

*THINK BEFORE
YOU CLIMB*

Helping Employees Use
Ladders Safely

Our presentation begins soon



*THINK BEFORE
YOU CLIMB*

Helping Employees Use
Ladders Safely

ICW Group Risk Management



Today's presenter

Brandon Arellano Mora

Assoc. Risk Management Consultant
Risk Management



Today's Topics

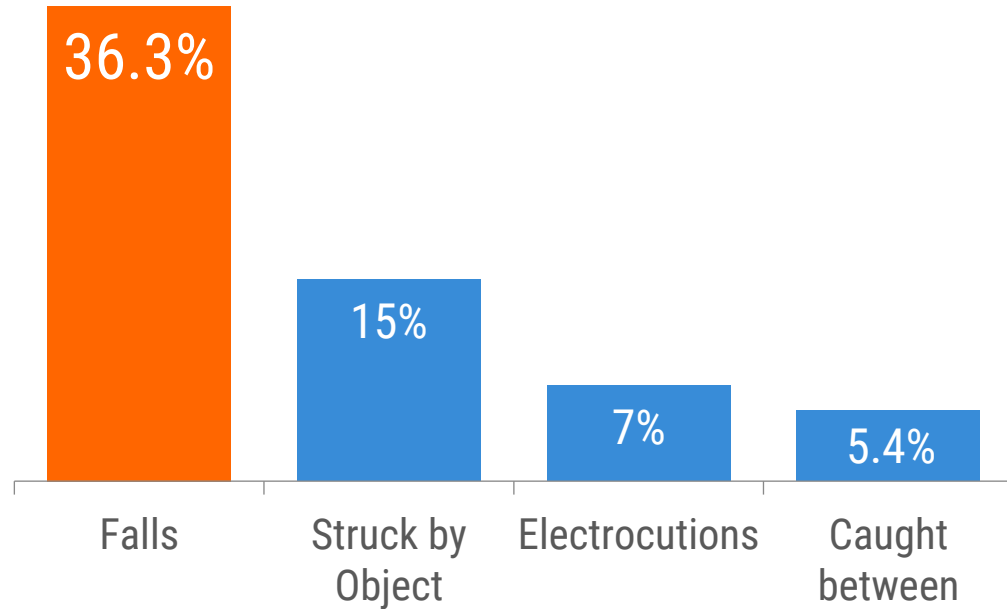
- Importance of Ladder Safety
- The ICW Group Risk Framework
- Reducing Ladder Injuries
- 10 Critical Steps to Ladder Safety



Construction's "Fatal Four"

**Falls are the Leading
Cause of Fatalities
in Construction**

**401 out of 1,102 Total
deaths in construction
were from falls in 2019**



Source: U.S. Bureau of Labor Statistics

ALARMING TRENDS

Poor Ladder Safety accounts for:

- **20%** of **ALL** work-related falls
- **81%** of construction fall related injuries
- **16%** of construction fatal injuries
- **24%** of non-fatal involving days away

