

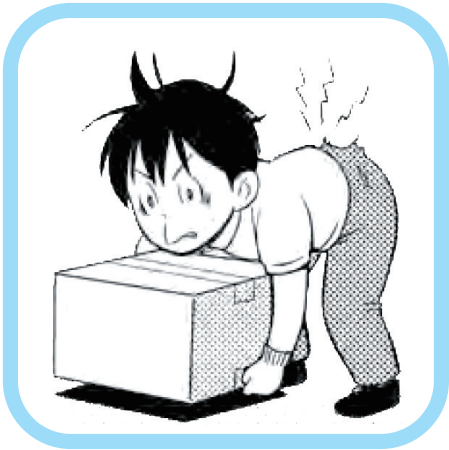
まんがでわかる

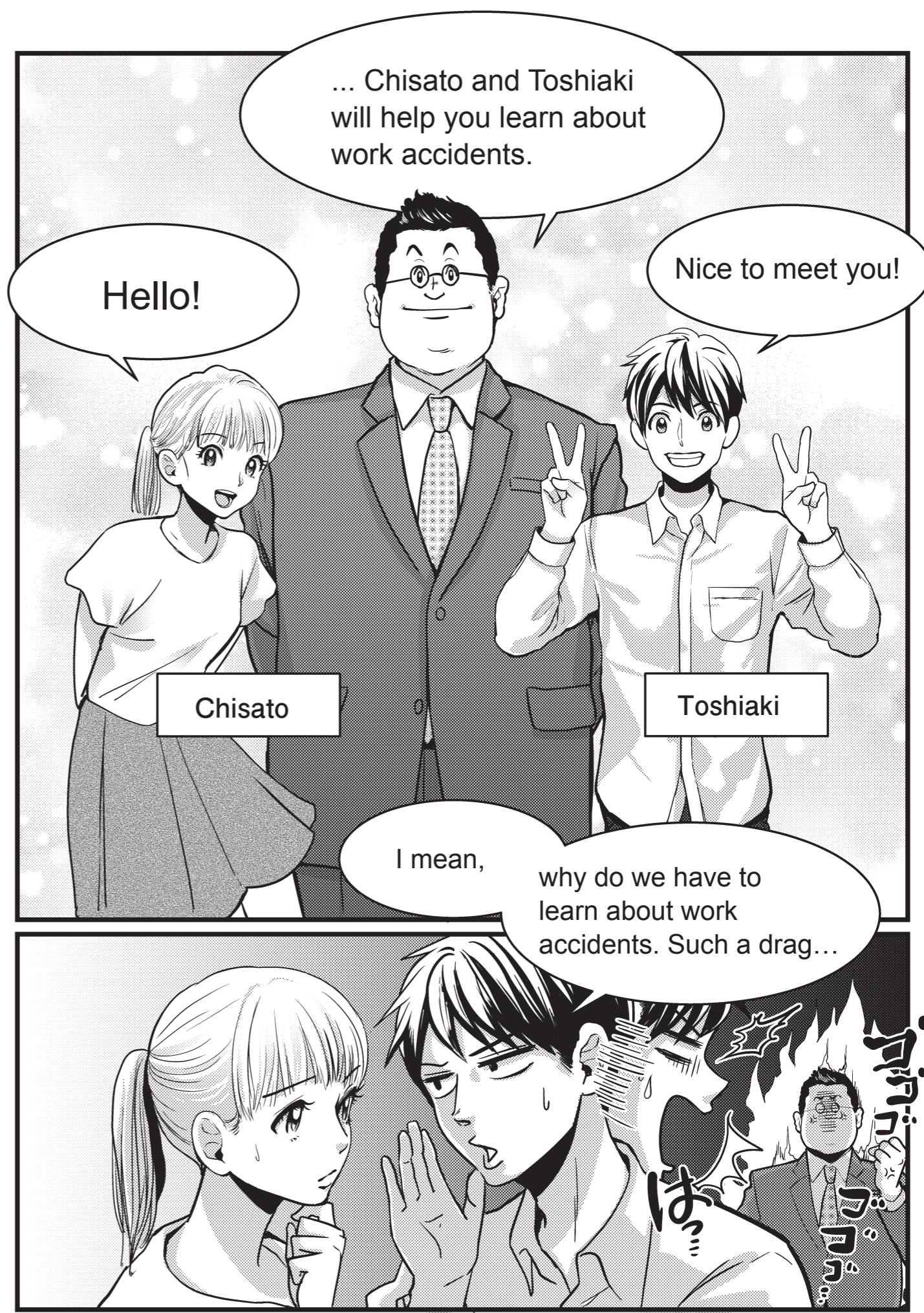
安全衛生と 労災防止の基本

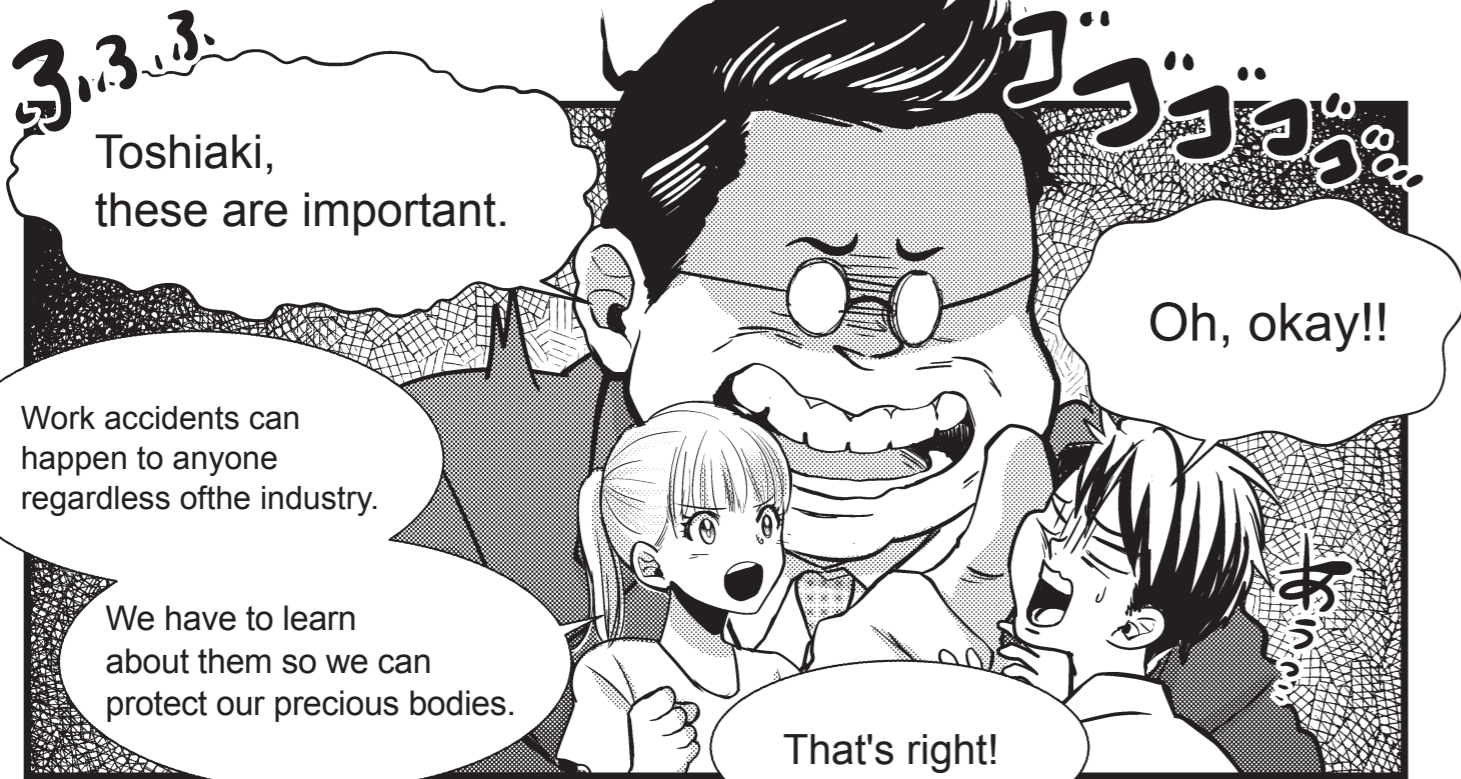


English
英語版

Learn through Manga
Health, Safety, and Injury Prevention for Workers







Toshiaki, these are important.

Oh, okay!!

Work accidents can happen to anyone regardless of the industry.

We have to learn about them so we can protect our precious bodies.

That's right!



Is this a classroom?

So, let's start!

Yes!!



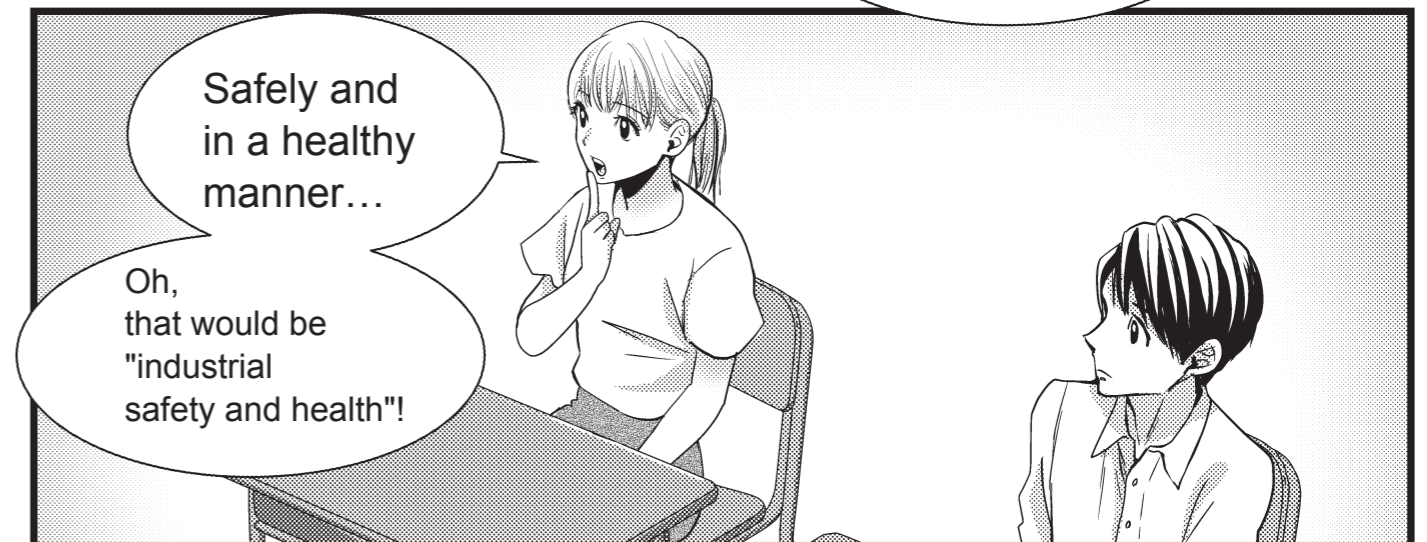
First, let's think about what we can do to prevent accidents.

