

Follow Safe Practices!!

# Otherwise, You Could Be Injured!



A-Frame LADDER



LADDER

# Preface

To the P&G site employees and OSCVs:

We can distribute this easy-to-understand booklet with full of cartoons describing various fall incident scenes and preventive actions based on actual cases. All of the contents of this booklet are derived from safety reference handbooks published by "The Low-Rise Housing Safety & Hygiene Association of Osaka (住宅安全衛生協議会大阪)". Original handbooks were developed for field workers who are engaged in building residential structures. The suggested Action and Guidance in this booklet may not fully match with P&G's recommendation, but we can learn a lot from here.

August 2002  
Corporate HS&E-Asia



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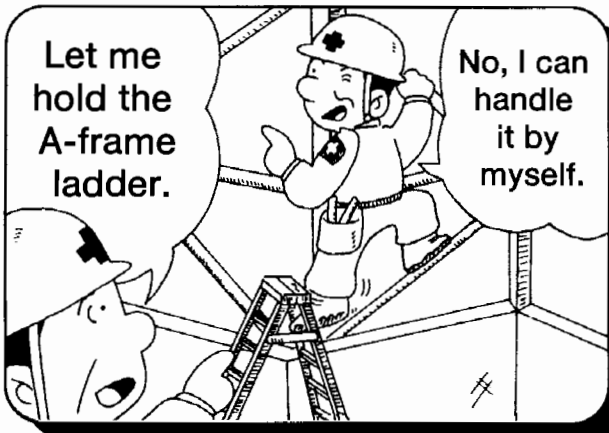
In Spite of a Risk Prediction (PR)



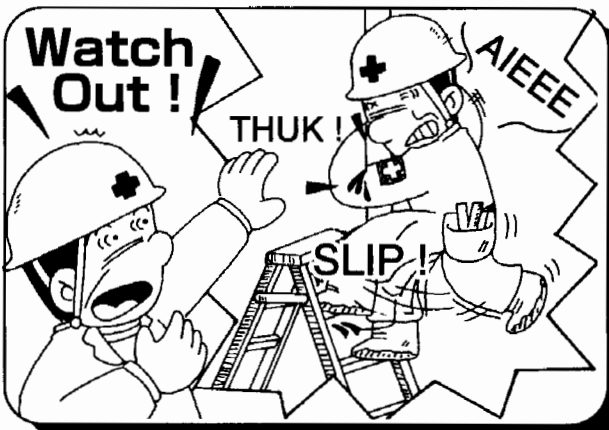
Monday, May 22  
 At around 2:30 P.M.  
 Fine in weather (rainy yesterday)  
 41 years old  
 Exterior Assembler  
 14 years' experience



Risk Prediction (RP) was done.  
 The two were assigned to work in pairs



He was working alone on the A-frame ladder.



He slipped and got off balance. He instinctively held tight the corner frame, and was stabbed deep on his left arm.  
 LWD (Lost Work Days) : 30 days

## ■ Incident Scene

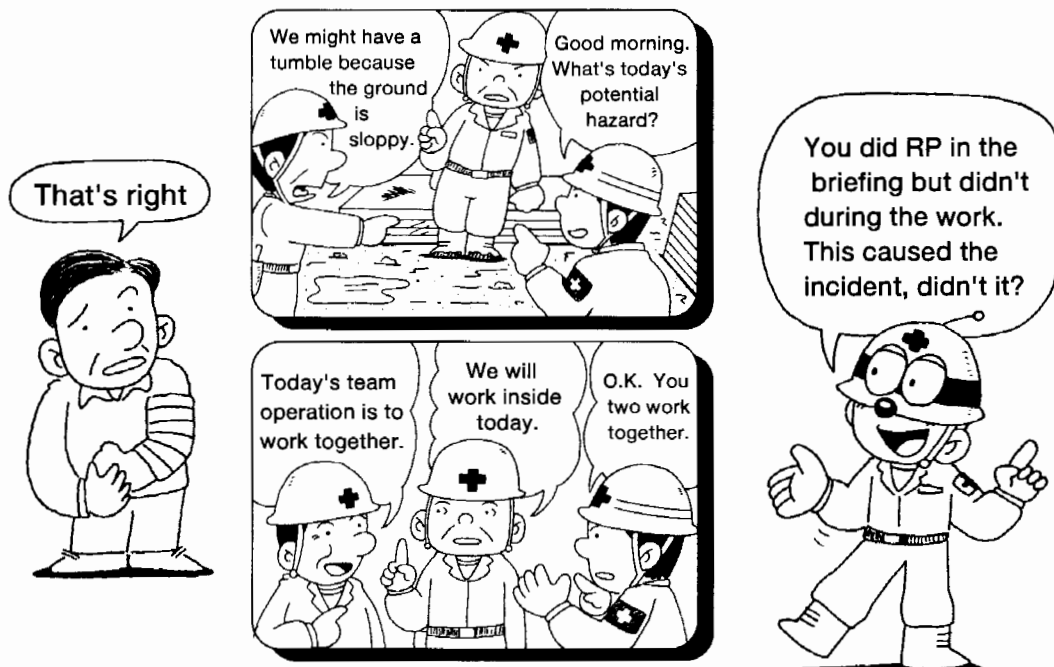
On Monday, May 22 (at about 2:30 P.M.), he was working on a A-frame ladder in the corner to frame the 1st floor of a two-storied house.

The instruction on pair work inside the house was delivered during a briefing in the morning because the ground remained sloppy from rain on the previous day, although it was fine on the incident day.

In spite of the instruction, he worked alone, and his muddy shoes caused him to slip. He lost his balance and instinctively held tight the corner frame. He received a cut on his left arm. He was given a diagnosis of an open wound on the left forearm and obliged to take 30 days off.

## ■ Action and Guidance

- 1 Work in pairs
- 2 Perform the risk prediction. Clear the mud off the shoes before setting to work.
- 3 Encourage workers to keep safety awareness in mind.