ALARMING TRENDS

Ladders Ranked #4 in OSHA violations

**50% of Falls Requiring Medical
Attention are from...**

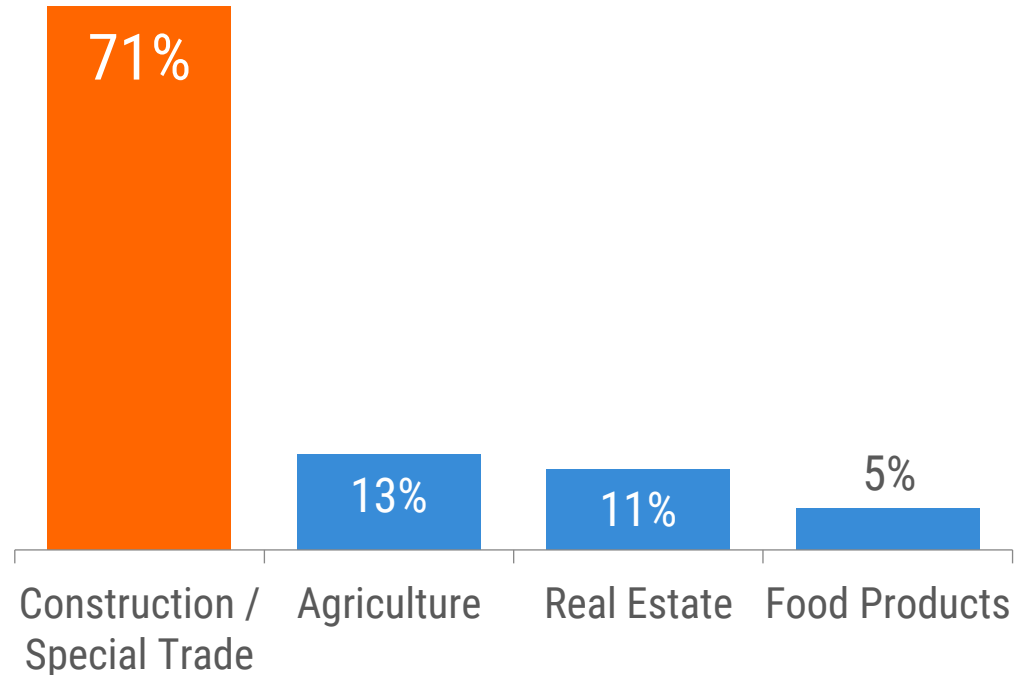
10 feet or Less

CUSTOMER DATA

Work Comp Insurance

**Construction/Specialty Trades
have the highest number of
Fall from Elevation Injuries**

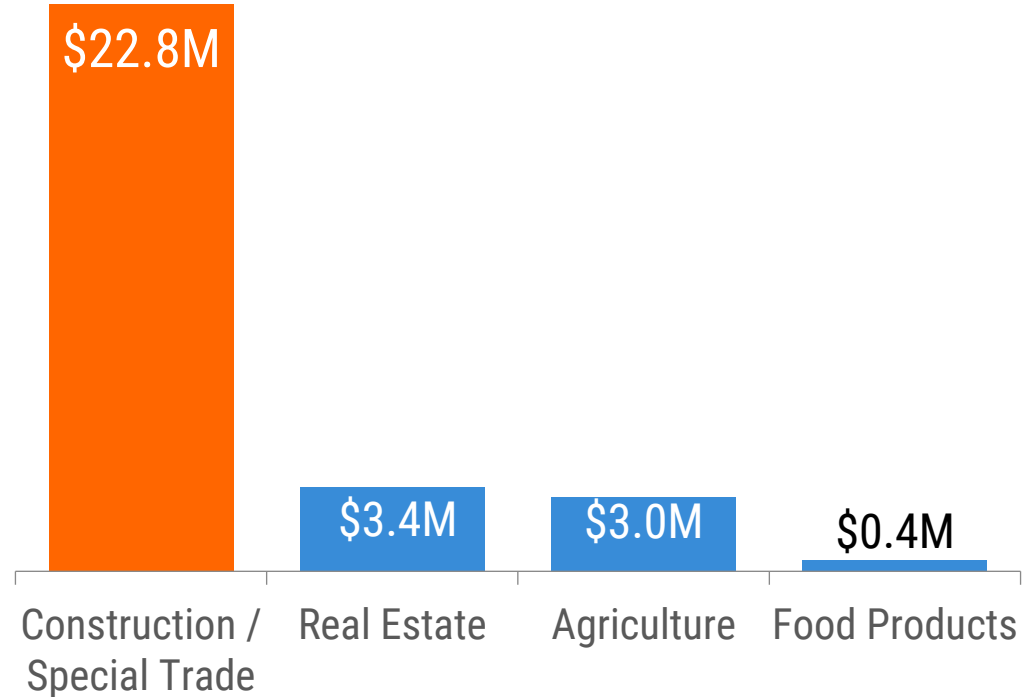
Ladders safety is Important!



