenjo

Area where smoking is allowed



6. What Types of Work Require Certification or Special Training?

第6 資格の取得や特別に教育を受ける必要のある業務とは？

Need for safety measures

Workers are required by law to be certified or complete special courses in order to do certain types of work. These jobs are especially dangerous, and workers are not allowed to engage in them without permission.

Jobs subject to legal restrictions

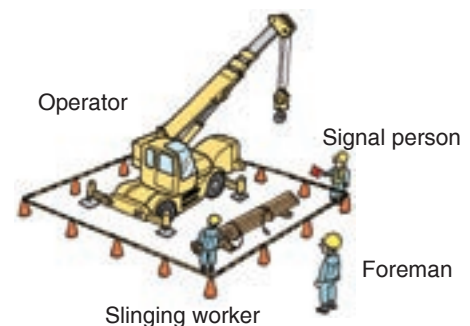
- 1) Workers must be certified before engaging in jobs subject to legal restrictions.
- 2) Doing these jobs without the required certification is against the law and is strictly prohibited.

Jobs requiring special training

- 1) Special training related to health and safety is required for those doing jobs considered dangerous or harmful by law.
- 2) Workers who have not received this training are not allowed to do these jobs.

Examples of jobs subject to legal restrictions

Slings work using stationary or mobile cranes with a hoisting load capacity of 1 ton or more
 Operating work vehicles in areas with work floors that are 10 meters or more above ground
 Operating vehicle-type construction machines for leveling, transferring, loading or digging that weigh more than 3 tons
 Operating forklifts with a maximum load capacity of 1 ton or more



Slinging work using mobile crane

Examples of jobs requiring special training

Welding or fusing metals using an arc welding machine
 Operating work vehicles in areas with work floors that are less than 10 meters above ground
 Operating vehicle type construction machines for leveling, transferring, loading or digging that weigh less than 3 tons
 Operating compacting equipment that can move anywhere on its own
 Operating cranes with a hoisting load capacity of less than 5 tons
 Replacing or otherwise handling grindstones
 Setting up, disassembling, or changing scaffolding
 (Except for when assisting operations from the ground or on a solid work floor)
 (Regulations to take effect July 1, 2015; transitory measures will be taken.)



Operation using vehicle-type construction machine

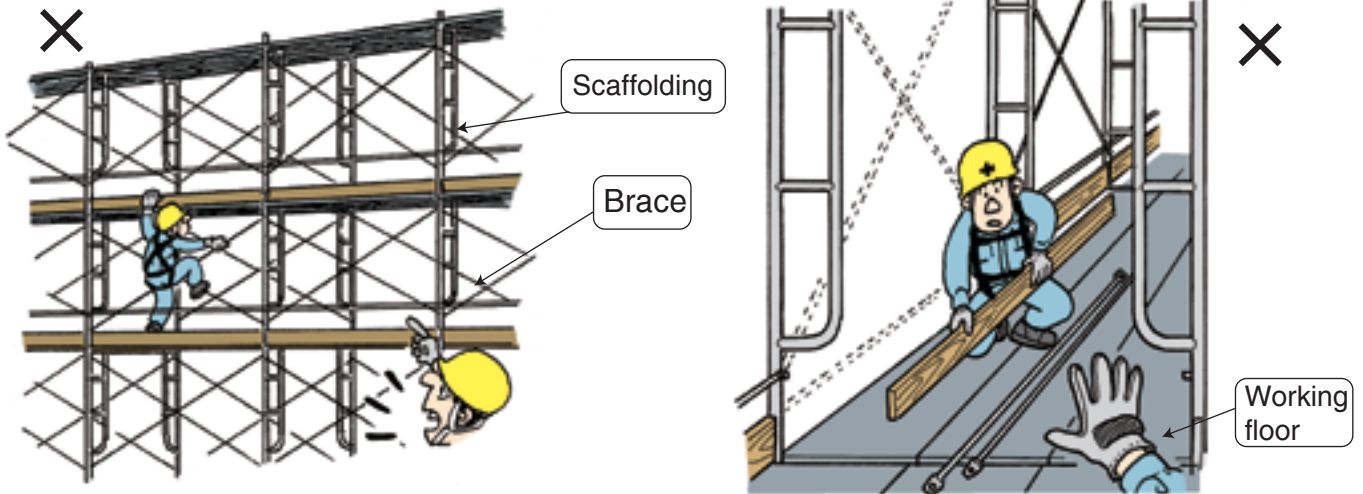
Examples of jobs that require workers to have training similar to special training

Work involving portable circular saws

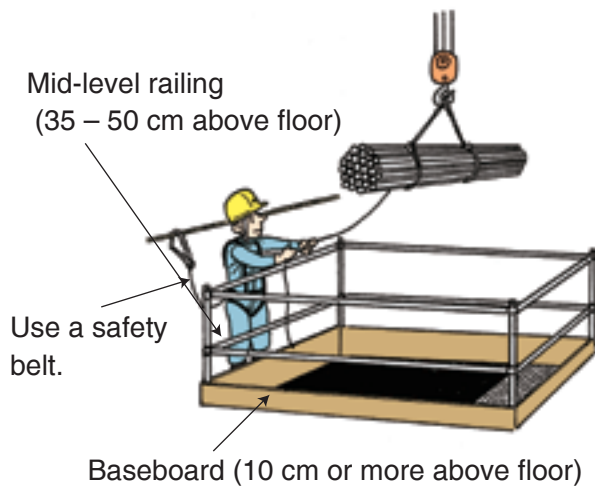
7. What Details are Important in Preventing People and Objects from Falling?

