Fall Prevention

For the Fruit and Vegetable Preserving and Specialty Foods Manufacturing Industry
Contents

Introduction ................................................................. 3
Lesson 1
Take Control of Your Own Safety ...................................... 4
Lesson 2
Stairways, Clutter and Slippery Floors ............................... 9
Lesson 3
Using Ladders Safely ..................................................... 14
Lesson 4
Working Safely on Raised Surfaces ................................... 21
Conclusion ....................................................................... 27
Quiz Yourself Answers .................................................... 29

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This material was produced under grant number 46G4-HT13 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

This booklet was produced by K-State Research and Extension, Kansas State University, Manhattan, Kansas.

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What's Inside?

This booklet teaches important practices to follow to prevent falls in the fruit and vegetable preserving and specialty foods manufacturing industry.

Safety tips, along with real accident reports, have been combined to give you a better understanding of the risks associated with this type of work.

Use this booklet along with hands-on safety training.
Lesson 1

Objectives

1. Discuss common causes of falls.

2. Recognize fall prevention messages and signs in work zones.

Take Control of Your Own Safety

Greatest Dangers

The most commonly reported causes of serious falls in the fruit and vegetable preserving industry are:

1. Slippery Floors, Clutter and Stairways
   Make sure floors are clean and dry and work areas are free of clutter. If you work in a wet environment, make sure to wear non-slip footwear and use appropriate walkways. Always use handrails on stairways.

   Accident Report
   Worker Slips and Breaks Wrist
   Summary of OSHA Accident Investigation 170812580
   A worker was walking along a floor that had puddles of water, tomato sauce and mineral oil from leaking machinery. She slipped, fell and broke her wrist.
   ⚠️ **Clean up spills immediately.**

2. Improper Use of Ladders
   Choose a ladder that is appropriate for the job you are doing.

   Accident Report
   Worker Killed After Ladder Slips
   Summary of OSHA Accident Investigation 103342606
   A worker was using a 12-foot aluminum stepladder to get to the top of a freezer that was 14 feet above the floor. He leaned the stepladder against the side of the freezer. The base of the stepladder slipped away from the freezer and the employee fell to the floor, where he hit his head. He was killed.
   ⚠️ **Never use an unopened stepladder or a ladder that is too short for the job.**
3. Climbing on Equipment and Materials
Never climb on boxes, pallets, trash bins, shelves or other materials instead of a ladder. Use only the appropriate stairs, walkways and ladders.

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Worker Killed in Fall From Flume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of OSHA Accident Investigation 170617146</td>
<td></td>
</tr>
<tr>
<td>A worker was trying to break up a jam in a tomato conveyor with a plastic shovel. He climbed over the guardrail and stood on the flume to get to a better position. He slipped and fell 22 feet and landed on the floor. He was killed.</td>
<td></td>
</tr>
<tr>
<td>! <strong>Do not climb over guard rails. Talk to your supervisor before attempting new tasks.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Employee Injured After Falling From Drum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of OSHA Accident Investigation 125960120</td>
<td></td>
</tr>
<tr>
<td>A worker was standing on a 55-gallon steel drum, loading bottles onto a conveyor. The drum he was standing on tipped and he fell, hitting his head. He suffered serious head and arm injuries.</td>
<td></td>
</tr>
<tr>
<td>! <strong>Do not climb on equipment or materials. Use an approved ladder.</strong></td>
<td></td>
</tr>
</tbody>
</table>

4. Falls From Raised Work Areas
Stay on approved work surfaces, such as platforms, catwalks, scaffolds and secured lift devices. Watch out for openings in roofs, floors and walls. Stay behind guard rails.