Work Accidents

Officially called Industrial Accidents

It is important to work safely and in a healthy manner.

Do you know what this is called in one term?



Safely and in a healthy manner...

Oh, that would be "industrial safety and health"!



Industrial Safety and Health

Wow! You know some difficult words.

Of course. It's also simply called "safety and health."

Exactly.

A workplace where workers can work safely and in a healthy manner.

Really?
So, companies are required to protect the safety and health of workers!

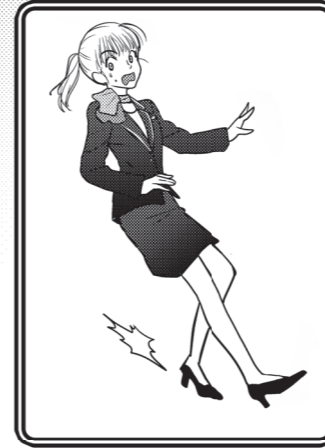
Businesses must provide a workplace that maintains safety and health.

Workers must also be careful, of course.

Toshiaki, you asked earlier why we have to learn about work accidents, yes?

You see, causes of work accidents can be found in any workplace.

On top of that, many accidents actually occur within our immediate surroundings.



Really?



Yes. Not only minor injuries and diseases,

but even cases resulting in severe impairments and deaths.

That's scary....

Take a look at this graph.

This is a summary of fatal accidents and injuries with work absence of 4 days or more.

Ministry of Health, Labour and Welfare
"The Status on the Occurrence of Industrial Accidents in 2018" (2018)

Fatal Accidents
909 People

Deaths and Injuries with Work Absence of 4 Days or More
127,329 People

1 Falls from height
256 people



2 Traffic accidents
175 people



3 Caught or dragged into machinery
113 people



1 Tripping
31,833 people



2 Falls from height
21,221 people



3 Reaction to motion/Improper motion
16,958 people

What!?
909 people lost their lives in one year!?

There are so many accidents by trips and falls from height.

Remember what I said earlier.

Losing your balance on top of a ladder,

losing your footing on the stairs while carrying objects,

tripping over on wet, slippery floors....

Aren't those things that can happen in everyday life?

True. I remember that happening to me.

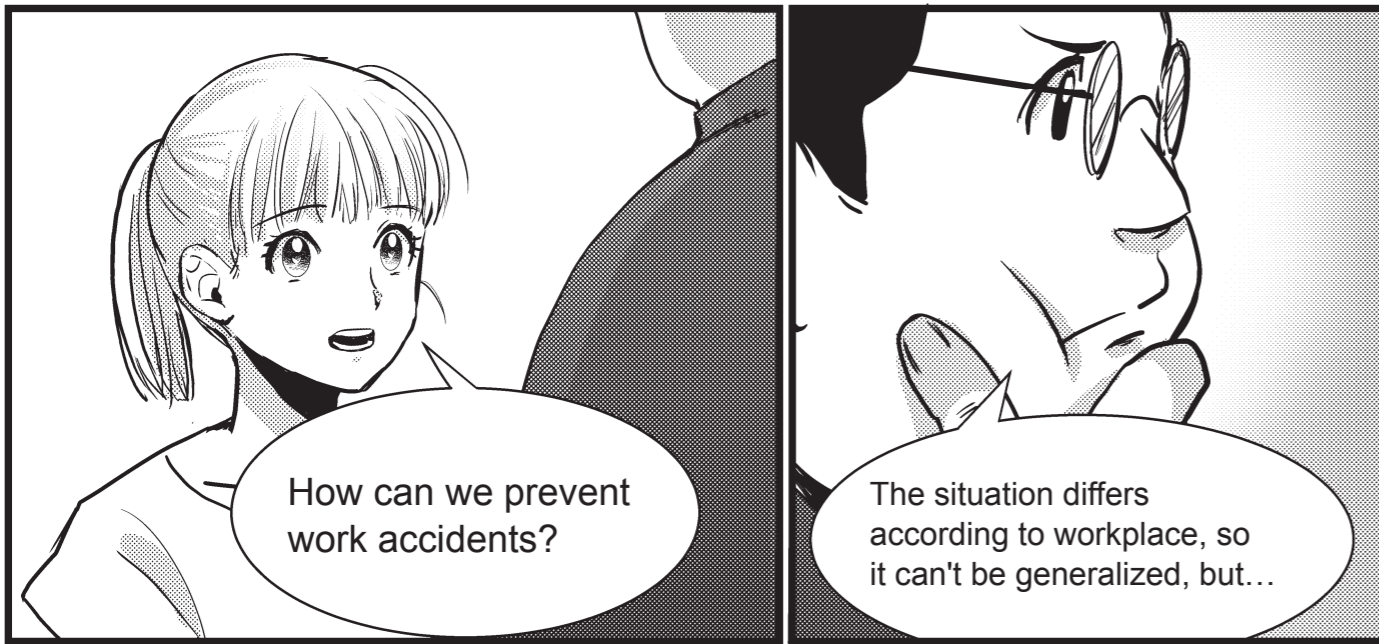
The causes of work-related accidents differ depending on the type of work and workplace.

However, some are preventable by being cautious.

Are people who are involved in accidents newbies like me?

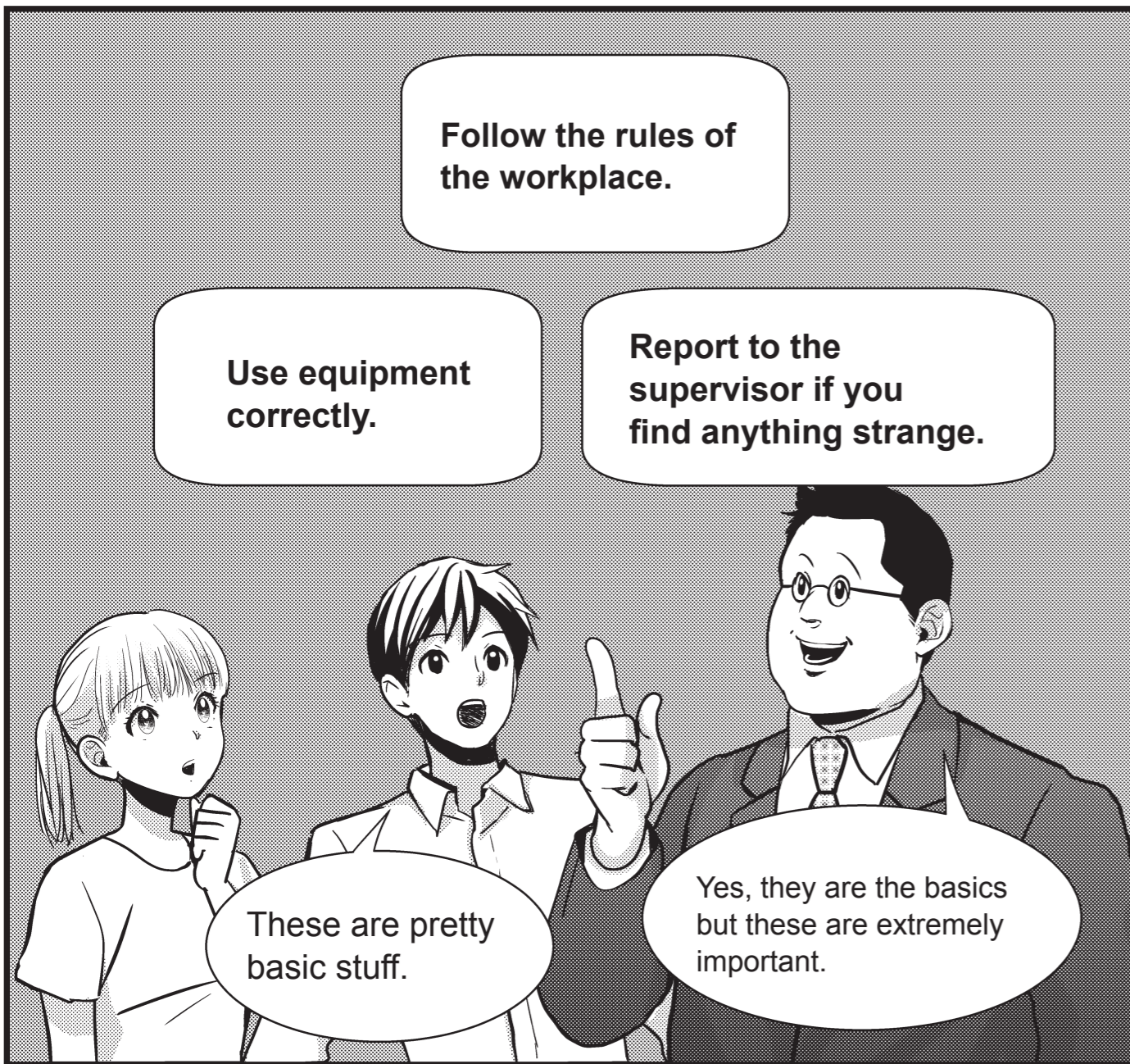
Yes, but...

the experienced can make mistakes when they are not careful.



How can we prevent work accidents?

The situation differs according to workplace, so it can't be generalized, but...