第7 墜落・転落しないためにはどのような注意が必要か？

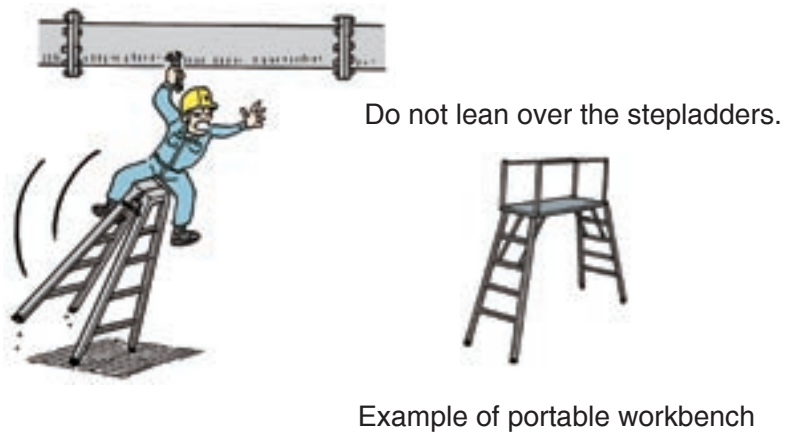
Work on scaffolding



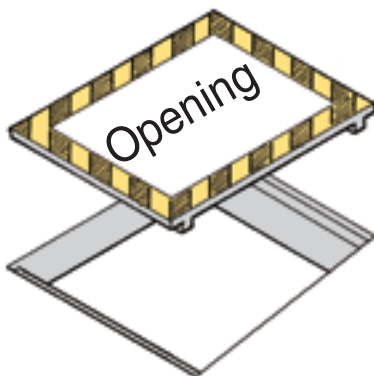
Working near large openings



Work using stepladders

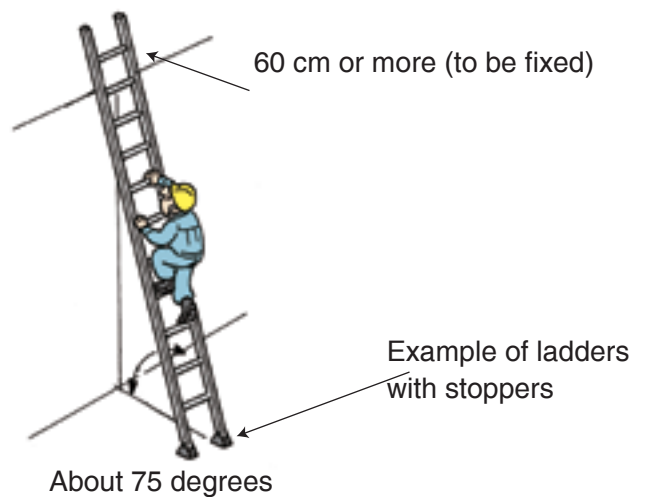


Example of railing around large opening



Example of cover for opening

Work using ladders



Need for safety measures

Working on scaffolding and slate roofs requires the greatest attention to safety measures since a fall from a high place can cause major injuries. You must be particularly careful to follow safe working practices to ensure that a fall does not happen.

Safety when working on scaffolding and other high places

- 1) Always use work floors and safety belts when working on scaffolding and other high places.
- 2) Use risers, stairs, ladders and other equipment to climb up and down the work site.
- 3) Do not remove railing or braces without permission.
- 4) Use designated safety walkways.
- 5) Use running boards when working on slate roofs to avoid stepping on sharp objects.

Safety when working near large openings

- 1) Do not remove railing around or coverings over large openings without permission. When instructed to remove this equipment by the foreman or other authority, put it back as soon as the work is finished.
- 2) Use a safety belt when pulling materials through large openings.
- 3) Do not drop objects through large openings.

Safety when working on portable workbenches and stepladders

- 1) Use portable workbenches whenever possible.
- 2) Working with portable workbenches
 - Do not turn your back to the bench or hold anything in your hands when stepping onto or down from workbenches.
 - As a rule, only one worker should stand at any one time on the top step of a workbench.
 - Do not use portable workbenches on slippery or soft surfaces.
 - Avoid placing tools or materials on top of workbenches.
- 3) Working on stepladders
 - Do not stand on the top step or lean over the stepladder while working.
 - Always lock stepladder legs in place.
 - Do not climb up or down the stepladder holding tools or other materials.