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Employee Falls From Raised Pallet and Dies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of NIOSH FACE Inspection 01MI068</td>
<td></td>
</tr>
<tr>
<td>An employee was standing on a pallet. The pallet was raised by a lift truck to a height of six feet. While he was working, he lost his balance and fell head first to the floor. He died from his injuries.</td>
<td></td>
</tr>
<tr>
<td>! <strong>Use only approved lift devices, and make sure workers are properly secured while raised.</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Worker Falls From Grain Elevator and Dies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of OSHA Accident Investigation 10255415</td>
<td></td>
</tr>
<tr>
<td>A worker was cleaning the top floor of a grain elevator. He fell 70 feet through an opening in the floor that had been left unguarded. He died from his injuries.</td>
<td></td>
</tr>
<tr>
<td>! <strong>Do not work near unguarded floor openings.</strong></td>
<td></td>
</tr>
</tbody>
</table>
Help Yourself

Safe work habits are important. Here are three actions you can take to be safe on the job site:

1. Learn all you can
   Pay close attention to your workspace to prevent falls. Always read and follow directions for ladders and lift devices. Pay attention to safety instructions and labels. Stop and ask your supervisor if you have questions.

2. Concentrate on working safely
   Sometimes you may be tempted to take risky shortcuts. Remember that an accident can leave you permanently injured or cut your life short. For your safety and the safety of those around you, do not take unnecessary risks. No deadline is so pressing you can’t take the time to do your work safely.

3. Additional Precautions
   Do not operate equipment or climb on ladders if you are fatigued or if you have taken drugs or alcohol. Talk to your doctor or pharmacist about working safely if you are on medication.

Choose safety
Safety Messages and Signs

Manufacturers put important safety messages on tools and materials and in operator manuals. It is critical to read, understand and follow these messages.

The triangle shape is the symbol for caution. The exclamation mark in the center means “Pay Attention”. In some instances, the sign will show a picture. Other times, words explain the sign.

Many safety messages use the words Caution, Warning and Danger to get your attention. Each of these signs will have a written message, and perhaps a picture, about an unsafe condition. Caution signs are usually yellow, warning signs are orange and danger signs are red. Here are some examples of safety messages and signs you might see in the workplace:

Caution means you need to be careful. Follow the directions on the sign or you could get hurt.

![CAUTION]

SLIPPERY WHEN WET.

WARNING is more serious and means you need to follow the directions on the sign or you could be seriously injured or killed.

![WARNING]

FAILURE TO READ AND FOLLOW LADDER DIRECTIONS MAY RESULT IN SERIOUS INJURY OR DEATH.

DANGER is the most serious safety message. If you don’t follow the directions, you will be seriously injured or killed.

![DANGER]

FALLS FROM ELEVATION WILL RESULT IN SERIOUS INJURY OR DEATH.

Images displayed in the caution, warning and danger boxes have been recreated from images taken with permission from ASAE S441.4, FEB04, Safety Signs.
Quiz Yourself

Answers can be found on page 29.

Use the list of words to fill in the blanks:

- opening
- ladder
- clutter
- danger

1. Never climb on boxes, pallets, trash bins, shelves or other materials instead of a ___________________.
2. ________________ is the most serious safety message.
3. You could be seriously injured or killed if you fall through an ________________ in the roof, floor or wall.
4. Make sure floors are clean and dry and work areas are free of ________________.

Match the safety sign with its meaning:

CAUTION:
SLIPPERY WHEN WET

DANGER:
FALLS FROM ELEVATION
WILL RESULT IN SERIOUS INJURY OR DEATH
Stairways, Clutter and Slippery Floors

Safety on Stairs

- Always use the hand rail.

Accident Report
Worker Falls Down Stairs, Breaks Ankle

Summary of OSHA Accident Investigation 170205876
A worker was searching for her identification card while walking down a flight of stairs. She was distracted and tripped on the stairs. Her ankle was broken in the fall.

⚠️ Pay attention and use the handrail while on stairs.

- Never store anything on stairs. You could trip over boxes, tools or other clutter.

- Do not carry large loads up and down stairs. Split the load between trips so you can have a hand free to use the hand rail or use the elevator.

- Tell your supervisor if you see any signs of damage or weakness on stairs or hand rails.

- Stay to the right to allow other traffic room to pass.

- Do not run up or down stairs.