Even a person with 20-year experience

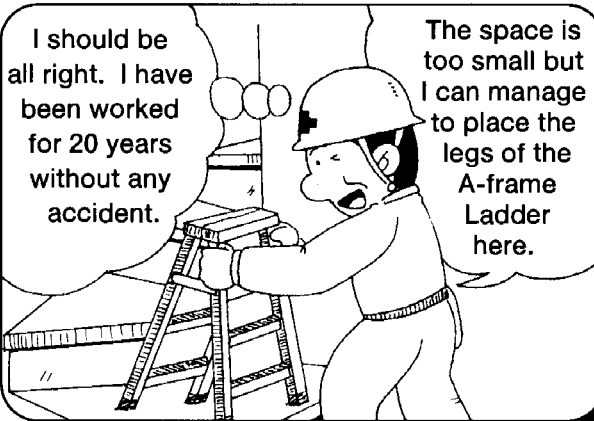
Only 20 minutes left for today's work, OK.



Tuesday, October 3  
At 5:10 P.M.

Fine in weather  
41 years old Carpenter  
22 years and 6 months' experience

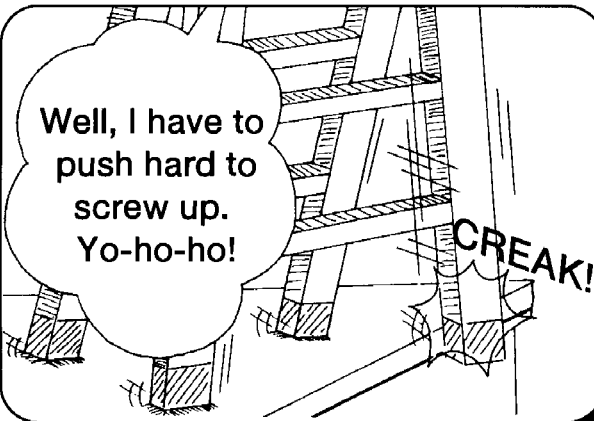
I should be all right. I have been worked for 20 years without any accident.



The space is too small but I can manage to place the legs of the A-frame Ladder here.

He set the A-frame ladder on the small stair landing near the low-lying entrance.

Well, I have to push hard to screw up. Yo-ho-ho!



When he pushed against the board to screw up, the A-frame ladder moved. He did not aware of it.

I didn't know a leg had lost its standing.



When he climbed down, the A-frame ladder shook. He lost his balance and fell down on the floor. He had his haunch bone fractured

LWD: 30 days.

### ■ Incident Scene

At around 5:10 P.M., on Tuesday, October 3, Mr. F, a carpenter with more than 20 years' experience was working on screwing up to fix wall boards on a A-frame ladder placed near the side of the low-lying entrance of a house. During this work, he did not pay careful attention to the position of the A-frame ladder.

When he pushed hard against a board, the A-frame ladder got off to the side. He was unaware of this, and tried to get down from the A-frame ladder. They wobbled and he fell down to the floor, losing his balance.

He bumped his back hard against the floor and had his haunch bone fractured. He could not work for about 1 month.

### ■ Action and Guidance

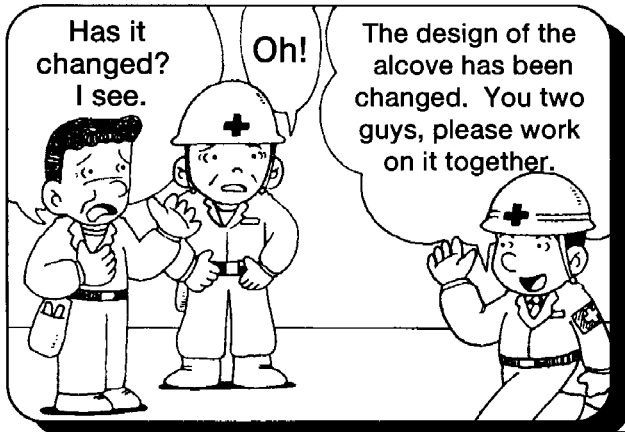
- 1 Confirm that the enough space is secured for setting a A-frame ladder.
- 2 At a place where safe space is not available, a temporary scaffold should be installed.
- 3 Use a A-frame ladder with flexible legs. Set the A-frame ladder with two of the legs on the first step of the staircase. Keep it close to the working object and away from the low-lying entrance.
- 4 Encourage workers to keep safety awareness in mind.
- 5 Carry out the promotion of the risk prediction.



If experience served to eliminate hazards, no incident would have happened to veterans. Remember what state of mind you had when you were a beginner.



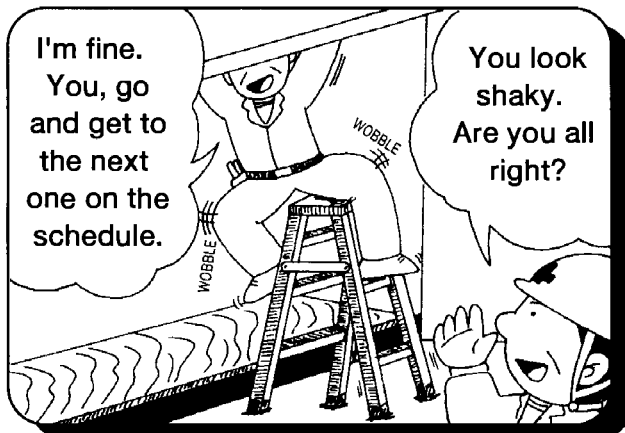
Hasty Work Needs Extra Care



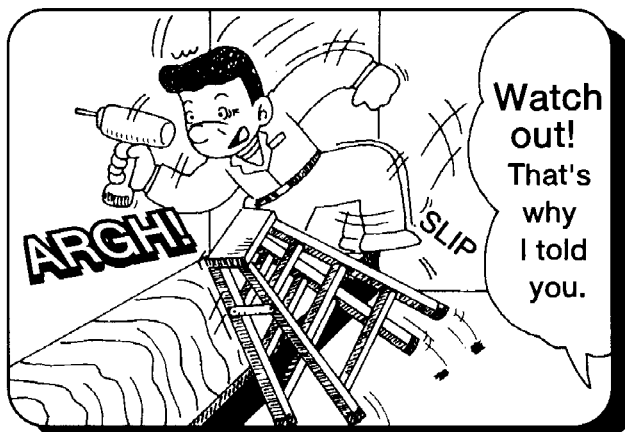
Saturday, April 15  
 At around 10:00 A.M.  
 Fine in weather  
 47 years old Carpenter  
 20 years' experience



He set to work on the change in the alcove without his partner's help.