Safety when working on ladders

- 1) Extend the upper part of the ladder 60 cm or more and lock in place. Place the ladder at a 75° angle.
- 2) Use a ladder with slip-stoppers and set the ladder securely in place on a non-slip surface.
- 3) Do not climb the ladder with anything in your hands or using only one hand.

Japanese to Remember—Safety Signs and Instructions

- ① 墜落注意 (ついらく ちゅうい)
◆たかいところの さぎょうは あぶないので ついらく しないよう きをつける。

1) Tsuiraku chuui

Working in high places is dangerous. Be careful not to fall.



- ② 開口部注意 (かいこうぶ ちゅうい)
◆あいている ところから おちないように きを つける。

2) Kaikoubu chuui

Be careful not to fall through large openings.



- ③ 足もと注意 (あしもと ちゅうい)
◆だんさや かいこうぶに きを つけて あるく。

3) Ashimoto chuui

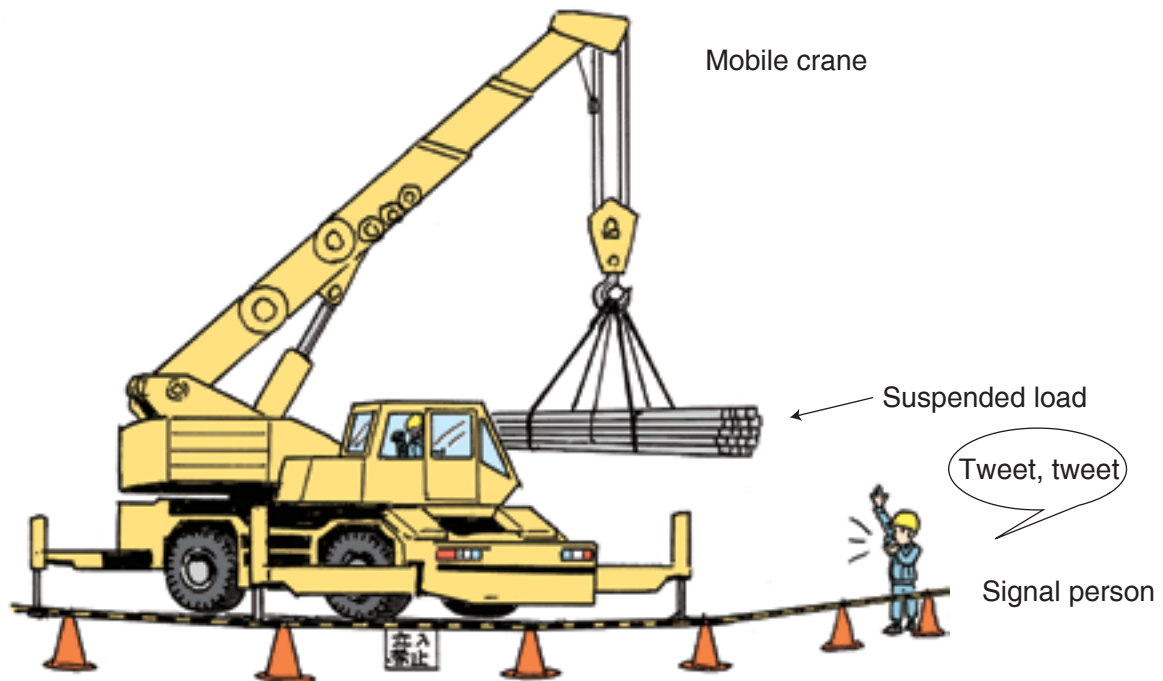
Mind gaps, bumps, steps and large openings when walking.