CUSTOMER DATA

ICW Group had nearly \$23 Million in Claim Costs from Falls in one year

Ex-mods are affected for three years



The ICW Group Risk Framework

*Working together
to lower your risk*



The ICW Group Risk Framework

Frequency

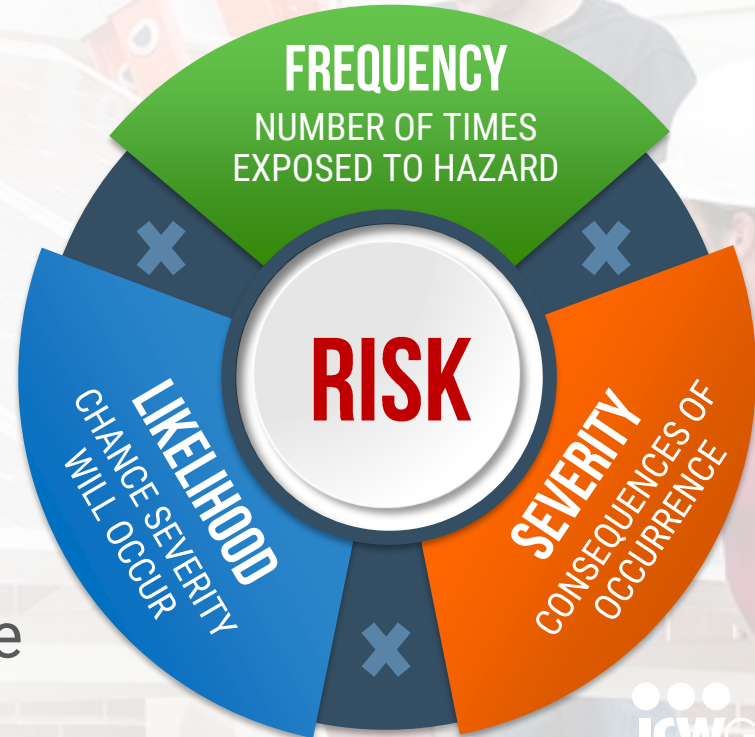
- Times exposed to hazard

Likelihood

- Chance severity will occur

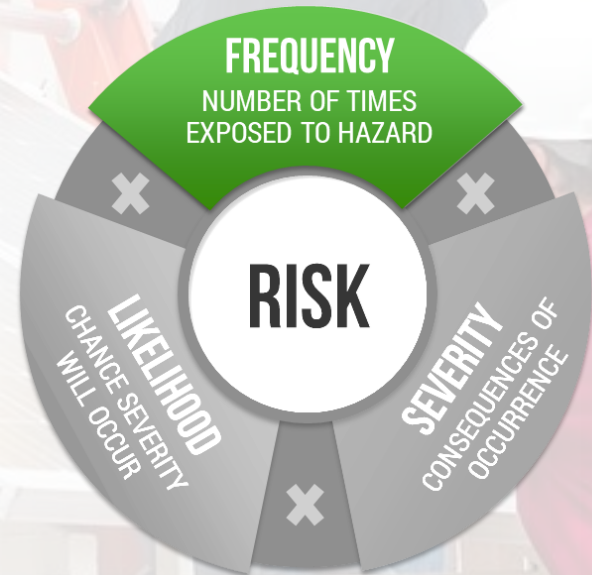
Severity

- Consequences of occurrence



Tips to Reduce Frequency

- Complete job assessment
- Store often-used items low
- Validate ladder is correct choice
 - *Should I use a work platform?*
 - *Can I use an extension pole?*
- Prefab work on ground
- Elevate materials with forklift