The A-frame ladder could not be placed in the right place due to the platform in the alcove. He had to work at full stretch toward the ceiling.



He slipped and fell down with the A-frame ladder, losing his balance. He had his rib bone broken.  
 LWD: 20 days.

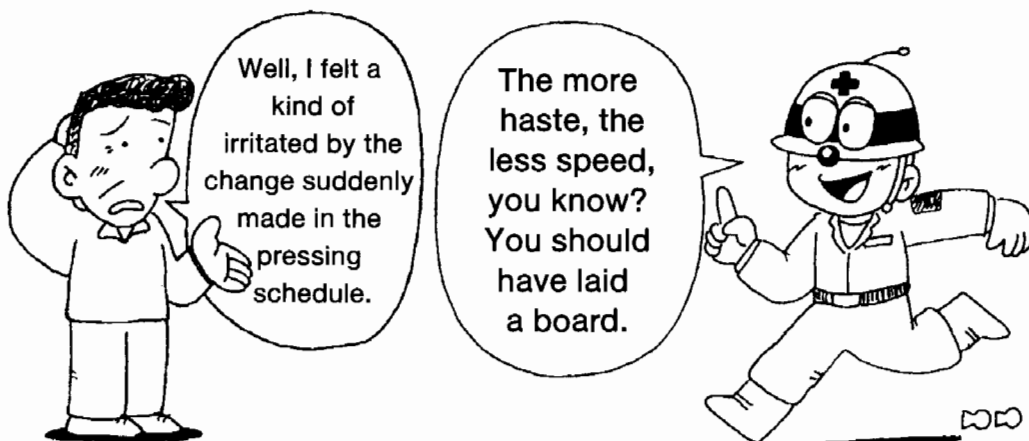
## ■ Incident Scene

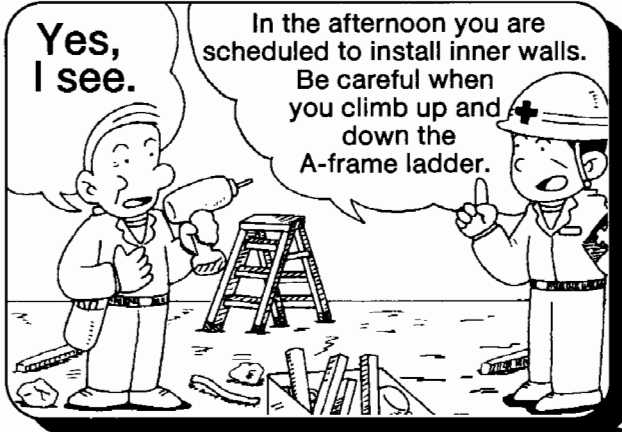
Mr. A, a carpenter, was a member of the team for the interior construction of a two-storied house. At around 10 A.M. on Saturday, April 15, he started working on the alcove by himself. Earlier in the morning, his supervisor told him to work on the design change of the alcove with the carpenter B. He, however, let his partner proceed to the next process, considering the work schedule.

He was engaged in the design change on the ceiling of the alcove, standing on a A-frame ladder, which was not placed in a proper position due to the platform in the alcove. When he stretched out to the ceiling, he slipped and lost his balance. He fell down together with the A-frame ladder. He bumped his chest against the A-frame ladder and had his rib bone fractured. He could not work for 20 days.

## ■ Action and Guidance

- ① Lay a board of 12 mm in thickness on the platform of the alcove and then place a A-frame ladder, so that the surface of the platform is not damaged.
- ② Use not one but correctly designed A-frame ladders (two-point support).
- ③ Work in pairs. (Never work alone)
- ④ Follow instructions by a field supervisor.
- ⑤ Confirm safety before work.

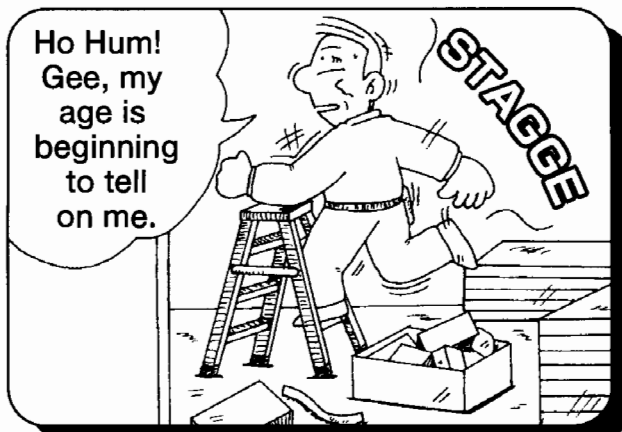




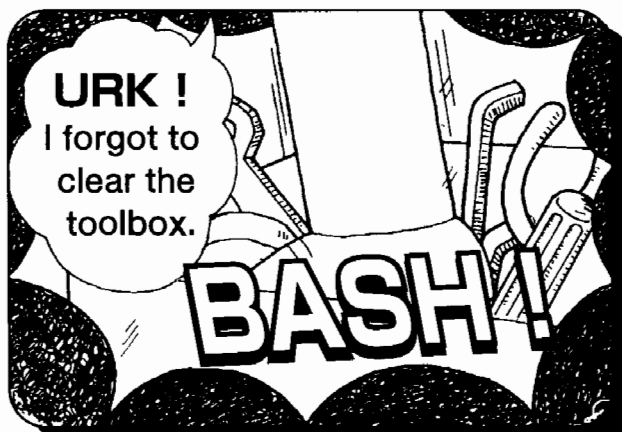
Monday, February 27  
 At around 2 P.M.  
 Cloudy in weather  
 65 years old    Assis-  
 tant carpenter  
 15 years and 2 months  
 in experience



Mr. H, who is an aged  
 worker, finished the  
 immediate portion of  
 his assignment and was  
 getting down the A-frame  
 ladder.