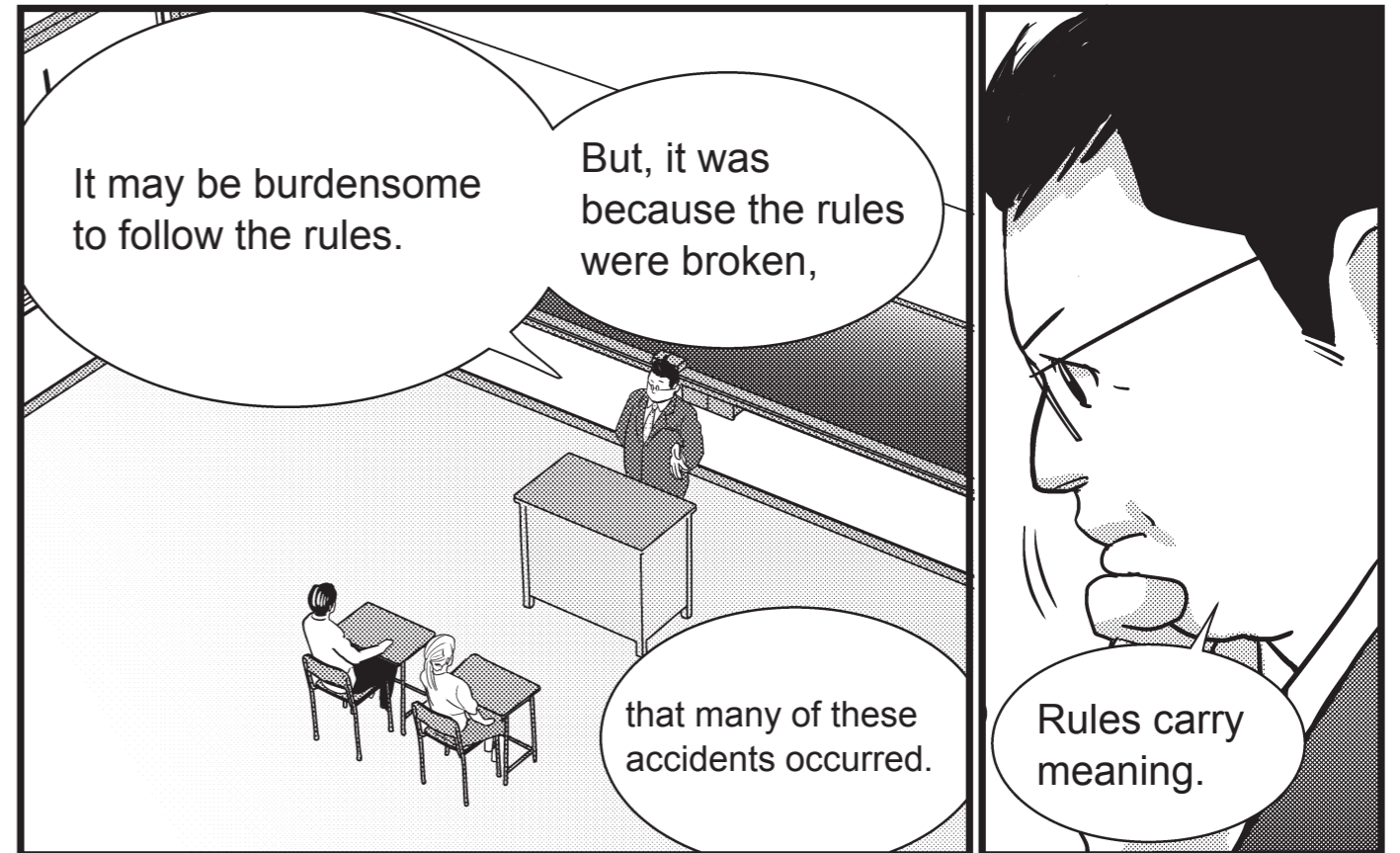
Follow the rules of the workplace.

Use equipment correctly.

Report to the supervisor if you find anything strange.

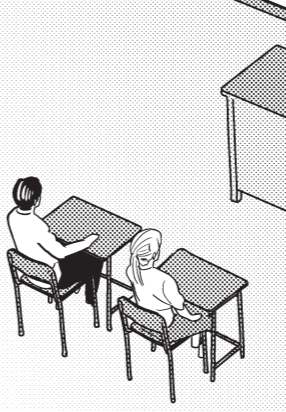
These are pretty basic stuff.

Yes, they are the basics but these are extremely important.



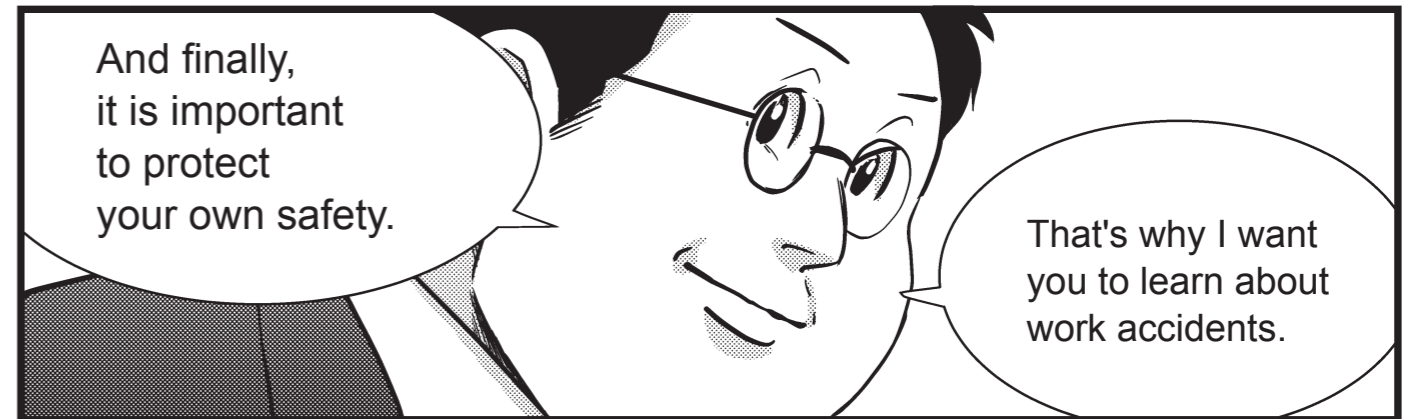
It may be burdensome to follow the rules.

But, it was because the rules were broken,



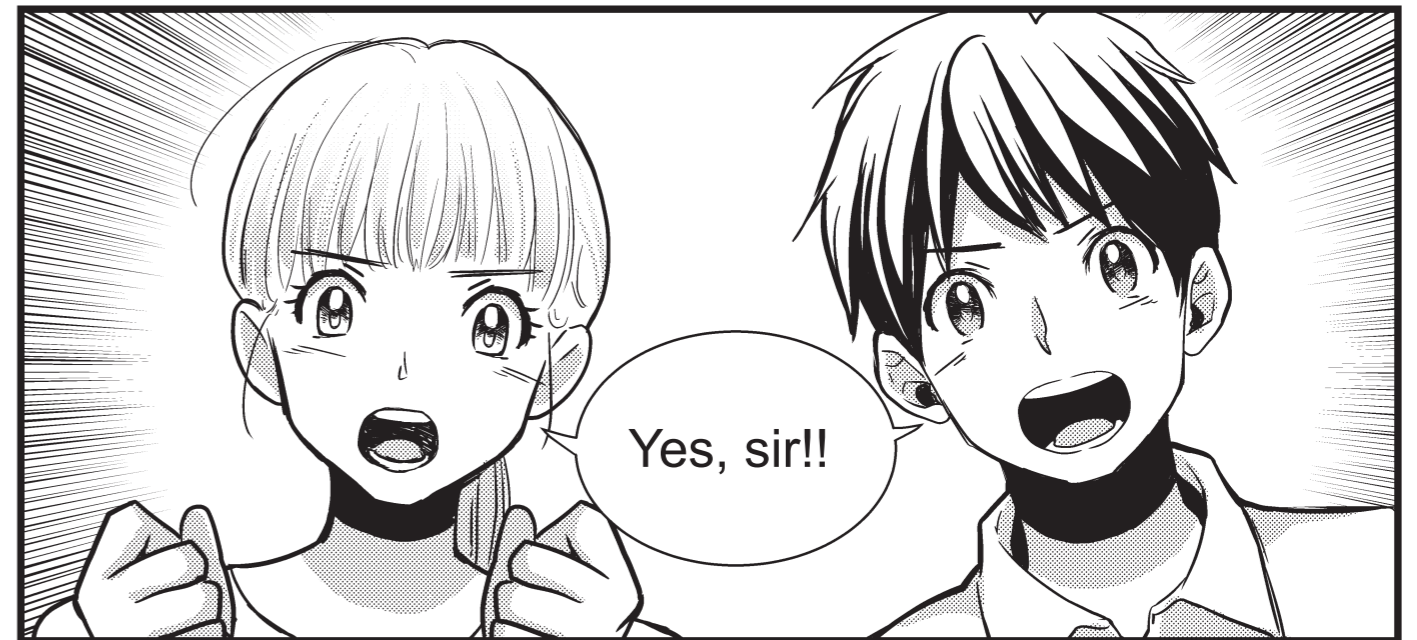
that many of these accidents occurred.

Rules carry meaning.