Tips to Reduce Likelihood

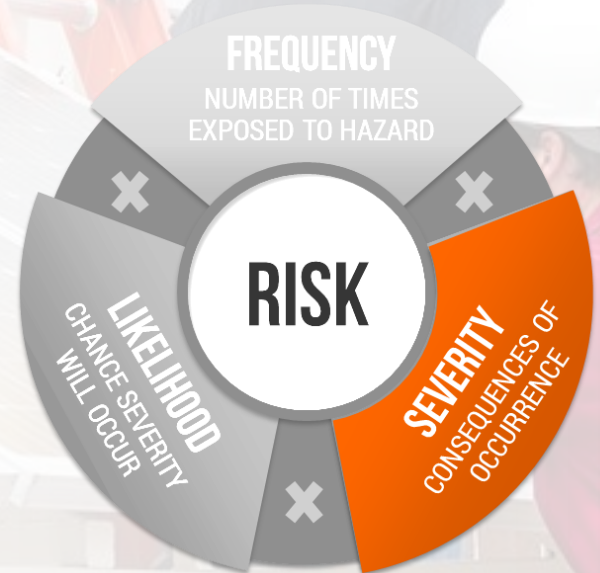
- Select the right ladder
- Secure and use properly
- Follow Safe Practices
- Keep ladders maintained

*Conduct Ladder inspections
and use ICW Ladder Stickers*



Tips to Reduce Severity

- Use fall protection
- Ensure area is clear
- Clearly define safe height – make it a “law”



Reducing Ladder Injuries

10 Critical Steps to Improve Your Culture of Safety



10 Critical Steps to Ladder Safety 

You don't have to fall far to get hurt. Remain safe on any ladder with these easy to follow tips.

- 1. Is a ladder your best tool?**
Consider alternatives, such as platforms, scaffolds, lifts.
- 2. Check your surroundings**
Keep clear of electrical lines, crowded areas, uneven surfaces.
- 3. Verify the duty rating**
Include your weight PLUS clothing, PPE, tools, supplies.
- 4. Select the right ladder**
Step ladders, extensions, combinations - select the safest!
- 5. Inspect for defects**
Remove ladders with broken steps, rungs, rivets, cleats.
- 6. Carry ladders carefully**
Be sure your path is clear, then lift and transport carefully.
- 7. Safely secure your setup**
Place on a level, stable surface, lock and stabilize ladder.
- 8. Verify if you need fall protection**
Reduce risk - use safety gear, straps, stays, other devices.
- 9. Read and follow all labels**
Review the usage markings on ladder and follow them!
- 10. Practice safe ladder use!**
Check shoes and steps for slippage, always face ladder, maintain three-point contact and NEVER over-reach!

Provided by ICW Group Workers' Compensation, Risk Management Services
Insurance Company of the West | Explorer Insurance Company | www.icwgroup.com | 800.877.1111

Is a Ladder Your Best Tool?

1

Review the task at hand and ask:

- Will I work at height for long period?
- Do I need to hold heavy tools and materials?
- Could a ladder become unstable?

Is a Ladder Your Best Tool?

1

- Can I get a ladder long enough?
- Can it be set-up properly?
- Is it possible to stay off top steps?
- Does the job demand standing sideways or reaching beyond side rails?

Check Your Surroundings

2

- What are environment impacts?
- Are there items in my way?
- Am I working by electricity, overhead power lines?
- Are there uneven work surfaces?
- Stairways?

Verify the Duty Rating

3

Will usage be within duty rating limits?

Ladder Type	Load Capacity
Type III (Light Duty)	200 pounds
Type II (Medium Duty)	225 Pounds
Type I (Heavy Duty)	250 Pounds
Type IA (Extra Heavy Duty)	300 Pounds
Type IAA (Special Duty)	375 Pounds

Verify the Duty Rating

3

Remember – include your weight **PLUS**:

- Clothing and PPE
- Tools and supplies you're carrying
- Any tools and supplies stored on ladder

Select the Right Ladder

4

When should you use a stepladder?