Walk Safely on Stairs:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not run; use hand rail.</td>
<td>Do not carry large loads.</td>
</tr>
</tbody>
</table>

Lesson 2

Objectives

1. Discuss safe housekeeping practices for the workplace.

2. Identify safe footwear.
Keep Your Workspace Clean and Organized

- Clean up spills immediately. Make sure areas around machines are free of debris.
- Use a temporary sign to mark a floor that is wet or being cleaned.
- Do not string cables or cords across a doorway or walkway.
- Make sure floor mats, rugs and carpets lie flat.

**Accident Report**
**Worker Dies After Slipping on Fruit**

Summary of OSHA Accident Investigation 014348205

A worker was walking on a concrete floor near a pear peeling machine. He slipped on a pear rind and hit his head on the concrete floor. He died later at the hospital.

⚠️ Clean up any spilled materials immediately.

- Store unused tools, brooms, mops and other housekeeping supplies in their proper place.
- Close all cabinet doors, drawers and secure loose machine parts.
- Keep all stairs, floors and aisles clutter-free and in good repair. Park lift trucks and pallet jacks away from pedestrian traffic.
- Report uneven or broken floors to your supervisor immediately.
Avoid Fall Hazards

Always look around for hazards such as vehicles, clutter, coworkers and other dangers.

- Never carry anything too tall to see over. You should be able to see where you are going at all times. If necessary, make more than one trip or use a pallet jack to transport loads.

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Worker Seriously Injured by Tripping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of OSHA Accident Investigation 170762579</td>
<td></td>
</tr>
<tr>
<td>A worker was alone in the cooling floor area of a warehouse, removing cases from a conveyor and placing them on a pallet. He forgot there was a platform behind him and he tripped over it. His hip and leg were broken.</td>
<td></td>
</tr>
<tr>
<td>Pay attention and look around for trip hazards.</td>
<td></td>
</tr>
</tbody>
</table>

- Stay on pedestrian walkways. Do not take short cuts by climbing over or under machines or conveyor belts.

- Stay off wet floors. If you must work in the area, wear non-slip footwear.

- Always turn lights on when you enter a dark room, even if you only need be in the room briefly.

- Use a flashlight in dark areas that have no overhead lights.

- Do not run.

<table>
<thead>
<tr>
<th>Accident Report</th>
<th>Worker Seriously Injured After Fall On Wet Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of OSHA Accident Investigation 111920609</td>
<td></td>
</tr>
<tr>
<td>A worker was walking close to a garlic dryer, where the floor is always wet. He heard someone shout. He quickly turned and slipped on the wet floor. He broke four ribs and punctured a lung.</td>
<td></td>
</tr>
<tr>
<td>Avoid walking on wet floors. When you must walk in an area with a wet floor, wear non-slip footwear.</td>
<td></td>
</tr>
</tbody>
</table>
**Wear Appropriate Footwear**

Wear sturdy non-slip footwear while on the job. Talk with your supervisor about what kind of non-slip footwear is appropriate for your working conditions.

- Make sure your shoelaces are tied.

- Wear shoes that are in good condition and fit properly. If the tread on your shoes is worn smooth, you should replace them.

- Shoes with a high heel, open toes, or an open back are not recommended.

<table>
<thead>
<tr>
<th>Safe Shoes:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YES</strong></td>
<td><strong>NO</strong></td>
</tr>
<tr>
<td><img src="image1" alt="Safe Shoe" /></td>
<td><img src="image2" alt="No Shoe" /></td>
</tr>
<tr>
<td><img src="image3" alt="Safe Shoe" /></td>
<td><img src="image4" alt="No Shoe" /></td>
</tr>
<tr>
<td><img src="image5" alt="Safe Shoe" /></td>
<td><img src="image6" alt="No Shoe" /></td>
</tr>
</tbody>
</table>
Quiz Yourself

Answers can be found on pages 29 and 30.

Use the list of words to fill in the blanks:

lights
worn
aisles
spills

1. Clean up ______________ immediately.

2. If the tread on your shoes is ________, you should replace them.

3. Keep ______________ clear of clutter and unused machinery. Park lift trucks and pallet jacks away from pedestrian traffic.