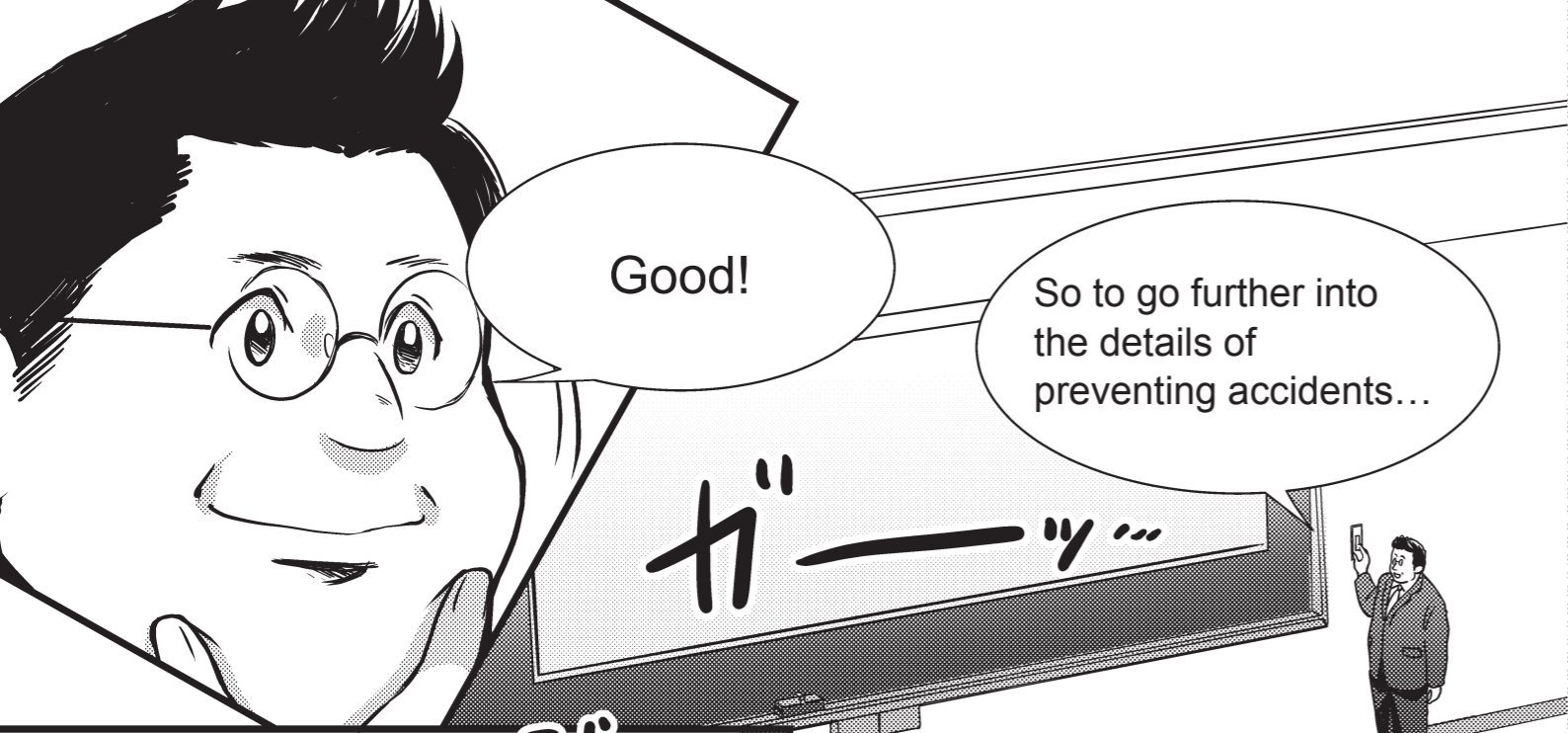


And finally, it is important to protect your own safety.

That's why I want you to learn about work accidents.



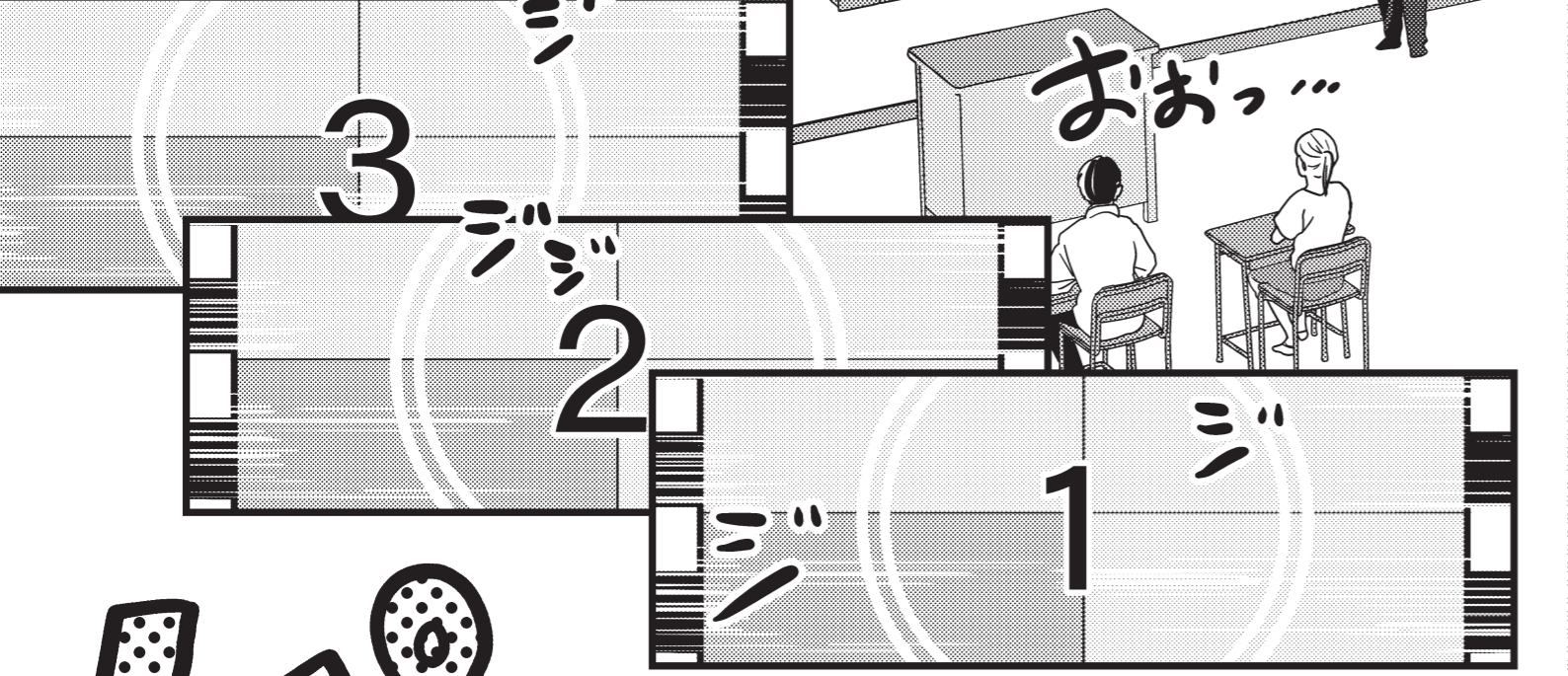
Yes, sir!!



Good!

So to go further into the details of preventing accidents...

ガーン...



3

おあっ...

2

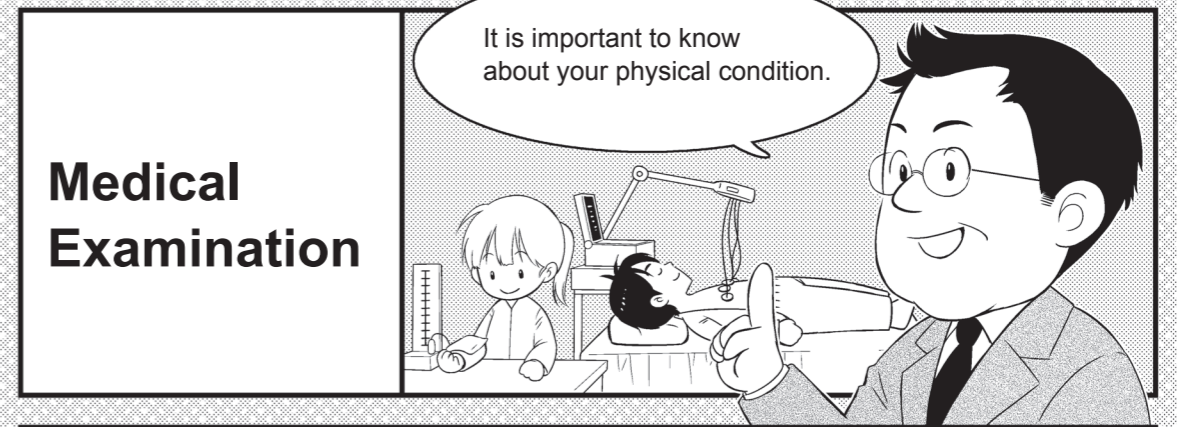
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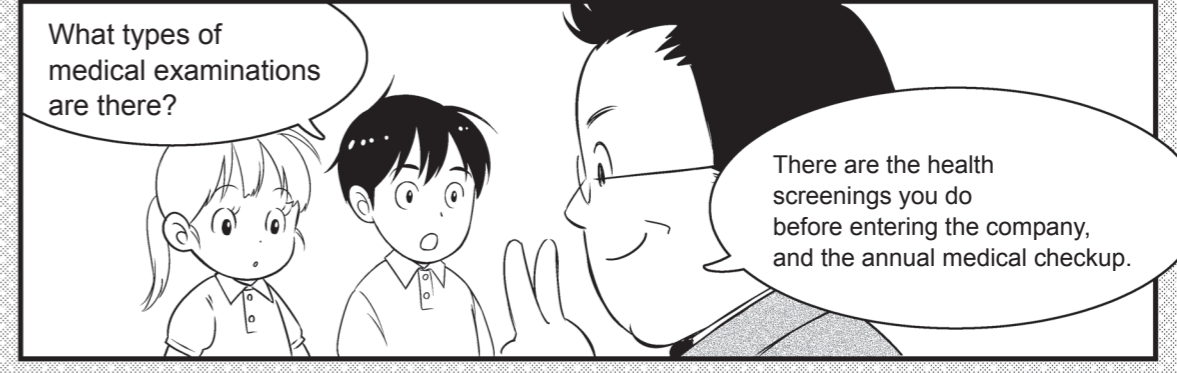
Let's learn! The Basics of Preventing Industrial Accidents