- It's a small job
- Under X feet
- There is stable ground
- Level - all 4 rails are even
- Able to fully open and lock
- No need to use top step or top cap.

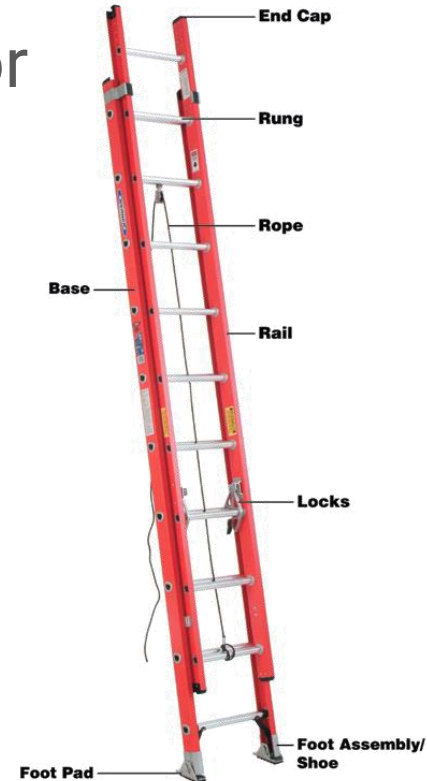


Select the Right Ladder

4

When should you use an extension or straight ladder?

- Need longer length
- Ground stable enough for 2 feet
- Able to lean against safe surface
- Can set up with at least 75.5°
- Ladder rails can extend 3' above landing



Select the Right Ladder

4

Consider Extension / Straight Duty ratings and maximum heights

Ladder Type	2 Sections	3 Sections
Type III (Light Duty)	32 feet	N/A
Type II (Medium Duty)	48 feet	60 feet
Type I (Heavy Duty)	60 feet	72 feet
Type IA (Extra Heavy Duty)	60 feet	72 feet

Select the Right Ladder

4

When should you use a combination ladder?

- Need a multi-level platform, such as a stairwell ladder
- Can be used as a step or straight ladder



Select the Right Ladder

4

When should you use an articulating ladder?

- Need a work platform
- Can use as scaffold



Inspect for Defects

5

Check ladder is well maintained

- Lubricate moving parts
- Test hardware and fittings
- Replace worn ropes on extension ladders
- Clean rungs and steps

Inspect for Defects

5

Inspect regularly

- Rungs – loose, cracked, broken
- Rails – cracked, bent, frayed
- Labels – missing, not readable
- Locks – broken, missing

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LADDER INSPECTION FORM
Inspect each ladder regularly

Type: Extension Step Construction: Wood Metal Fiberglass Ladder # _____ Location: _____ Year: _____

IMPORTANT: Remove and discard any ladders identified as needing repair, unless repaired with manufacturer-approved methods.

Data	Inspected By		Date		Date repaired/Repaired By		Date	
	OK	Needs Repair	OK	Needs Repair	OK	Needs Repair	OK	Needs Repair
GENERAL								
Side rails are in good condition								
Steps or rungs are tight and can't be wiggled by hand								
Nails, screws, bolts and other metal parts in good condition								
Uprights, braces and rungs are in working order								
Ladder is free from oil, grease or slippery materials								
Non-slip bases or feet are in good condition								
STEP LADDERS								
Not wobbly or loose (i.e. won't wobble from side-to-side)								
Hinges, spreaders and stop aren't loose or broken								
All steps are in good condition								
Ladder does not exceed 20 feet in height								
EXTENSION LADDERS								
Extension locks are not loose, broken or missing								
Locks seat properly while extended								
Pulley, rung locks and rope are in good condition								
Single section ladders don't exceed 30' in length								
2-section ladders don't exceed 48' for metal, 60' for wooden								

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Insurance Company of the West | Explorer Insurance Company | Visterra Insurance Company
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Inspect for Defects

5

Inspect regularly

- Hardware – loose, broken
- Feet (shoes) – worn, broken
- Other – depending on type

Use Ladder Inspection Form

Doesn't pass? Remove!