When he just put his  
 left foot on the second  
 step, he lost his bal-  
 ance.



He jumped off on the  
 right leg and crushed  
 into the toolbox. He  
 had the joint of his right  
 leg fractured.  
 LWD: 30 days

### ■ Incident Scene

At around 2 P.M., on Monday, February 27, Mr. H, an assistant carpenter, (65) was going to climb down a A-frame ladder after he finished his work. When his left foot reached to the 2nd step, he lost his balance. He jumped down on the right leg and plunged into his toolbox that was left on the floor in a disorderly manner.

He had the joint of his right leg fractured and could not work for 30 days.

### ■ Action and Guidance

- 1 Make thoughtful arrangements for aged workers.

(Reasonable assignment → Prohibition of work at high)

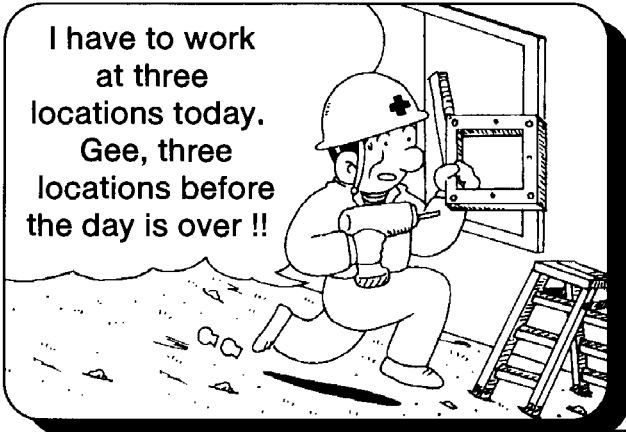
- 2 Organize and clean up toolboxes and materials. Keep the working area clean.

- 3 Don't stand on the top of a A-frame ladder when working.



Why Me on Sunday?

I have to work at three locations today. Gee, three locations before the day is over !!



Sunday, August 21

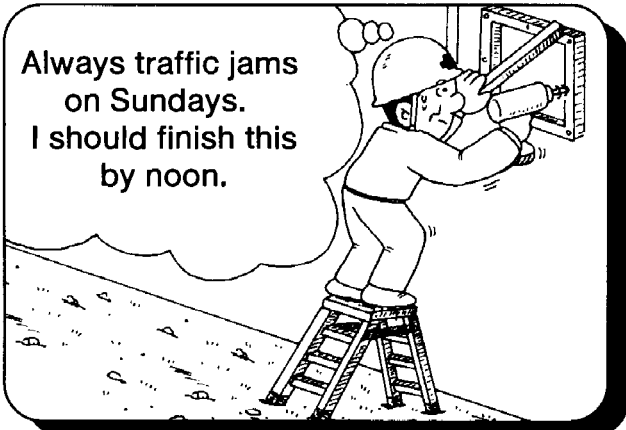
At around 10 A.M..

Fine in weather

52 years old Kitchen assembler

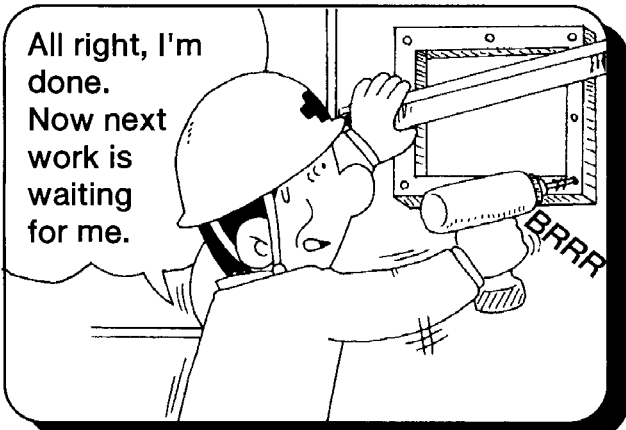
33 years' experience

Always traffic jams on Sundays. I should finish this by noon.

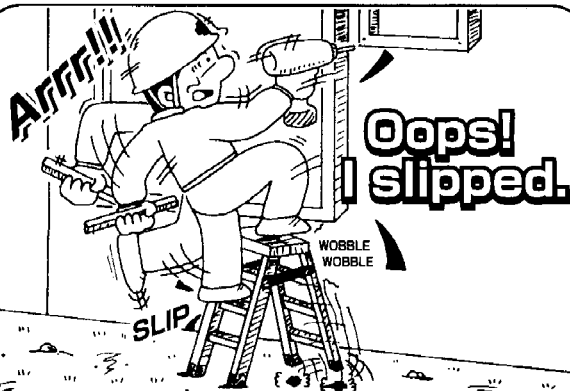


As the delivery date was at close hand, he worked even on the Sunday.

All right, I'm done. Now next work is waiting for me.



He just finished installing the outer frame of a ventilation hood. He was trying to climb down the A-frame ladder, holding a rechargeable screwdriver and materials in both hands.



He tripped on the A-frame ladder and fell down to the ground. He had his left heel bone fractured.

LWD: 90 days

## ■ Incident Scene

At around 10 A.M., on Sunday, August 21

Mr. G, a kitchen assembler with 33 years' experience, was working on Sunday as he had some 10 more orders which were yet to be completed in time for delivery during the summer vacation season. He finished installing the outer frame of a ventilation hood, and was climbing down the A-frame ladder with a rechargeable screwdriver and materials in his both hands. (Probably he was impatient for the remaining works.) He tripped on the A-frame ladder and fell down to the ground. He had his heel bone fractured and could not work for 90 days.