Let's watch a video that sums up the basics of work accidents



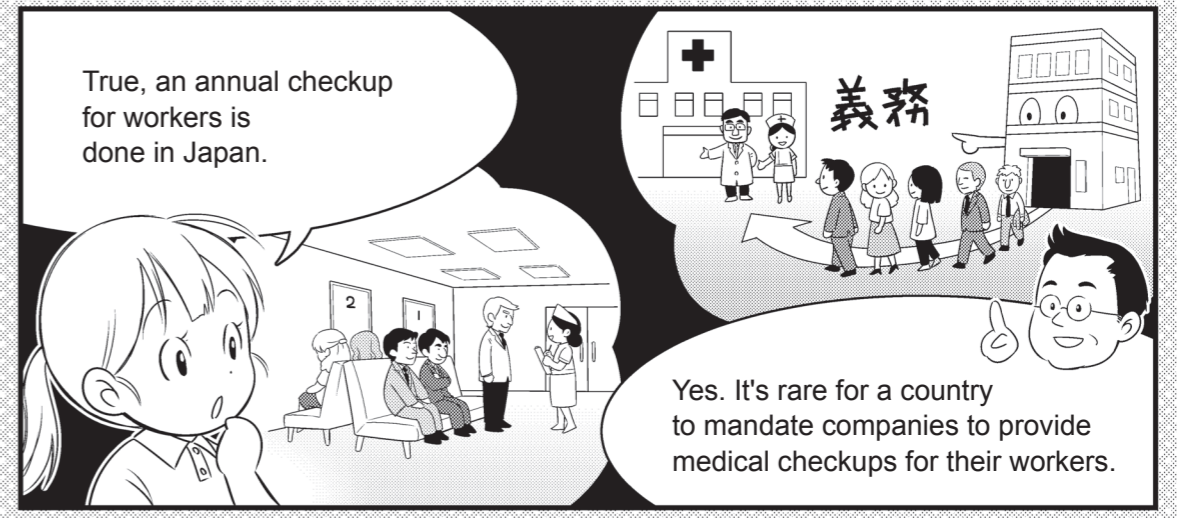
Medical Examination

It is important to know about your physical condition.



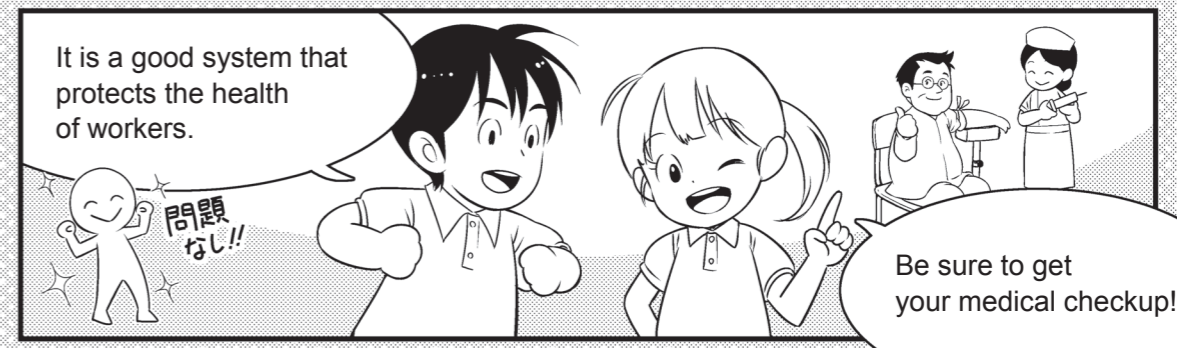
What types of medical examinations are there?

There are the health screenings you do before entering the company, and the annual medical checkup.



True, an annual checkup for workers is done in Japan.

Yes. It's rare for a country to mandate companies to provide medical checkups for their workers.



It is a good system that protects the health of workers.

Be sure to get your medical checkup!

問題なし!!

Tripping

Falls can lead to serious injuries!



First, let's check the places around you that lurk the possibility of falls!



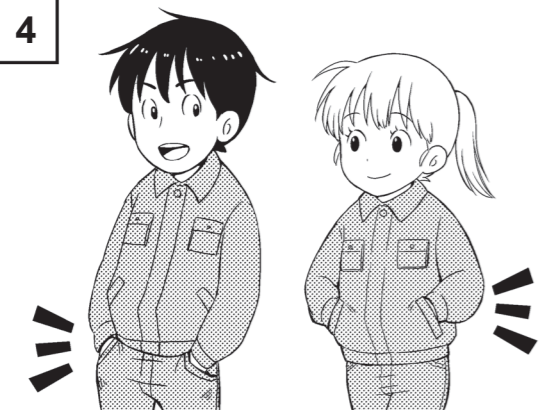
1 Are there objects left in or on pathways, stairs, and exits?



2 Are puddles and messes on floors cleaned up and not left as is?



3 Do your work shoes fit you?



4 Do you put your hands in your pockets when walking?



5 Do you warm up before starting the work?

Falls are the most common work accidents.

60% of all injured persons are taking absence from work for over a month!?

These seem to be quite common among the elderly....

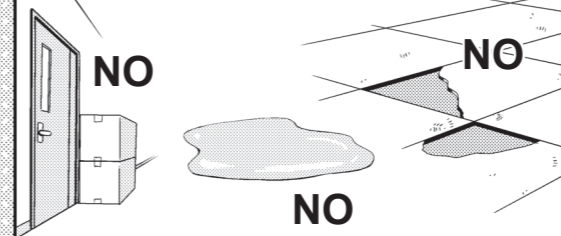
It is crucial to take preventive measures regularly to avoid serious injuries.

Prevention Measures

Have a look into the following examples.

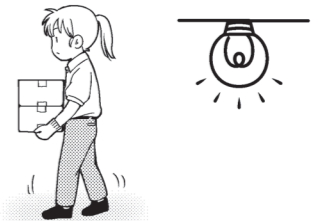
4S: Tidy (Seiri), Orderly (Seiton), Sanitary (Seiketsu), Clean (Seiso)

- Do not leave objects in the walkway.
- Clean up messes on floors.
- Fix floor surfaces that are uneven or unlevel.

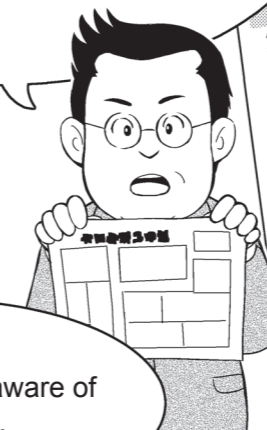
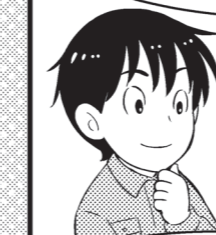


How to prevent falls during work:

- Have enough time when taking action.
- Walk slowly on slippery floors.
- Do not walk where it is difficult to see your footing.



Wearing shoes appropriate for work, and sharing info on slippery areas are also effective.



転倒の危険を予測して対策しよう	
チェック項目	
1	通路、階段、出口に物を放置していませんか?
2	床のホコリや水、油、砂糖などは拭き取らず、その危険を認識していますか?
3	安全に掃除できるように十分な時間と（物）が確保されていますか?
4	転倒を予防するための教育を行っていますか?
5	作業靴は、作業現場に合った靴履きがあり、かつちょうど良いサイズのものを選んでいませんか?
6	ヒールハット履靴を使用して、転倒しやすい靴の危険マップを作成し、表示していますか?
7	指定のある経路や滑りやすい場所などに注意を促す標識をつけていますか?
8	ポケットに手を入れたまま歩くことを禁止していますか?
9	ストレッチ体操や転倒予防のための運動を励行していますか?



It is important to be aware of the dangerous areas.

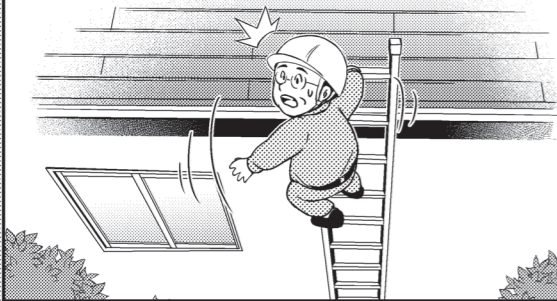
Be extra careful in areas that are marked with stickers!

Falls From Height



Examples of accidents and their prevention measures when working on ladders

Losing your balance on ladders.

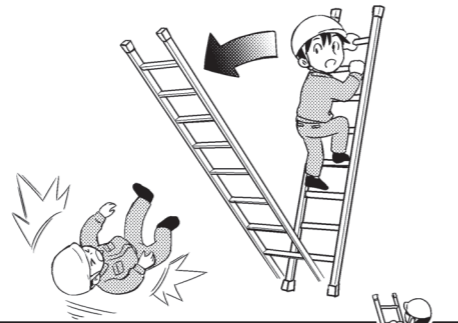


Prevention Measure

Consider other safer ways to conduct operations.

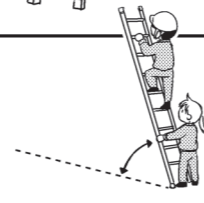


Ladder falling over.

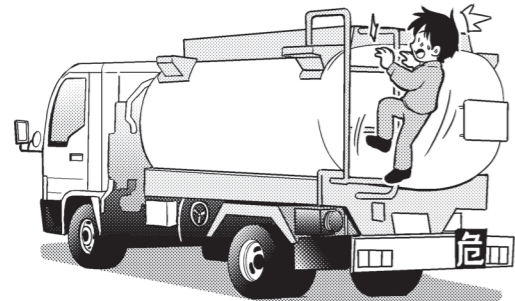


Prevention Measure

Secure the ladder in place or have someone hold the ladder.

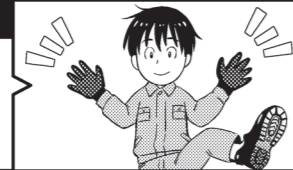


Slipping when going up the ladder.



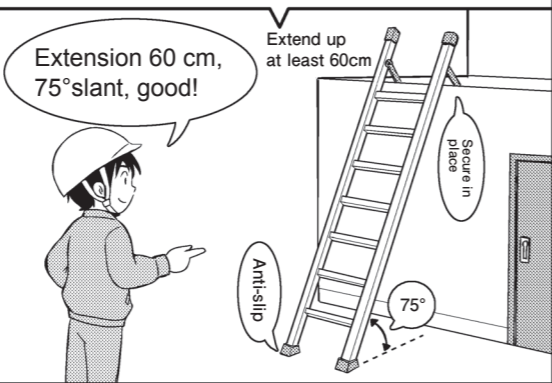
Prevention Measure

Wear slip-resistant shoes and gloves.