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LADDER INSPECTION FORM
Inspect each ladder regularly

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Carry Ladders Carefully

6

Injuries can occur when moving ladders!

- Store ladders close to the work area
- Check path is clear of hazards
- Use good lifting techniques
- When in doubt, ask for help.

Safely Secure Your Setup

7

Survey area before setting up

- Place on firm, level surface
- Check all locking devices
- Ensure proper angle
- Extend 3 feet above upper landing
- Double check stability



Safely Secure Your Setup

7

Consider ladder leveling devices

- Manufacturer approved
- Maximum 8 ½ inches extension
- Duty rating remains the same if installed properly



Safely Secure Your Setup

7

- Securely fasten straight or extension ladders to upper support
- Guard doorways near ladder



Need Fall Protection?

8

- Required for fixed ladders above 24'
- Note updated OSHA ruling on cages
- Other ladder type considerations



Read and Follow Labels

- Review usage directions
- Be sure to follow!



Practice Safe Ladder Use

10

Improper use is #4 on OSHA's most frequent offenders

- Side rails not 3' above upper level
- Not using as designed
- Using top cap as a step
- Not removing defective ladders
- Not on stable, level surface
- Not properly secured

Practice Safe Ladder Use

10

Remember to:

- Always face ladder when using
- Maintain three-point contact
- Move ladder instead of over-reaching
- Only one person on ladder
- Stop 3 rungs from top
- Never get off ladder from side

Practice Safe Ladder Use

10

Remember to:

- Keep body between rails
- Hips square to rungs
- Wear anti-slip shoes
- Don't climb while carrying tools
- Clean ladder after each use
- Store carefully

Reduce the RISK of Ladder Injuries

Follow safe practice “Do’s” and Don’ts

- Post in employee area



Ladder Safety - Do's & Don'ts
Think before you climb!

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Ladder Do's...

1. Only one person on a ladder.
2. Avoid electrical hazards.
3. Set-up on level, stable surfaces.
4. Read and follow labels/markings.
5. Always face the ladder when climbing.
6. Wear anti-slip shoes; free of mud, ice, oil etc.
7. Maintain three-point contact climbing and descending.
8. Keep your body between rails; hips square to rungs.
9. Secure working area around ladder.

Ladder Don'ts...

1. Use if impaired by alcohol/drugs/medication/illness.
2. Lean too far outside rails in either direction.
3. Move or shift a ladder while on it.
4. Use a self-supporting ladder in a closed position.
5. Use the top step/rung of a ladder as a step/rung.
6. Place on box or unstable base for additional height.
7. Exceed maximum load rating.
8. Carry tools and materials in your hands.
9. Fasten two ladders together for additional height.

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Involve Your Safety Culture

Work as a team to:

- Identify ladders users
- Provide safety training
- Identify ways to reduce ladder use
- How often and for what purpose?



Involve Your Safety Culture

- Observe use in the field
- Coach on correct use
- Educate on choosing correct ladder
- Check ladder labels – add if needed
- Post helpful reminders



Involve Your Safety Culture

- 10 Critical Steps to Ladder Safety
- Ladder Safety – Do's and Don'ts
- Ladder Inspection Guide



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LADDER INSPECTION FORM
Inspect each ladder regularly

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IMPORTANT: Remove and discard any ladders identified as needing repair, unless repaired with manufacturer-approved methods.