8. Which Areas on a Construction Site are Off-Limits?

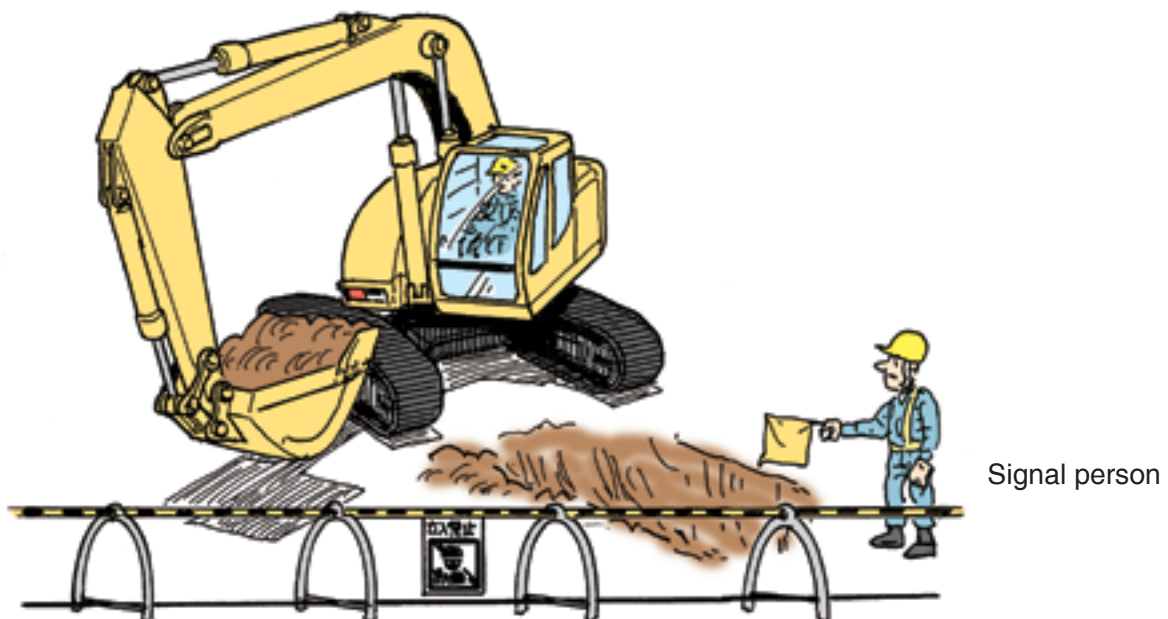
第8 建設現場で立ち入ってはならない場所とは？

Working with mobile cranes



Working with vehicle type construction machines

Drag shovel



Need for safety measures

Many areas of a construction site are extremely dangerous, and entering these areas can put you in grave danger. For this reason, you should never enter areas of a construction site that are off-limits.

Safety around loads lifted and transferred by crane or other machinery

- 1) Never enter the area where this work is being done.
- 2) Never pass below a suspended load.
- 3) Always follow the signal person's instructions.
- 4) Never enter an area where there is a "no entry" sign or instructions.

Safety around vehicle type construction machines

- 1) Never enter an area around vehicle type construction machines marked as off-limits.
- 2) Never enter an area where work is being done with rotating construction machines such as drag shovels or backhoes.
- 3) Always follow the signal person's instructions.
- 4) Never enter an area where there is a "no entry" sign or instructions.

Japanese to Remember—Safety Signs and Instructions

- ① かんけいしゃ いがい 関係者以外 たちいりきんし 立入禁止 (かんけいしゃ いがい たちいりきんし)
◆さぎょうに かんけいしない ひと は その なかに はいらない。

1) Kankeisha igai tachiiri kinshi

Only persons involved with this work may enter.



- ② さぎょうはん いないたちいりきんし 作業範囲内立入禁止 (さぎょう はんい ない たちいり きんし)
◆くれーん いどうしきくれーん しゃりょうけい けんせつきかいが うごく まわりに はいらない。

2) Sagyou haninai tachiiri kinshi

No entry allowed near cranes, mobile cranes, or vehicle type construction machines in operation.

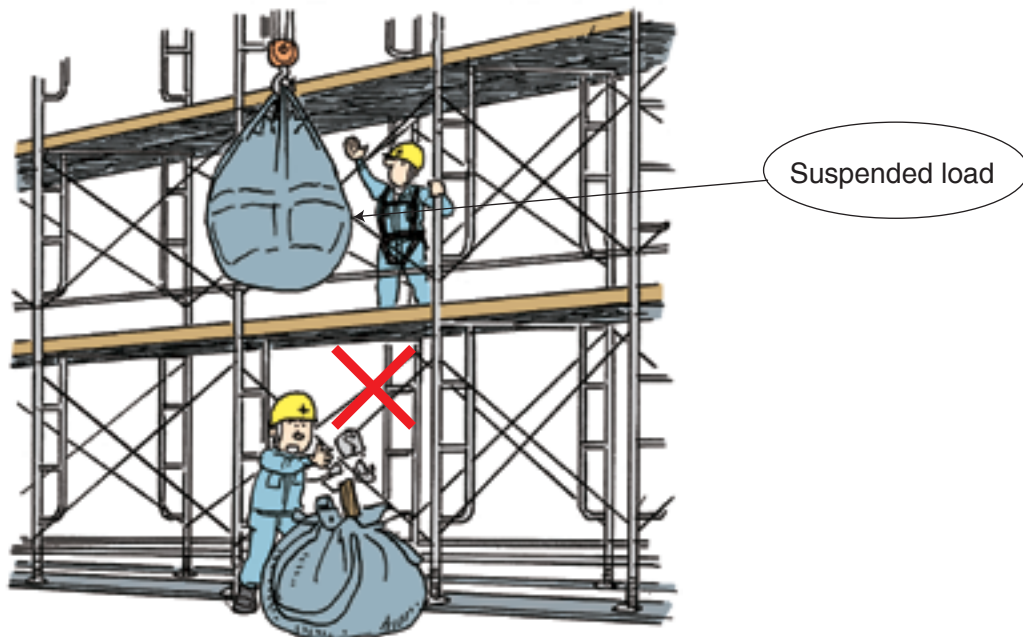
- ③ きけん つりに 危険 吊り荷の した 下に ぜったい 絶対 はい 入るな (きけん つりにの したに ぜったい はいるな)
◆たまがけ さぎょうは あぶない ですから つっているものの したに ぜったい はいらない。

3) Kiken tsurinino shitani zettai hairu na

Slinging work is dangerous. Never pass below a suspended load.