How to use ladders safely

When putting up a ladder, level it horizontally at an angle at 75° and extend the ladder at least 60 cm above the point of support.



Extension 60 cm, 75° slant, good!

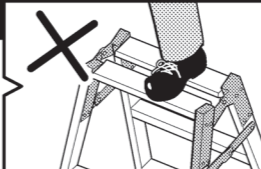
Examples of accidents and their prevention measures when working on step ladders

Losing your balance on the top cap

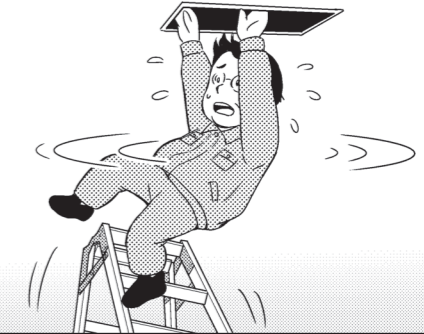


Prevention Measure

Do not go on the top cap.

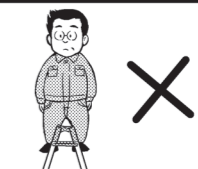


Losing your balance mounting on the top.



Prevention Measure

Do not mount on the step ladder.



Losing your balance while carrying objects.

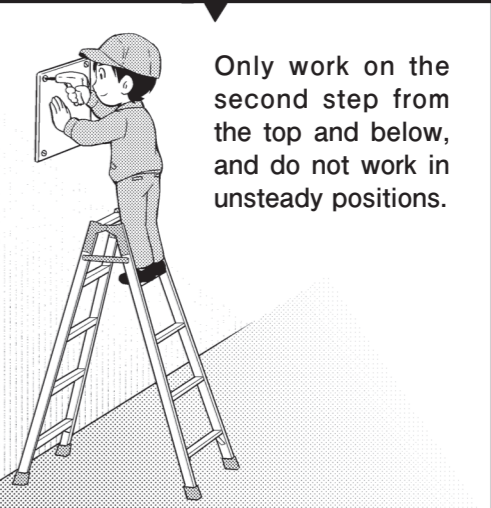


Prevention Measure

Do not climb up or down with objects in your hands.



How to use step ladders safely



Only work on the second step from the top and below, and do not work in unsteady positions.

It is a good idea to always wear a helmet to protect your head.



4 Points to Use Helmets Safely

1. Secure the chin strap in place.
2. Do not wear the helmet at a tilt.
3. Do not wear damaged helmets.
4. Follow the service life.

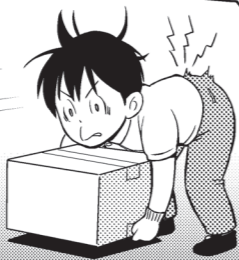
Be especially careful to fasten the chin strap.



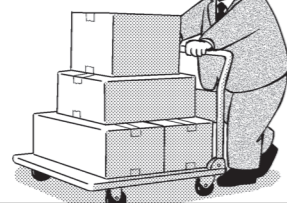
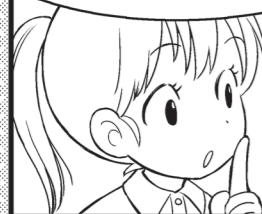
Back Pain



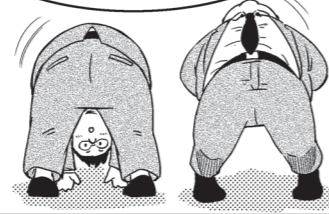
Back pain can easily become chronic, so it is crucial to be careful at all times.



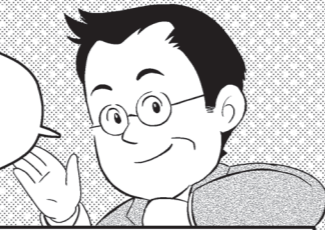
We should use hand trucks and containers when handling heavy objects.



It is also important to stretch daily as a prevention!



If you cannot use hand trucks and containers, carry objects in the proper way.

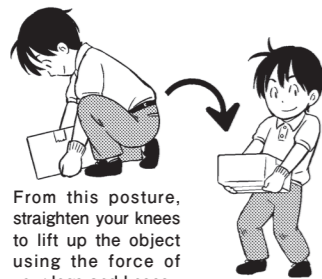


Posture When Lifting Up Objects



NO
Lifting objects using the force of your back without bending your knees.

Prevention Measure



From this posture, straighten your knees to lift up the object using the force of your legs and knees.

Position of Object



NO
Lifting objects that are placed far from your body.

Prevention Measure



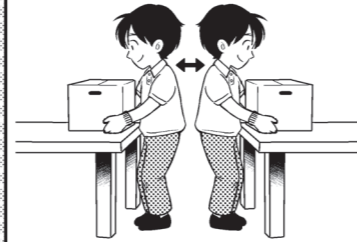
Carry objects close to your body and lower your center of gravity.

Using Your Body



NO
Moving objects with just your upper body.

Prevention Measure



Move your entire body facing the same direction without twisting your hips.

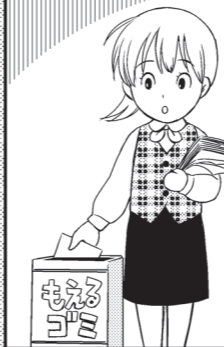
Reference: Japan Construction Occupational Safety and Health Association "Measures to Protect Your Body: Prevent Back Pain Edition"

4S

The 4Ss are practices that aim to create a safe and comfortable work environment from your immediate surroundings.

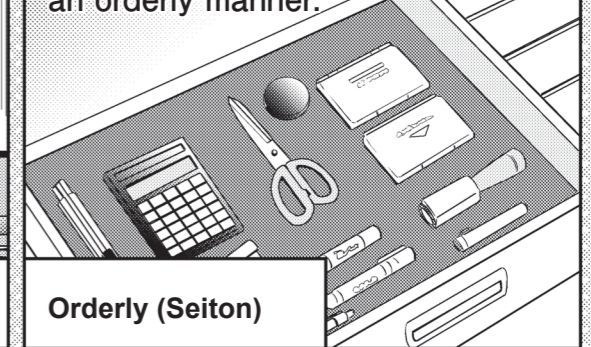


Dispose of unnecessary things.



Tidy (Seiri)

Store necessary items in an orderly manner.



Orderly (Seiton)

Clean (Seiso)

Clean up the workplace.



Sanitary (Seiketsu)

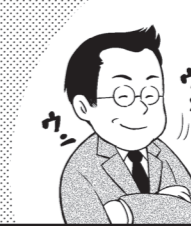
Maintain a sanitary state for both the workplace and workers.



Workplaces that follow these 4Ss will allow everyone there to work comfortably.



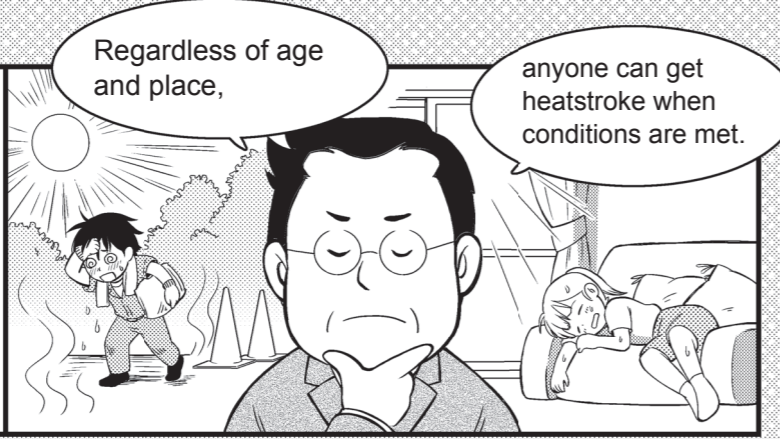
I'll try to apply these points in my surroundings, too!



Reference: Japan Industrial Safety and Health Association "The Basics of 4S"

Heatstroke ※

*Falling ill, such as with a headache, in high temperatures and humidity.



Regardless of age and place,

anyone can get heatstroke when conditions are met.

Here are the prevention measures to avoid coming down with heatstroke during the hot Japanese summers!

Prevention Measure No.1

Frequently replenish fluids and sodium



Prevention Measure No.2

Rest in a cool place



Prevention Measure No.3

Report to someone if you don't feel right



The most important prevention measure is to have a good night's sleep.

It's also important to avoid drinking alcohol, and you should have a fulfilling breakfast.

There is even an index, which considers not only temperatures but also humidity, called WBGT (heat index).

When the WBGT index goes over 28 degrees, there is an increased risk of people having heatstroke.

If heatstroke occurs, immediately provide first-aid.

First-Aid Step 1

Evacuate to a cool place



Lie down here!

Don't leave the person alone!

First-Aid Step 2

Loosen clothing



Relax.

First-Aid Step 3

Replenish fluids with a sports drink

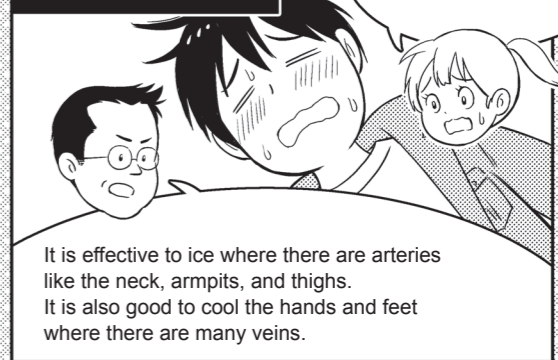


Give him fluids!

Sports drinks are better than water! Make sure to take sodium too.

First-Aid Step 4

Cool down the body



Oh no, his body is very hot!