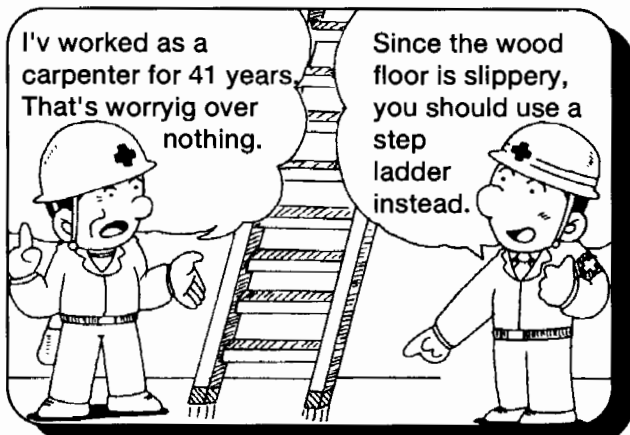
## ■ Action and Guidance

- ① Don't stand on the top of a A-frame ladder when working.
- ② Don't climb up and down with both hands full.
- ③ Slow down and keep patient. (Impatience invites disaster.)
- ④ Always try to predict potential hazards.

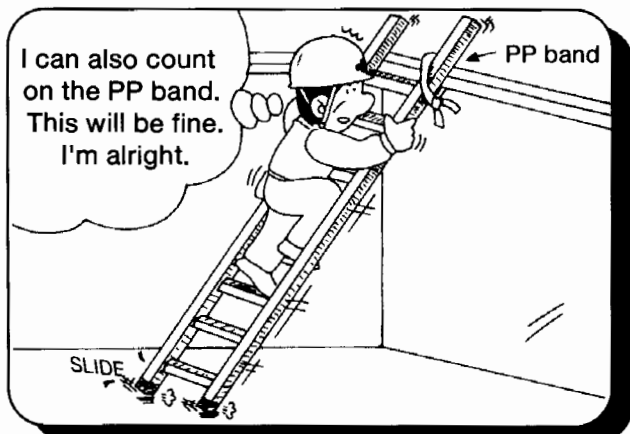


Impatience invites disaster.

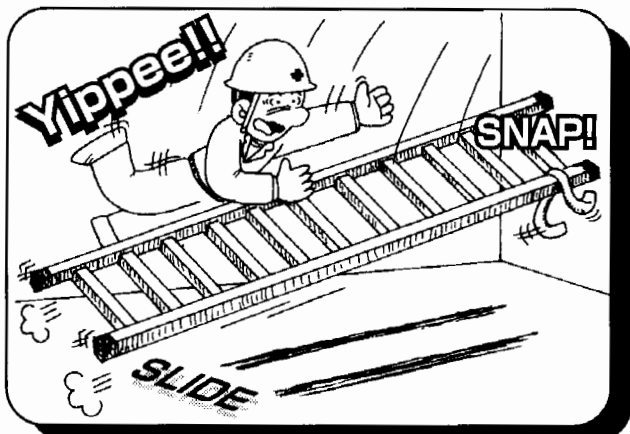
I Should Have Followed Boss' Instruction.



Thursday, May 25  
 At around 8:40 A.M..  
 Fine in weather  
 58 years old Carpenter  
 41years' experience



He turned down the suggestion.  
 The ladder was fastened with a PP band (packing belt).



The PP band was broken off and the foot of the ladder moved off to the side. He got thrown out of the ladder and fell down.



He had his right femoral bone, right pubic bone and ischial bone fractured.  
 LWD: 120 days

## ■ Incident Scene

On Thursday, May 25

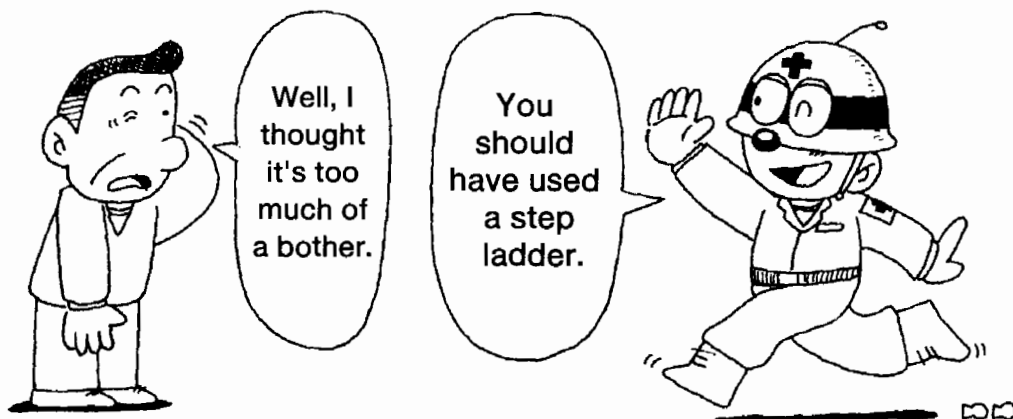
Mr. B, a carpenter, was scheduled to resume his work on the 2nd floor of a house. The ladder, which had been placed before, was not there because the flooring work on the 1st floor had been done on the day before. His supervisor recommended a step ladder for his work. Mr. B, however, turned him down, saying he couldn't be bothered and was all right with a simple ladder. He then set the ladder by himself which had been removed on the day before, and tied with a packing belt (PP band) to fix it. He got on his work.

At around 8:40 A.M., he began to climb the ladder to the 2nd floor. The ladder started slipping off to the side and the packing belt got broken off. He was thrown off the ladder and fell down to the floor.

He hit his right leg and hip hard against the floor and had his right femoral bone, right pubic bone and ischial bone fractured. He could not return to work for 120 days.

## ■ Action and Guidance

- ① Make sure that both the top and bottom of a ladder are fixed.
- ② Use a step ladder.
- ③ Provide guidance for paying constant attention to safe practices. (Don't put too much confidence in experience)

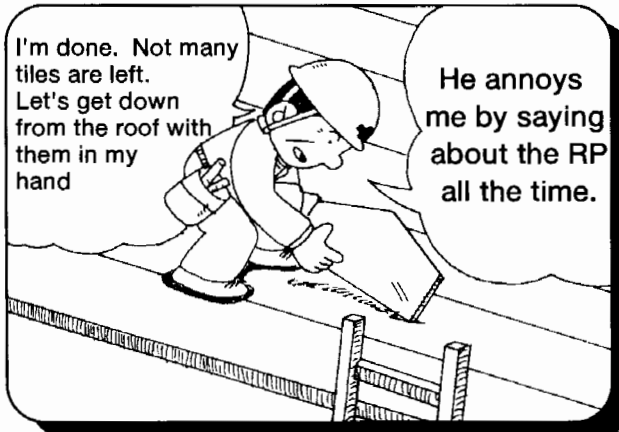


Too much Self-confidence Causes Disaster.