9. What Should You Pay Attention to When Working Above and Below Others?

第9 現場で作業を行う際、上下にはどんな注意が必要か？



Need for safety measures

When working on a construction site, there will be work going on above and below you, and your actions and the actions of others can lead to injuries. You must always pay attention to what is happening above and below you.

Safety when working above and below others

- 1) Avoid working directly below work going on overhead.
- 2) When working as a team on two different levels, workers above and below should communicate through call and response.
- 3) Do not throw objects down from the scaffolding. When you cannot avoid lowering objects from a height of 3 meters or more, drop equipment must be set up below, and have someone monitoring the operation.

Japanese to Remember—Safety Signs and Instructions

① 頭上注意 (すじょう ちゅうい)

◆あたまの うえに きけんが あるので きを つける。

1) Zujou chuui

Watch out above. Beware of danger overhead.



② 危険 投げるな 落とすな (きけん なげな おとすな)

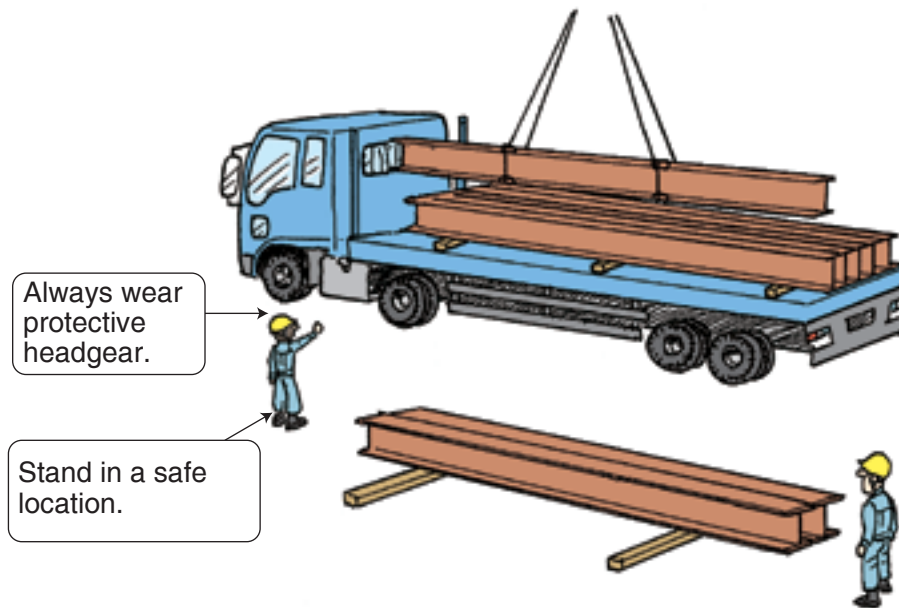
◆あぶない ですから ものを なげたり おとしたり しては いけない。

2) Kiken nageru na otosu na

Do not throw or drop objects from above. It is dangerous.

10. What Are Safe Working Practices When Loading and Unloading Materials?

第10 荷の積み卸し作業を安全に行うためには？



Need for safety measures

Injuries can occur during the loading and unloading of materials and completed products for transport by truck or other vehicles to the site. Careful attention must be paid during this type of work to ensure safety.

Safety when loading and unloading

- 1) Always wear protective headgear when loading and unloading.
- 2) Avoid working on the bed of the truck whenever possible. Work from the ground as much as possible.
- 3) Avoid walking over unstable loads whenever possible.
- 4) Do not turn your back to the bed of the truck.
- 5) Always secure the side panels and back panel of a flatbed truck after loading or unloading; never leave the panels hanging down.
- 6) Do not act in an unsafe manner by jumping onto or off of the truck bed.

Japanese to Remember

① 飛び乗り、飛び降り（とびのり、とびおり）

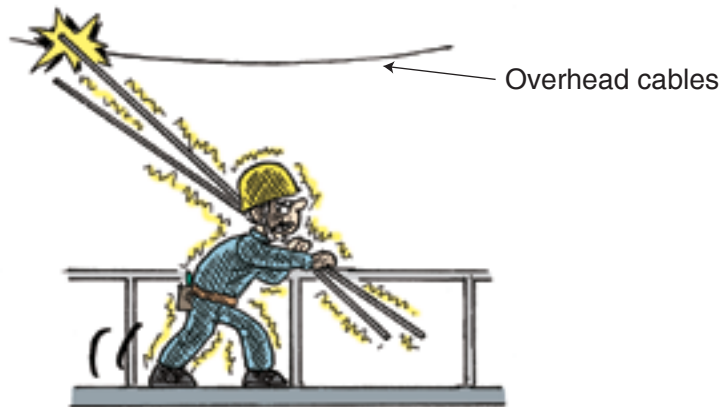
◆ ちょくせつ にだいに かけあがったり にだいを かけおりたりする あぶない こうどう。

1) Tobinori/Tobiori

Unsafe act of jumping directly onto or off of the truck bed

11. What Details Are Important When Handling Electrical Wires and Tools?

第11 電気、電動工具の取扱いにはどのような注意が必要か？



Need for safety measures

Electricity at even just 100 volts can cause deadly accidents. You must thoroughly understand the dangers and handle electrical tools in a careful manner.