4. Always turn ______________ on when you enter a dark room, even if you only need be in the room briefly.

Circle the picture of the safer footwear:

5. 

6. 

7.
Using Ladders Safely

Choose the Right Ladder for the Job

It is important to choose the right ladder. You could fall from a ladder that is not designed for the job. Always inspect ladders before use; never use a damaged ladder.

- Use a ladder of the right length so you do not have to stretch or reach.
- Make sure your ladder has a slip-resistant base.
- Do not use ladders that are weak, wobbly, damaged or have missing rungs.
- Do not use metal ladders near electrical equipment. You could be electrocuted. Use a fiberglass ladder instead.
- Never splice two ladders together to make a longer ladder.
- If your work requires both hands, you should not use a ladder. You could fall if you are not able to hold on to the ladder. Use an elevated work platform such as a personnel lift or scaffold.
- Do not stand on a ladder for long periods of time—you could become fatigued and fall. Use a scaffold, personnel lift or other elevated platform.

Accident Report
Employee Dies After Falling From Ladder

Summary of OSHA Accident Investigation 200672863
A worker was using an extension ladder to make some machinery repairs. He set the feet of the ladder on smooth concrete floor. After he was finished with repairs, he was coming down the ladder when it slipped. He fell 8 feet onto his head and died. The rubber feet on the ladder were broken.

Inspect all ladders before use. Always check the base to make sure it is stable and secure.
Check Your Ladder Rating

Ladders are rated for use according to the amount of weight they can support. There are four ratings of ladders. This information is usually posted on the side rail of the ladder.

<table>
<thead>
<tr>
<th>Ladder Ratings:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type IA</td>
<td>Heavy Duty Industrial</td>
<td>300 lbs. capacity</td>
</tr>
<tr>
<td>Type I</td>
<td>Industrial</td>
<td>250 lbs. capacity</td>
</tr>
<tr>
<td>Type II</td>
<td>Commercial</td>
<td>225 lbs. capacity</td>
</tr>
<tr>
<td>Type III</td>
<td>Household Duty</td>
<td>200 lbs. capacity</td>
</tr>
</tbody>
</table>

- Remember to add the weight of your tools and materials to your weight. This combined weight should not be over the ladder’s capacity.

- Never remove, paint or cover the rating information on a ladder.

Inspect Ladders Before Every Use

Always inspect the ladder before use. Do not use a damaged ladder. If you find any damage on the ladder, tell your supervisor. Mark the ladder “Dangerous, Do Not Use” and take it out of service immediately. Never paint wooden ladders — signs of rot and damage could be covered up by the paint. See the checklist, right, for areas to inspect.

Ladder Inspection Checklist

<table>
<thead>
<tr>
<th>Needs Repair</th>
<th>OK</th>
<th>General</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loose steps or rungs (considered loose if they can be moved at all by hand)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loose bolts or other metal parts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cracked, split, or broken uprights, braces, steps or rungs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slivers on uprights, rungs, or steps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Damaged, worn or missing nonslip bases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rusting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil, grease or other slippery deposits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stepladders

| Wobbly |
| Loose or bent hinge spreaders |
| Stop on hinge spreaders broken |
| Broken, split or worn steps |
| Loose hinges |

Extension Ladders

| Missing and defective brackets and locks (do not seat properly when ladder is extended) |
| Damaged rope or pulley |

Accident Report

Worker Injured After Fall From Damaged Ladder

Summary of OSHA Accident Investigation 170206882

A worker was using an extension ladder to take apart a vinegar tank. The worker knew the ladder had been taken out of service, but he used it anyway. It had a broken side rail that had been patched. The ladder failed, and the worker fell about 6 feet to the ground. He suffered a serious neck injury.

⚠️ Inspect all ladders for damage before use. Do not use a damaged ladder.
Types of Ladders

Straight and Extension Ladders
These ladders are portable and are leaned against a roof or other secure surface. You need a ladder that is at least three feet higher than the surface you are trying to reach. These ladders should never be used horizontally as a work platform.