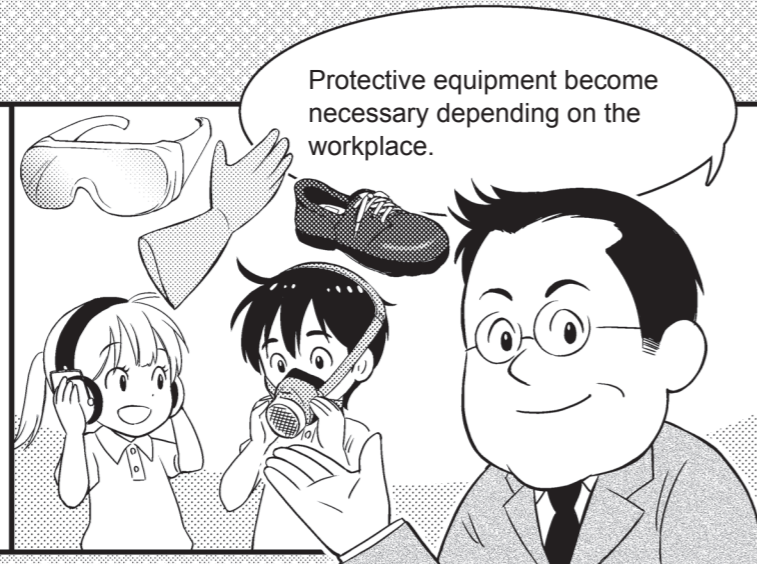
It is effective to ice where there are arteries like the neck, armpits, and thighs. It is also good to cool the hands and feet where there are many veins.

If they have a fever, or are unconscious, that's an especially dangerous case of heatstroke! Call the hospital and transport them immediately.

Heatstroke can lead to death.

It can happen especially when working, so be careful!

Industrial Safety and Health Protective Equipment



Helmets

Protects the head from falling objects and from falls from high places.

4 Points to Use Helmets Safely

1. Secure the chin strap in place.
2. Do not wear the helmet at a tilt.
3. Do not wear damaged helmets.
4. Follow the service life.

Be sure to fasten the chin strap securely.

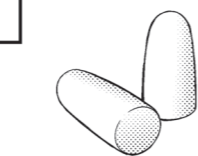


Protective Glasses

Prevents dust and sprays from entering the eyes.



Hearing Protection

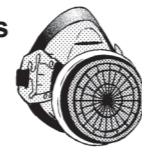


Protects the ears from loud noise. Wear the appropriate protector according to the environment.

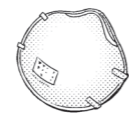
Respiratory Protection

Prevents inhaling of gas and dust in the air.

Respirator masks
Protects from inhaling hazardous gas.



Dust masks
Protects from inhaling dust in the air.

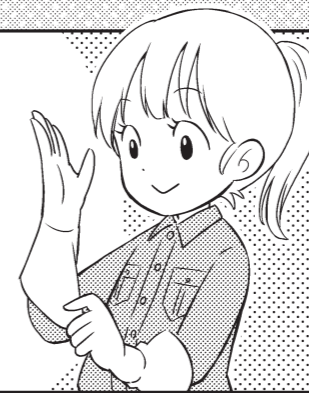


Masks made of gauze or non-woven fabric do not have these effects!



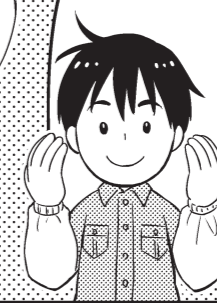
Gloves

Protects against cuts and burns, and prevents objects from slipping when carrying them. Use the appropriate type of gloves (cloth, rubber, etc.) according to the purpose.

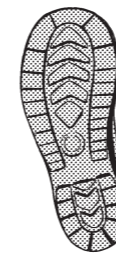


Chemical resistant gloves

Protects the skin from chemical substances.



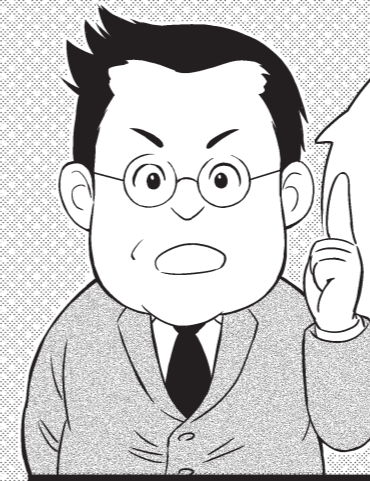
Safety shoes



Protects the feet against heavy falling objects, punctures such as by nails, and pinch-point injuries.

Harnesses

Used to prevent falls from high places.



It is meaningless if you don't wear the appropriate protective gear at the appropriate time and place in the appropriate way!

Safety Measure Step 1

Choose the right protective gear according to the work environment and work details.



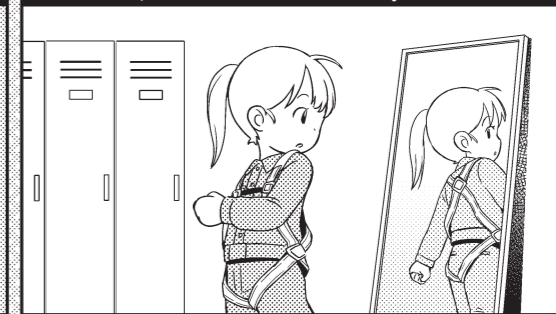
Safety Measure Step 2

Choose protective gear in the right size to fit your body.



Safety Measure Step 3

Wear and use the gear correctly. Otherwise, it won't function effectively!



Safety Signs

Safety signs help workers work safely by illustrating the dangers of the workplace and important information.



There are 5 types of safety signs. Here are some of the major signs!

禁止標識 (prohibition sign)



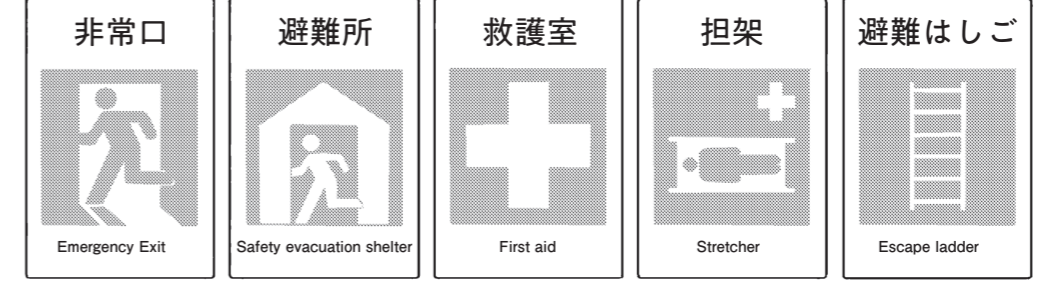
指示標識 (mandatory action sign)



注意警告標識 (warning sign)



安全状態標識 (safe condition sign)



防火標識 (fire equipment sign)



There are so many types of safety signs.

These signs help us understand the dangers and safety easily.

Various safety signs are used depending on the workplace.

Check to see what safety signs are in your workplace.

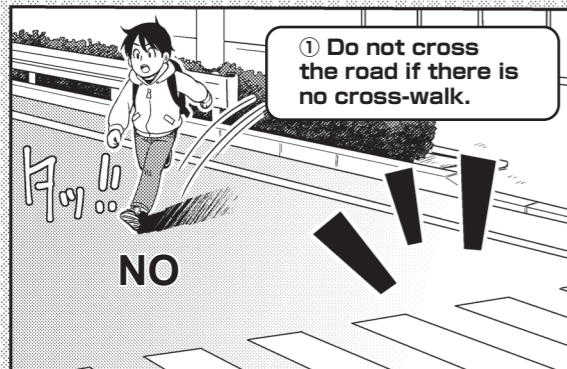
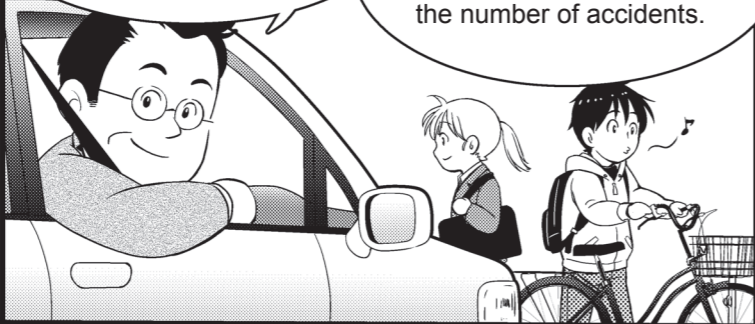
Okay

Reference: Japan Industrial Safety and Health Association "For Diverse Workers: A Handbook on Safety Signs"

Commuting

Dangers exist even when commuting to work.

Obviously, following traffic rules will definitely decrease the number of accidents.