Safety related to handling electrical wires

1) When handling long materials such as single piping (metal pipes) on and above roofs, pay special attention to nearby overhead cables.

1) Always use the safety devices (safety cover, etc.) on portable circular saws and other electric tools and the grip on disc grinders.

2) Check for any damage to power cables and other parts, and always use the earthing electrode.

3) Always turn the power off when carrying electric tools.

4) Do not wear work gloves when working with electric drills and disc grinders.

Japanese to Remember—Safety Signs and Instructions

① 感電注意 (かんでん ちゅうい)

◆ 電きは とても きけん ですから きを つける。

1) Kanden chuui

Electricity is very dangerous. Be extremely careful to avoid electric shock.



② 高電圧危険 (こう でんあつ きけん)

◆ ここは でんあつの たかい でんきが ながれて いるので きけん。

2) Koudenatsu kiken

Voltage here is high. Be careful.



12. What Should You Do in Emergency Situations?

第12 緊急事態が発生した場合、どう対処すればよい？

Call an ambulance!



First aid treatment



Need for safety measures

When accidents or injuries occur in the workplace, it is important to take immediate and appropriate action to minimize damage to people and objects.

Safety measures in case of injury

- 1) Put the rescue and medical treatment of the victim above all else.
- 2) Report all injuries, no matter how minor, to the foreman and/or technical intern training coordinator
- 3) If you discover anything out of the ordinary, point this out in a loud voice to those around you and immediately notify the foreman and/or technical intern training coordinator. To call an ambulance, dial 119. Locate in advance the automated external defibrillator (AED) devices on site.
- 4) In the case of electric shock or hypoxia (lack of oxygen), secondary injuries among those who try to help the afflicted victims are possible. Follow the instructions of those in charge, and do not take action on your own.

Disaster drills

- 1) Disaster drills conducted by the general contractor provide training that could save your life. Take this training seriously.
- 2) When an early earthquake warning is issued, put your daily training to full use and follow all instructions from the foreman and/or technical intern training coordinator to evacuate to safety.

Japanese to Remember—Safety Signs and Instructions

① 担架 (たんか)

◆ けがした ひとを のせて はこぶ どうぐ。

1) Tanka

Stretcher used to carry injured persons



② AED (えい いー でいー)

◆ しんぞうびょうで たおれた ひとを きゅうめいする ための きぐ。

2) AED

Equipment used to save the life of people who have collapsed due to heart disease



③ 酸素欠乏注意 (さんけつ ちゅうい)