Examples of Straight and Extension Ladders:

Stepladders
These ladders are portable and stand on four legs. Since they are free-standing, they do not lean against a wall for support. Never use a folded-up stepladder instead of a straight or extension ladder or as a horizontal work platform.

Examples of Stepladders:

Setting up straight or extension ladders:

1. Place the ladder at an angle so that the base is one foot out for each four feet of height you need to reach. To find out how far away from the wall your ladder base should be, you can use this equation:
   
   \[
   \text{height of wall} \div 4 = \text{distance from wall to ladder base}
   \]

   Examples: If the surface to be reached is 8 feet from the ground, divide 8 by 4.

   \[
   8 \div 4 = 2
   \]

   The ladder base should be two feet from the wall.
If the surface to be reached is 14 feet from the ground, divide 14 by 4.

\[ 14 \div 4 = 3.5 \]

The ladder base should be three and a half feet from the wall.

2. Place the top of the ladder so that both rails are fully supported.

3. Make sure the ladder extends at least three feet above the top landing.

4. Never lean ladders against loose boxes or other unsecured surfaces.

5. Never place a ladder against a window or sash. Securely lash a board across the top of the ladder so that it overlaps each side of the window.

6. Make sure the base of the ladder is stable and level.

7. Tie the ladder in position (top and bottom) when using it to reach scaffolds or when necessary to make secure.

8. Make sure the two sections of the ladder are locked in place. The upper section must always overlap on the climbing side of the ladder. See column, right, for ladder overlap requirements.

### Setting up a Stepladder:

1. Choose a flat, stable surface that is free of puddles and debris to set up the stepladder.
2. Open the ladder fully and lock the metal spreader before starting to climb.
3. Before setup check that the ladder feet are stable, level and secure.

### Extension Ladder Overlap

The upper section of an extension ladder must always overlap on the climbing section of the ladder.

**Example of ladder overlap:**

The amount of overlap should be:

- For ladders up to 36 feet: at least 3 feet
- Ladders 36-48 feet: at least 4 feet
- Ladders 48-60 feet: at least 5 feet
Working Safely on Ladders

- Always face toward the ladder when climbing up or down.

- Always maintain at least three points of contact with the ladder. This means that at all times, both hands and one foot, or both feet and one hand should be in contact. This is called a three-point stance and it is the safest way to climb up and down a ladder.

<table>
<thead>
<tr>
<th>Accident Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worker Injured After Missing Ladder Step and Falling</td>
</tr>
</tbody>
</table>

Summary of OSHA Accident Investigation 17035773

A worker was standing on an 8-foot ladder to check the product level in a storage tank. As he was going down, he missed the third step from the bottom and lost his balance. He fell to the cement floor, and was hospitalized with a fractured hip.

Watch where you step when climbing up or down a ladder. Hold on with both hands and step on every rung.

- Do not carry things in your hands while you are climbing a ladder. Have a coworker send them up with a rope or by other means, once you have reached your work area.

- Never stand or sit on the top steps of a step-ladder—the ladder could tip over. Unsafe steps are marked “Do Not Stand or Sit.”

- Do not reach away from the center of the ladder. A good rule of thumb is to never let your belt buckle go beyond the side rail of the ladder.

- Never try to move a ladder while you are on it. Always get off the ladder and reposition it. Always reposition ladders from the ground—not from above.

- Only one person is allowed on a ladder at a time. Do not allow anyone to climb the opposite side of a step-ladder.
Never put a ladder in front of a door that opens toward the ladder, unless the door is locked or guarded. Use a barricade to keep traffic away when you use a ladder in a parking lot or doorway.

Do not use ladders as a horizontal work platform.

Do not place the ladder on top of boxes, barrels or other unstable surfaces to make them higher.

Do not leave ladders unattended.

**Ladder Storage**

Store ladders out of the weather in a place with good ventilation. Do not store them near radiators, stoves, steam pipes or other places with excessive heat or dampness.

Do not store fiberglass ladders in direct sunlight—they can be weakened.