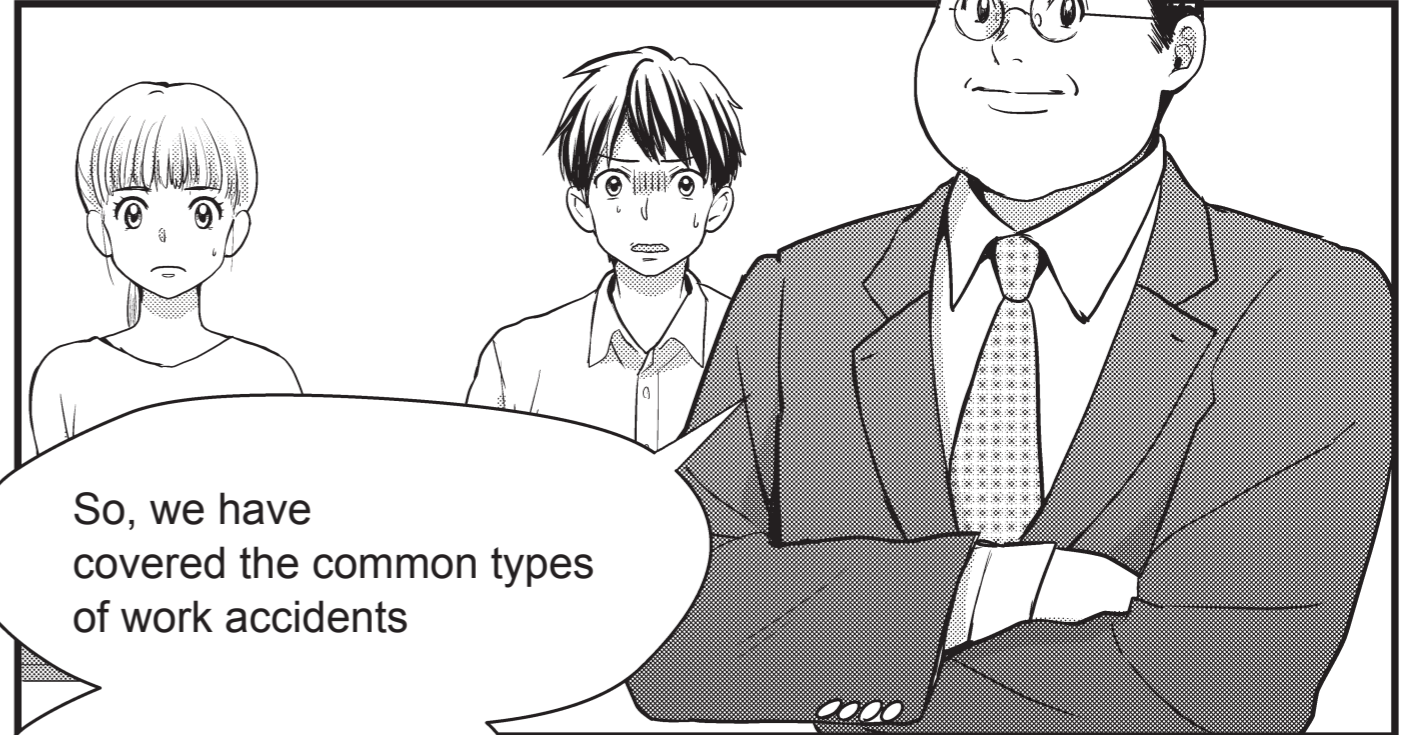
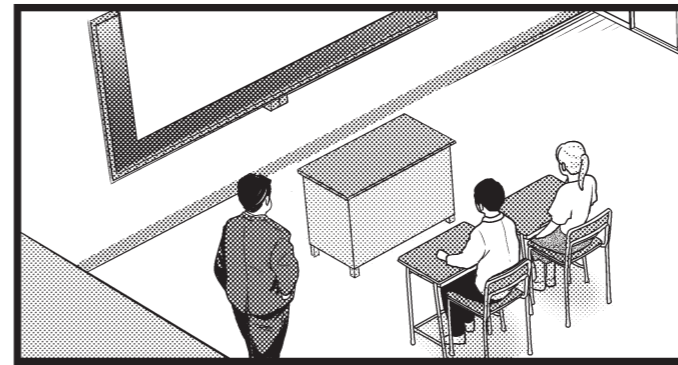
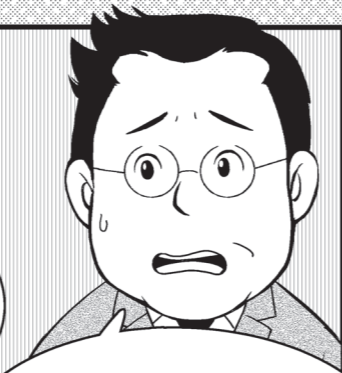


My livelihood will be affected if I can't work during treatment.

Your family will be sad if you become injured.

In some cases, it might leave you with permanent damage.

Remember that following traffic rules will protect your body!



So, we have covered the common types of work accidents.

What did you think?

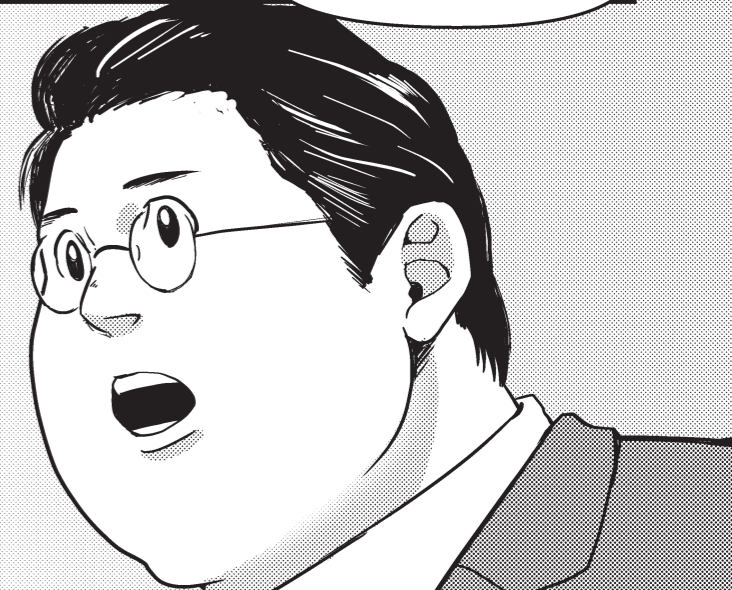
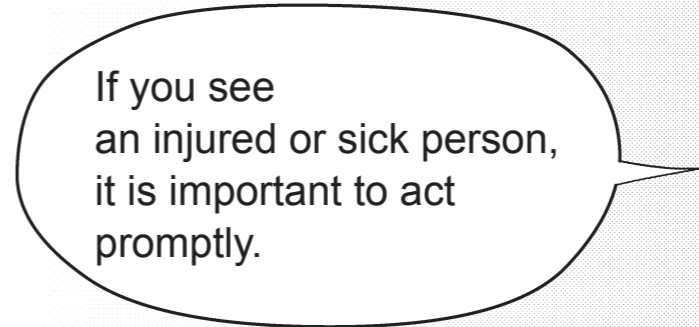


There are dangers lying everywhere close to us....

Toshiaki, you should be extra careful.



If you see an injured or sick person, it is important to act promptly.





If you find someone injured or sick,

quickly let the other people know.



If you become hurt, don't bear the pain, but tell others.

In case of an emergency, ask the supervisor to call the ambulance!



On to the next topic,

let's look at the details of work accidents by each industry!

Learn through Manga

Health, Safety, and Injury Prevention for Workers

Issued in March 2020

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Planning: Mizuho Information & Research Institute, Inc.

Supervised by: The Promotion Committee for Industrial Safety and Health Teaching Material Preparation,
Japan Industrial Safety & Health Association

Production: Sideranch Inc.



症状・病状説明のための 指さしシート

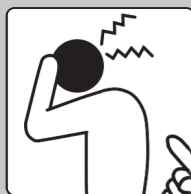
Sheet for pointing to symptoms and their descriptions

このシートの利用方法 | How to use this sheet

例 | Example

病状と、その程度を示して伝えましょう。

Describe your condition and its severity



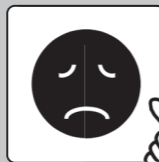
頭が痛い

I have a headache



我慢できる

Tolerable



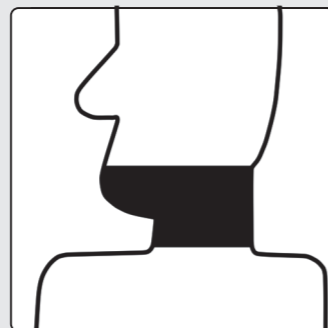
かなりつらい

Very severe



頭が痛い

I have a headache

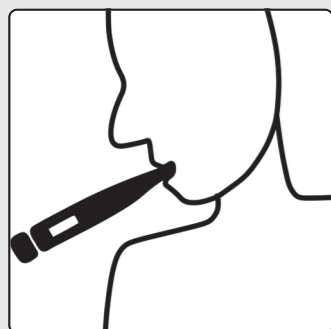


のどが痛い

I have a sore throat

せきがでる

I have a cough



熱がある

I have a fever



腰が痛い

My lower back hurts

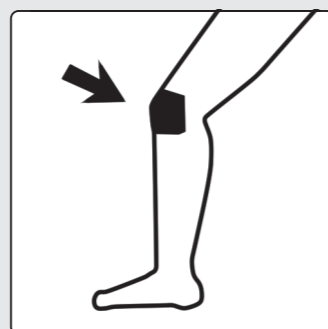
足がしびれる

My legs are numb



めまいがする

I feel dizzy



膝が痛い

My knee hurts

曲げられない

I cannot bend my knee



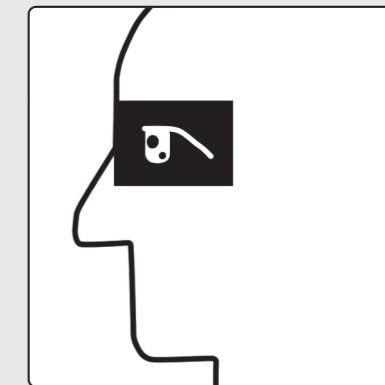
おなか(胃)が痛い

I have a stomachache



かぶれた

I have a rash (in one place)



目が痛い

I have sore eyes

下痢

I have diarrhea

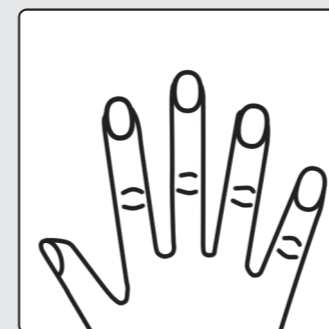
発疹がでた

I have a rash (all over)

目がかゆい

I have itchy eyes

怪我をした | injured myself



転倒した

I fell down

落ちた

I fell (from...)

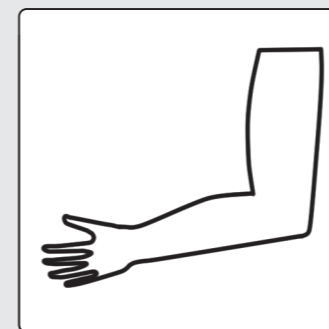


刺さった

I picked myself

やけどした

I burned myself



切った

I cut myself



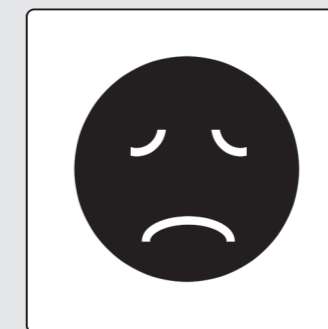
ぶつかった

I bumped (against...)



我慢できる

Tolerable



かなりつらい

Very severe



For inquiries about this document, please contact:

Safety Division, Industrial Safety and Health Department, Labour
Standards Bureau of the Ministry of Health, Labour and Welfare