3 Minutes for RP Could Have Helped



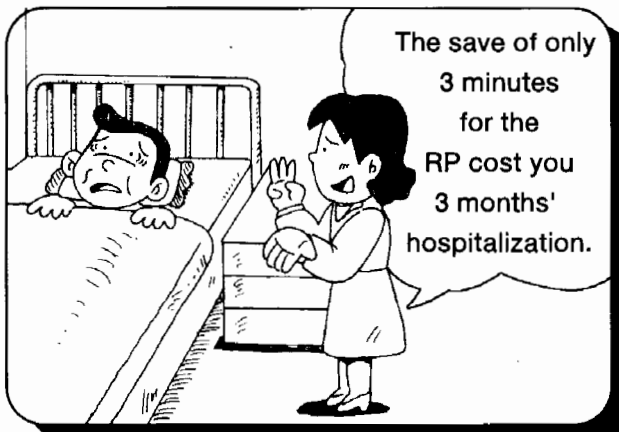
Monday, March 7  
 At around 10:30 A.M.  
 Cloudy in weather  
 55 years old Roofer  
 25 years' experience



The ladder was not fixed.



The ladder wobbled, and he could not retain his balance because he held tiles in one hand.



He fell down to the ground. He had his right rib bone and right pelvis fractured.  
 LWD: 80 days

## ■ Incident Scene

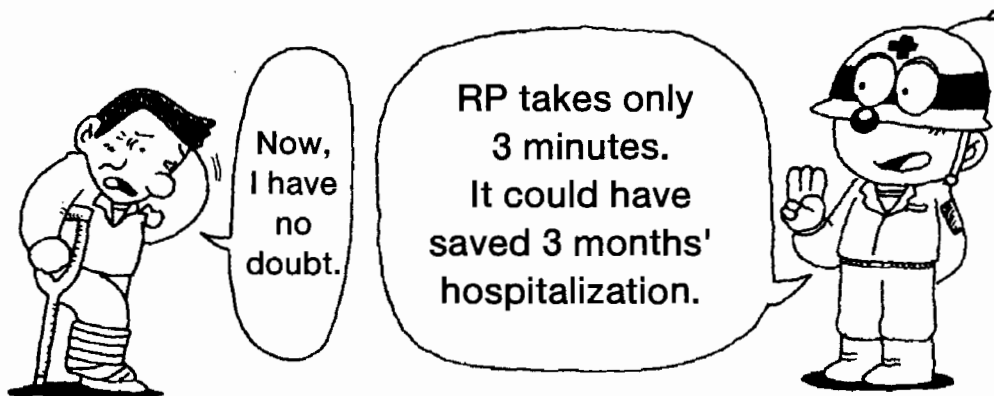
At around 10:30 A.M., on Monday, March 7 Mr. C, a roofer, set to work on laying tiles on the roof after he made a morning briefing with his supervisor. After he completed his work on the roof, he was going to climb down a ladder, holding the remaining tiles. (The tile lifter was removed already. He thought he could descend the ladder with the remaining tiles since they were not many and manageable in one hand.)

When he stepped onto the ladder, it wobbled because it was not fastened. He lost his balance and fell down to the ground.

He hit badly against the ground. He had his right rib bone and right pelvis fractured. It took him 80 days to return to work.

## ■ Action and Guidance

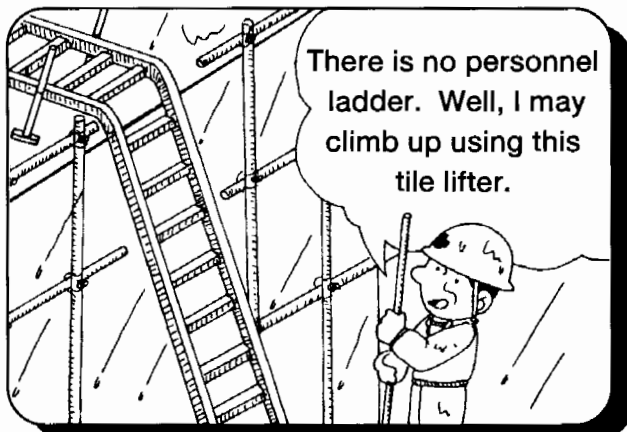
- ① Make sure that both the top and bottom of a ladder are fixed.
- ② Don't climb up and down a ladder with hand full.
- ③ Make RP before work. It is workers' responsibility to eliminate potential hazards. When they cannot handle by themselves, they should contact their supervisor. Don't start working before the improvement is confirmed.



Just Needed A Personnel Ladder

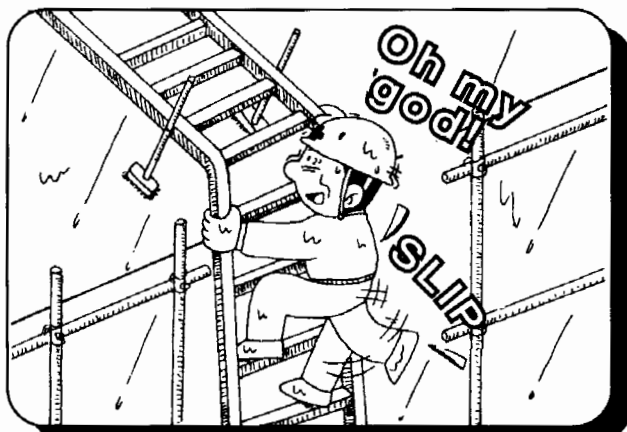


Thursday, October 12  
 At around 10:35 A.M.  
 Light rain in weather  
 54 years old. Roofer  
 36 years' experience