Store them so that people will not trip over them, and so they will not fall on anyone.
Quiz Yourself

Answers can be found on page 30.

Use the list of words to fill in the blanks:

3 feet
horizontal
toward
electrical equipment

1. Always face ____________ the ladder when climbing up or down.

2. Do not use ladders as a ____________ work platform.

3. The top of an extension ladder should extend ____________ above the top landing.

4. Do not use metal ladders near _______________. Use a fiber-glass ladder instead.

Is this safe?
Circle the correct answer.

You decide to use a stepladder leaned against a wall to reach this ceiling because you don’t have an extension ladder.

Safe

Unsafe
Working Safely on Raised Surfaces

Get to Equipment Safely

Do not climb on equipment. Stay on safe walking and climbing surfaces, such as stairs and platforms. Use a ladder or lifting device to get to hard-to-reach areas.

- Do not climb on shelves, pallets, boxes or other materials. Use a ladder instead.
- Never walk or climb on equipment that does not have appropriate steps, walking surfaces or hand rails.
- Never climb under or over machines.
- Use ladders, lifting devices or scaffolds for hard-to-reach areas.

Note: Scaffolds require training that is beyond the scope of this book. Ask your supervisor about training if you need to use a scaffold.

Lesson 4

Objectives

1. Discuss methods to get to hard-to-reach areas.

2. Identify methods of fall protection.
Fall Protection

Guarding a floor opening

- These protect workers from the manlift opening in the floor.

Guarding a raised work area

- This gate should only be opened while loading items into the elevated storage area.

Fall Protection Devices

Guardrails, Handrails and Toe Boards

All raised work areas should have guard rails, hand rails and toe boards installed to protect workers.

- Do not remove fall protection devices. Talk to your supervisor if your work requires you to work without guardrails, handrails or toe boards. Never leave an area unattended where you have removed handrails, guardrails or toe boards.

- Report damaged or missing guardrails, toe boards and hand rails to your supervisor.

- Do not climb or stand on handrails or guardrails.

- If you must climb on machines, use handrails and steps designed for workers. Do not climb on machine parts that are not designed to hold your weight.

- Close gates as soon as you are finished walking through them. Do not leave gates open and unattended.

- Never reach over or lean against guardrails. You could lose your balance or the rail could give way and you could fall.

Accident Report
Worker Injured When Platform Fell From Lift Truck

Summary of OSHA Accident Investigation 105941470

A worker was in a platform on the forks of a lift truck. A coworker operated the controls. The platform was not secured to the forks or carriage. The worker was removing pipe and accidentally cut a vinegar line. The coworker operating the controls backed the truck away. The platform with the worker on it fell from the forks. The worker fell about 10 feet to the floor and the platform fell on top of him. He was hospitalized.

Use only approved work platforms, and always secure them properly.

Accident Report
Worker Killed After Falling From Work Surface

Summary of OSHA Accident Investigation 303414841

A worker was on a scaffold, painting overhead. He slipped on the uneven surface and fell 45 feet through the opening below the top guardrail. He was killed. The scaffold guardrail system was missing both the midrail and the toeboard.

Report missing guardrails to your supervisor immediately. Do not work in raised work areas that are missing guardrails, handrails or toe boards.

- Report damaged or missing guardrails, toe boards and hand rails to your supervisor.

- Do not climb or stand on handrails or guardrails.

- If you must climb on machines, use handrails and steps designed for workers. Do not climb on machine parts that are not designed to hold your weight.

- Close gates as soon as you are finished walking through them. Do not leave gates open and unattended.

- Never reach over or lean against guardrails. You could lose your balance or the rail could give way and you could fall.
Personal Fall Arrest System

If you must work in an area more than four feet from the floor that does not have guardrails, handrails or toe boards, use a personal fall arrest system. These can include body belts, harnesses, lanyards or safety nets. You should be trained and authorized before you use personal fall protection.

- Inspect equipment before every use: check belts, harnesses and lanyards for cracks, cuts or broken stitching. Make sure all clips, buckles and rivets are not loose or broken.