Date reported/Repaired By	Date								
	Inspected By	OK	Needs Repair	OK	Needs Repair	OK	Needs Repair	OK	Needs Repair
GENERAL									
Sider rails are in good condition									
Steps or rungs are tight and can't be wiggled by hand									
Nails, screws, bolts and other metal parts in good condition									
Uprights, braces and rungs are in working order									
Ladder is free from oil, grease or slippery materials									
Non-slip beets or feet are in good condition									
STEP LADDERS									
Not wobbly or loose (i.e. won't wobble from side-to-side)									
Hinges, spreaders and stop aren't loose or broken									
All steps are in good condition									
Ladder does not exceed 20 feet in height									
EXTENSION LADDERS									
Extension locks are not loose, broken or missing									
Locks seat properly while extended									
Pulleys, rung locks and rope are in good condition									
Single section ladders don't exceed 30' in length									
2-section ladders don't exceed 48' for metal, 60' for wooden									

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Ladder Safety - Do's & Don'ts
Think before you climb!

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Ladder Do's...

1. Only one person on a ladder.
2. Avoid electrical hazards.
3. Set-up on level, stable surfaces.
4. Read and follow labels/markings.
5. Always face the ladder when climbing.
6. Wear anti-slip shoes, free of mud, ice, oil etc.
7. Maintain three-point contact climbing and descending.
8. Keep your body between rails, hips square to rungs.
9. Secure working area around ladder.

Ladder Don'ts...

1. Use if impaired by alcohol/drugs/medication/illness.
2. Lean too far outside rails in either direction.
3. Move or shift a ladder while on it.
4. Use a self-supporting ladder in a closed position.
5. Use the top step/rung of a ladder as a step/rung.
6. Place on box or unstable base for additional height.
7. Exceed maximum load rating.
8. Carry tools and materials in your hands.
9. Fasten two ladders together for additional height.

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10 Critical Steps to Ladder Safety

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You don't have to fall far to get hurt. Remain safe on any ladder with these easy to follow tips.

1. **Is a ladder your best tool?**
Consider alternatives, such as platforms, scaffolds, lifts.
2. **Check your surroundings**
Keep clear of electrical lines, crowded areas, uneven surfaces.
3. **Verify the duty rating**
Include your weight PLUS clothing, PPE, tools, supplies.
4. **Select the right ladder**
Stepladders, extension, combinations - select the safest!
5. **Inspect for defects**
Remove ladders with broken steps, rungs, rivets, cleats.
6. **Carry ladders carefully**
Use any your path is clear, then lift and transport carefully.
7. **Safely secure your setup**
Place on a level, stable surface, lock and stabilize ladder.
8. **Verify if you need fall protection**
Wear risk - use safety gear, straps, stays, other devices.
9. **Read and follow all labels**
Follow the usage markings on ladder and follow them!
10. **Use safe ladder use!**
Always use steps for slippage, always face ladder, three-point contact and NEVER over-reach!

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Your Safety Resources

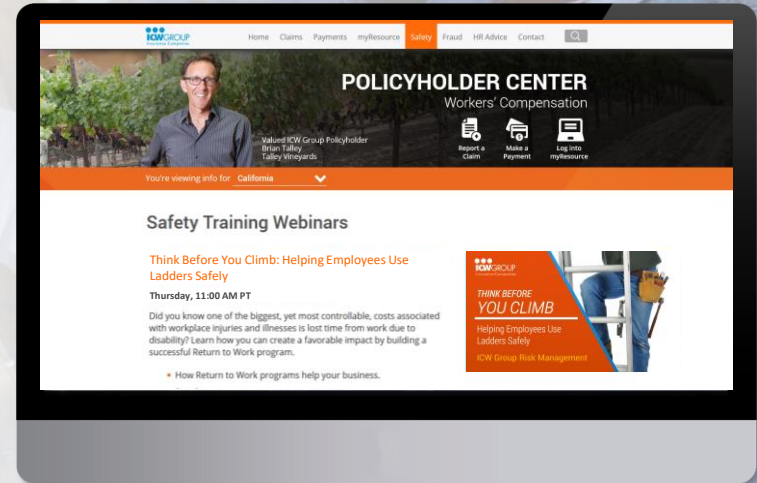
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ICW Group Policyholder Website!

icwgroup.com/**safety**

- Go to Safety Webinars page
- Click on the topic to find the presentation & resources
- **BONUS MATERIALS!**
 - List of Safety *OnDemand*® ladder safety materials



ICW Group Policyholder Website!