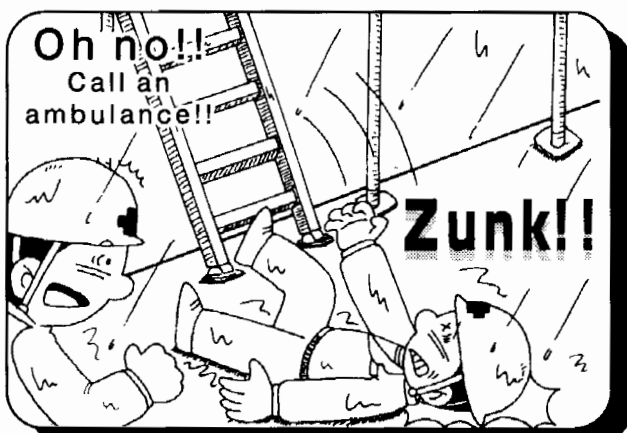


Since a personnel ladder was not prepared, he substituted a tile lifter to climb up to the roof.

After he completed his work, he was going to get down from the roof, using the tile lifter.



The rain made the steps slippery, and . . . he slipped.



He fell down on the road. He had his skull broken and suffered brain contusion. He got into a critical condition and lay unconscious for a year and 2 months before he died.

Our deepest condolences to him.

## ■ Incident Scene

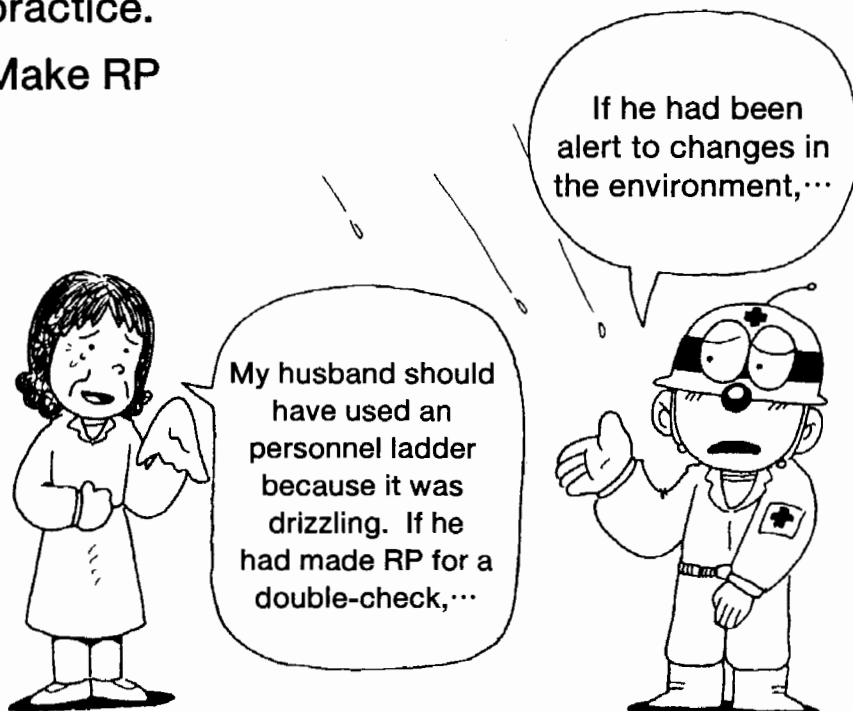
At around 10:35 A.M., on Thursday, October 12,

He was installing a tile lifter on the scaffold to carry roofing materials up to the roof of a two-storied house. After he fixed the top of the lifter, he was going to climb down the tile lifter, as there was no personnel ladder installed on the scaffold. Unfortunately it was lightly raining. He slipped on the wet lifter and crashed on the ground.

He was brought to a hospital by ambulance. He had his skull broken and suffered brain contusion. He got into a critical condition and lay unconscious for 1 year and 2 months before he passed away.

## ■ Action and Guidance

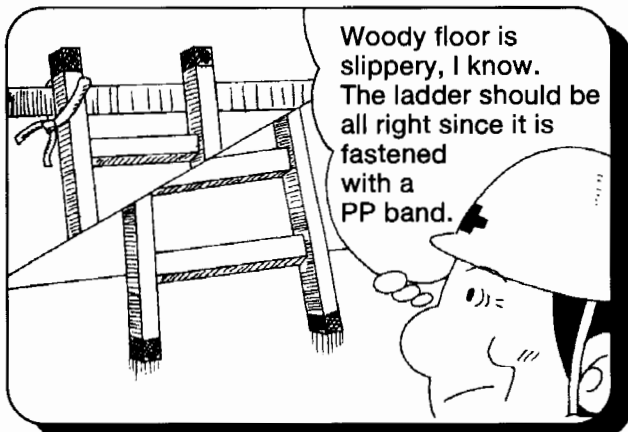
- ① Operation at height is suspended when the footing is wet, even if it is drizzling.
- ② Install an personnel ladder
- ③ Document operation procedure and put it in practice.
- ④ Make RP



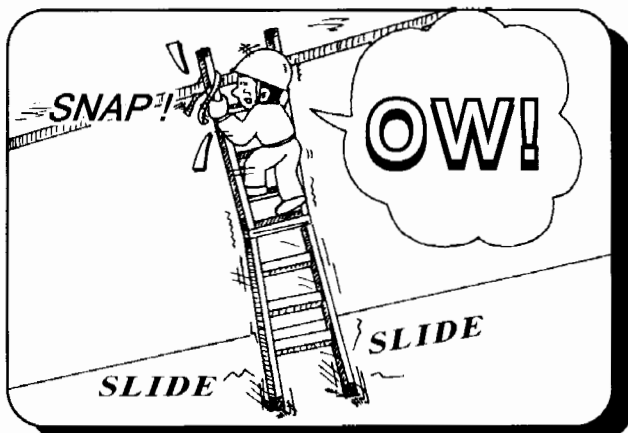
No A-frame ladder Can Be Substituted



Saturday, November 4  
 At around 5:25 P.M.  
 Fine in weather  
 57 years old Carpenter  
 2 years and 11 months' experience



The top of the ladder was fixed with a PP band (packing belt). The rain made the steps slippery, and . . . he slipped.