◆ さんそ のうどが ひくい くうきを すわないう きを つけて さぎょうを おこなう。

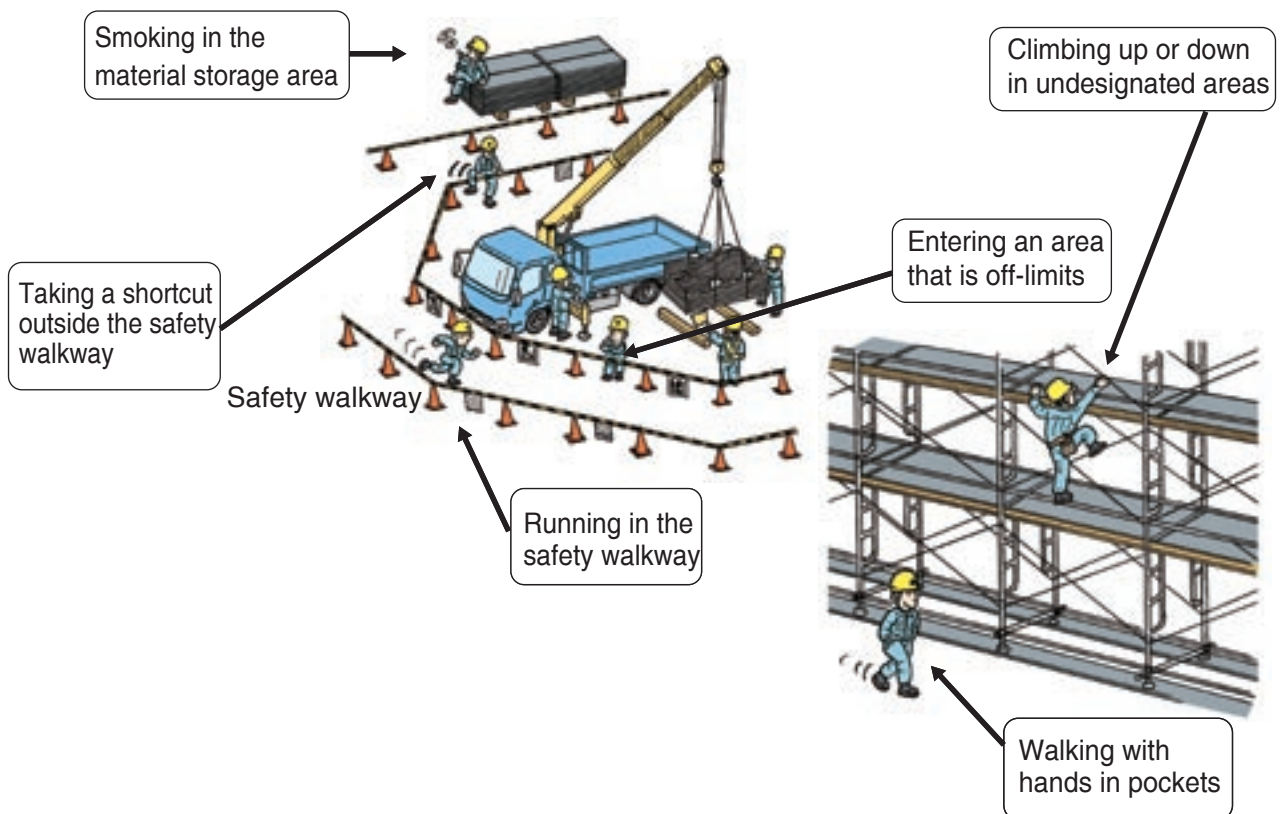
3) Sanketsu chuui

Beware of hypoxia, or breathing air with low oxygen concentrations while working.



13. How Can You Avoid Unsafe Actions?

だい 第13 ふ あんぜんこうどう ふせ 不安全行動はどうすれば防げるか？



Examples of unsafe actions

Need for safety measures

Many work-related injuries result from the actions of workers (acting in an unsafe manner, human error). It is very important to always follow proper work procedures and act in a safe manner to ensure work safety and avoid being injured.

Examples of typical unsafe actions and human error

- 1) Disregarding or dismissing danger → "This amount of risk shouldn't be a problem. I can handle it."
- 2) Taking shortcuts or omitting steps → "It's too much trouble. It'll be in the way."
- 3) Lack of knowledge or experience, not accustomed to the task → Errors of judgment caused by lack of knowledge or experience
- 4) Carelessness → Absentminded, thoughtless

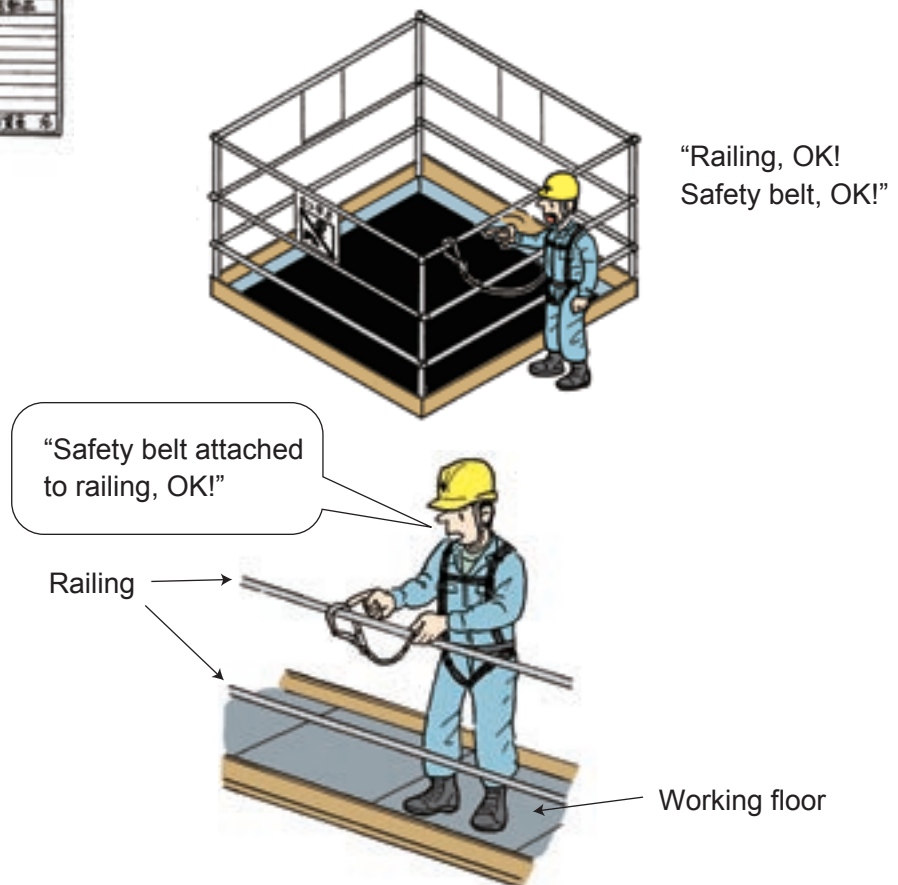
14. What Are the Safety Activities on a Construction Site?