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Ladder Safety - Do's & Don'ts
Think before you climb!

Ladder Do's...

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Steps to Ladder Safety

WHAT'S AT STAKE?

Ladders are just another tool much like a screwdriver or pliers. Please run the risk of becoming complacent with the use of ladders. Choose the right ladder for the job and climb the ladder with care amongst other precautions.

WHAT'S THE DANGER?

DANGERS ASSOCIATED WITH LADDERS

The use of ladders presents many hazards, injuries involving ladders frequently cause permanent disability.

The hazards associated with ladders include:

- Falls from ladders
- Sluck by falling ladders
- Tripping over ladders (over or lying on floor)
- Lifting heavy ladders
- Striking persons or objects when carrying ladders
- Contact with electrical equipment when using ladders

GENERAL PRECAUTIONS FOR SAFE USE OF LADDERS

- Ladders must be maintained free of oil, grease, and other slipping hazards.
- Wooden ladders must not be painted as this could hide flaws or damage of the manufacturer's rated capacity.
- Ladders must not be loaded beyond their manufacturer's rated capacity.
- Ladders must be used only for the purpose for which they were designed.

SAFETY TIPS | SafetyNow | www.SafetyNow.com | 1.800.687.8200

Ladder Safety Checklist

Use this ladder safety checklist to ensure that the ladders in your workplace are in good operating condition and that your workers are setting up and using ladders safely.

Ladder Inspection

- Are all the rungs, cleats, or steps in good condition?
- Are the side rails intact without any cracks, bends, or breaks?
- Do the rungs, cleats, or steps fit snugly into the side rails?
- Is the ladder free of corrosion?
- Are the side rails and steps free of oil or grease?
- Are the ladder's hardware and fittings secure and undamaged?
- Do movable parts operate freely without binding or excessive play?
- Are the ropes on extension ladders intact without fraying or excessive wear?
- Are damaged ladders removed from service and marked "Do not use"?

Ladder Usage

- Ensure step ladders are fully open and locked before climbing them.
- Place the ladder on a flat, secure surface.
- Place the ladder on a hard surface, as it will sink into a soft surface.
- Place the ladder on a non-movable base.
- Lean the ladder against a secure surface, not boxes or barrels.
- Do not place a ladder in front of a door.

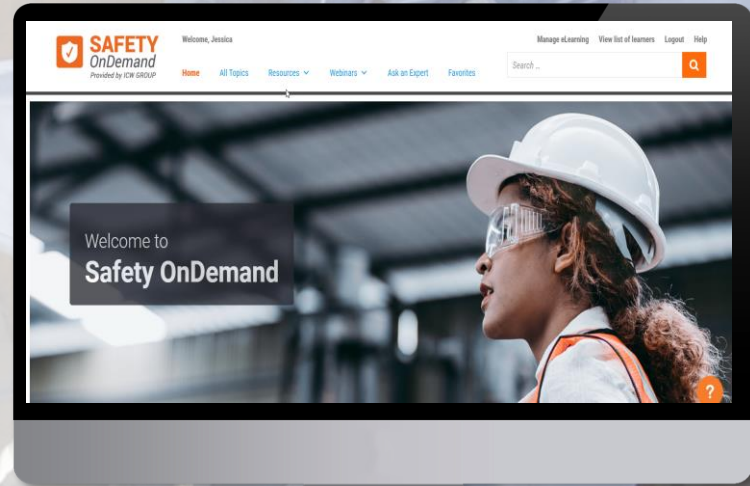
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safety talks and more!**



QUESTIONS?

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riskmanagement@icwgroup.com

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YOU CLIMB*

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