The A-frame ladder was substituted for a ladder. The PP band was broken off and the A-frame ladder started moving off to the side.



He fell down together with the A-frame ladder. He had his thumbs and rib fractured.  
 LWD: 50 days

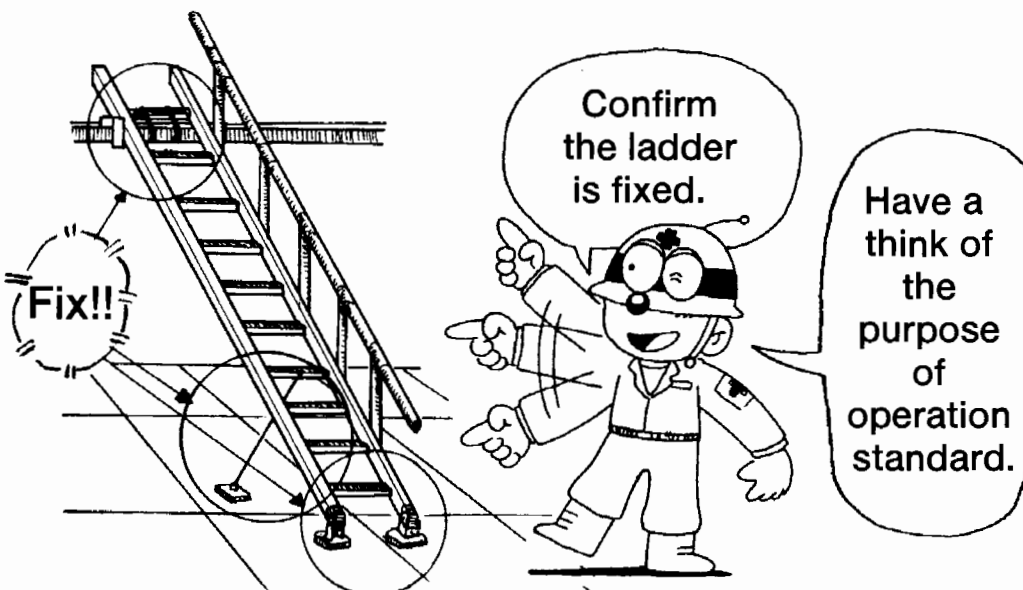
## ■ Incident Scene

At around 5:25 P.M., on Saturday, November 4,

Mr. A, a carpenter, finished his interior work for the day and was preparing for leaving the construction site of a two-storied house. His daughter and her husband were supposed to come to his house in the evening. He hurried up to the 2nd floor to lock the windows. When he came to the 6th step, the legs of the A-frame ladder started sliding off the side. It was unstable because the A-frame ladder was used as a ladder. The floor was woody and slippery. The PP band with which the A-frame ladder was fixed at the top was broken off. He pitched forward together with the A-frame ladder. He badly hit his both hands and chest and had his thumbs and a rib fractured. It took him 50 days to return to work.

## ■ Action and Guidance

- ① Always carry out safety practices. Proactively participate in safety training.
- ② Use a proper ladder or step ladder.
- ③ Make sure that both ends of a ladder are fixed.  
(with ropes, rubber bands or bolts)



No A-frame ladder Can Be Used As a Ladder

# 楽しいためになる得をする 安全大会を盛り上げよう

## 安全ビンゴゲーム



- 楽** ◆ビンゴゲームの要素を取り入れ、ゲーム感覚で、楽しくそれぞれのテーマに関する知識を学べます。
- ため** ◆テーマに関する問題が全75問。回答解説付き。クイズ形式による『参加型教育ゲーム』です。
- 得** ◆賞品を用意する事で、盛り上がります。研修に参加したことを良かったと感じていただけます。

安全ビンゴ	安全ビンゴCD
1セット(50枚入)	1枚(CD-ROM)
1,500円	4,500円

\*1セットでも送料無料

### ◆ビンゴ運営全般お任せ下さい

司会者、景品の手配などの運営  
もご相談下さい。



**大阪住安協ホームページ**: <http://www.osaka-jyuankyou.com/>  
その他CSビンゴ、エコビンゴがあります。詳細の内容や進行の仕方等はまず、ホームページをごらん下さい。

## 講演講師



### 黒田クロ Kuroda Kuro

漫画家、講演家、イラストレーター  
エッセイスト、人権擁護委員  
(株)クロデザインスタジオ代表

1947年徳島生まれ。PHP研究所の安全衛生のハウツー本関係を作成する他、松下幸之助商學院の販促講師を続けている。現在講演は年間200回を超え、その発想はユニークでユーモアあふれ独自の視点から練りだした人生論をはじめ、商店街の活性化、労働組合、各種地域団体、各業界の安全衛生大会、教育研修、人権教育等で好評。

#### ＜主な講演テーマ＞

- 「見方・やり方・考え方 カ・エ・ル」
- 「考え方がその人の人生を決める」
- 「ここ・から イキイキ」
- 「発想のいずみ～ものの見方、視点の変え方」

### Yabuse Mari 矢伏真理

ウェイクアップ体操インストラクター  
まちおこしダンスアドバイザー  
イラストレーター

「心と体の健康」をテーマにゼネコン、ハウスメーカー等で「ケガをしないための体操」の普及で全国行脚中。安全大会の講師として好評。また、大阪府守口市、京都府京丹後市・伊根町、福井県小浜市をはじめ、全国各地で主によさこい踊りの振り付け、指導を手掛ける。その他、市民大学・老人大学等でも講演、誰にでも踊れるステップダンス指導を実践。



#### ＜主な講演テーマ＞

- 「ウェイクアップ体操で、心と体をもっといきいき」
- 「心と体の健康」
- 「夢を持って～動き出そう自分から～」
- 「自分をイキイキさせ、仕事のやる気をアップ」

\*講演料につきましては、ご相談させていただきます。交通費・宿泊料につきましては、別途頂戴いたします。

\*その他多数講師がいますので、ご要望に合わせます。