第14 建設現場での安全活動にはどのようなものがあるか？

Activities to anticipate risks



Examples of point and call



Need for safety measures

A variety of safety activities have been developed to prevent work-related injuries on construction sites. It is important that you fully understand the reason for these activities and the way they are done, and that you actively participate in them.

Typical Safety Activities—Safety signs and instructions

1) Kiken yochi katsudou (KYK activities)

This training helps you anticipate areas that could be dangerous and instills a healthy fear of these dangers on the job. KYK activities are always conducted during safety meetings.

2) Shisa koshou de anzen kakunin

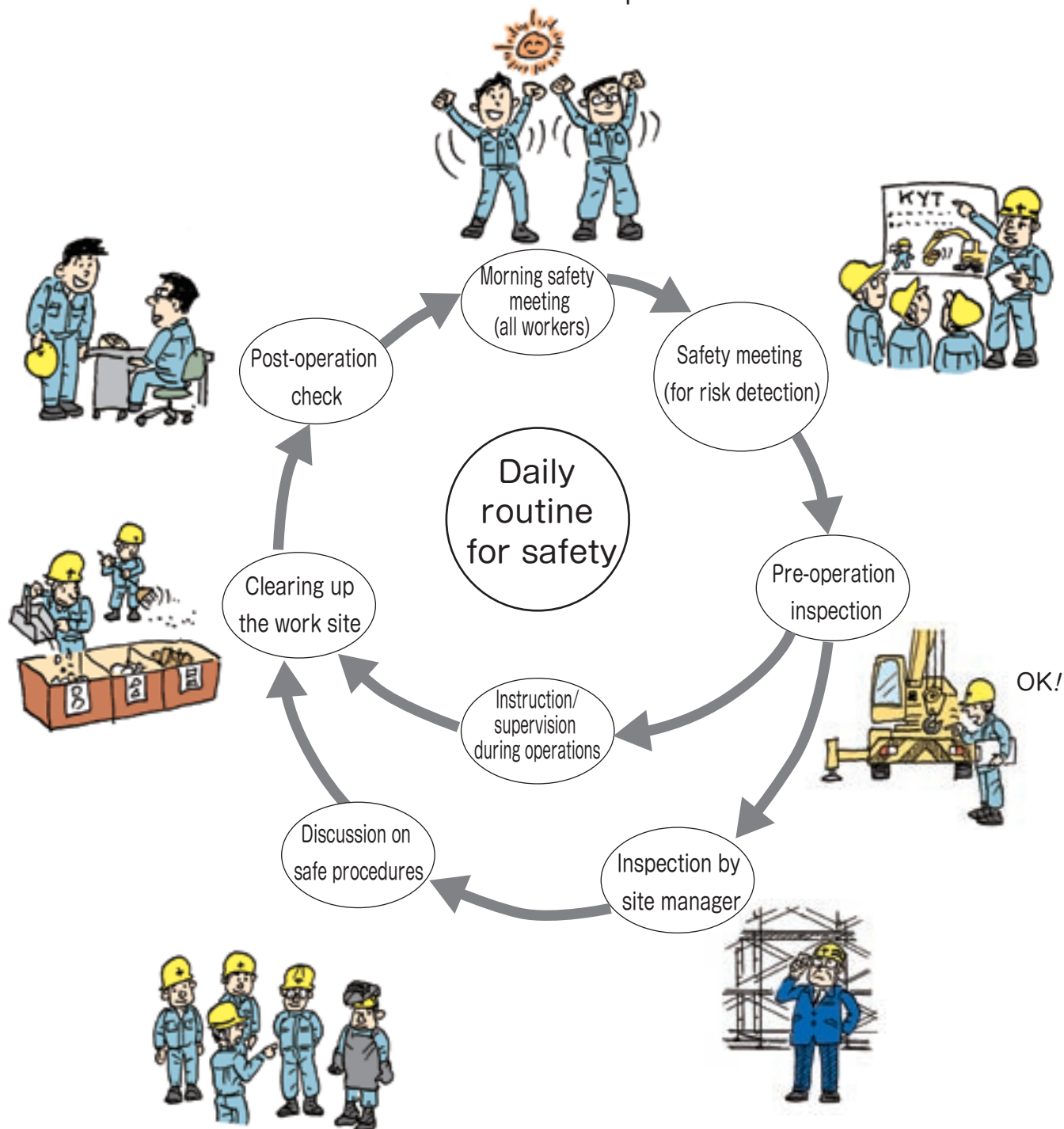
Checking safety conditions by pointing to the item and declaring out loud that it is safe. This method keeps the brain alert and clarifies the information when you hear it said aloud.



15. Understand and Actively Participate in Daily Safety Activities on the Construction Site!

だい けんせつば ばん いちにち あんぜんかつどう りかい せつきよくてき さんか
第 15 建設現場における一日の安全活動を理解し積極的に参加！

Calisthenics broadcast on Japanese radio



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