Work Safely on Raised Surfaces

Catwalks, Runways and Platforms

- Do not run, and pay attention to where you are going.

- Stay behind guardrails on catwalks, runways and platforms.

Accident Report

Worker Leans Over Guard Rail, Falls and Is Seriously Injured

Summary of OSHA Accident Investigation 112069349

A worker was using a long pole to clear a jam on a conveyor belt. She was standing on an elevated work platform. She leaned too far over the guardrail and lost her balance. She fell to the ground, about 12 feet below the platform. She suffered a broken jaw, pelvis and right arm.

⚠️ Do not lean over guard rails.

Accident Report

Worker Injured in Fall From Runway

Summary of OSHA Accident Investigation 111790028

A worker was walking back to her position on a raised runway when she realized she left her gloves in the break room. She was hurrying back to the break room when she saw a coworker and waved to them. She was not paying attention and took a wrong turn and walked into a gate. The gate gave way and she fell 12 feet onto the concrete floor. She was hospitalized.

⚠️ Walk slowly on elevated walkways, and pay attention to where you are going.

This worker on an order picker is wearing personal fall protection attached to the lift truck.
Skylights, Floor, Roof and Wall Openings

- Make sure openings are protected by guards or properly covered.

Accident Report
Worker Falls Through Skylight, Seriously Injured

Summary of OSHA Accident Investigation 126208016
A worker was on the roof with two coworkers. They were removing a steam exhaust duct through a 4-foot by 8-foot skylight. The worker lost his balance and fell through the skylight about 30 feet to the ground. He suffered serious injuries that required hospitalization.

⚠️ Use fall protection devices and never work in raised work areas without guardrails.

- Do not sit on, lean against or step on a skylight or covering.

- Tell your supervisor if you see unguarded skylights or openings.

Use Lift Devices Safely

Lifting devices can be attached to a lift truck’s forks or can be a free-standing lift. Approved lifting devices have guards and safety restraints.

- Lift workers only while the lift truck is stationary and on a level surface.

- Follow safe parking procedures before allowing workers to enter the lift cage.

- The lift device should have a guard between the raised worker and the mast to prevent crushing accidents.

- Never lift workers standing on pallets, lift truck forks or other unapproved devices.

- Make sure the lift device is secured to the forks before lifting.

- Make sure the person who is raised is secured with a personal fall arrest system (such as a lanyard or body harness), standard guardrails or other type of restraint.
The lift truck operator must stay at the vehicle controls while the person is being raised.

Raise and lower the platform slowly and smoothly.

Make sure only one set of controls—either the lift truck controls or the device’s controls—can be used at any one time.
Quiz Yourself

Answers can be found on page 31.

Use the list of words to fill in the blanks:

unguarded
lean
ladders

1. Use ______________, personnel lifting devices or scaffolds to access hard-to-reach areas.

2. Tell your supervisor if you see ______________ skylights or openings.

3. Never reach over or ______________ against guardrails. Stay behind them at all times.

Fall Protection Devices

Use the list of words to label the fall protection devices.

toe board
access gate
guardrails
Conclusion

Practicing safe work habits can help prevent falls in the workplace. You have been presented with checklists, safety tips and exercises designed to help you avoid the most commonly reported causes of falls, as well as other important safety precautions to consider. Use this information to keep your workplace safe.
Quiz Yourself

Answers can be found on page 31.

Use the list of words to fill in the blanks:

stepladder
spills
flashlight
center
alcohol

1. Do not reach away from the __________ of the ladder.

2. Never use a folded-up ___________ instead of a straight or ex-
tension ladder.

3. Do not work while under the influence of ____________.

4. Use a ____________ in dark areas that have no overhead lights.

5. Clean up ____________ immediately. Make sure areas around ma-
chines are free of debris.
Quiz Yourself Answers

Lesson 1, Page 8

1. Never climb boxes, pallets, trash bins, shelves or other materials instead of a ______ ladder ________.

2. _______________ is the most serious safety message.

3. You could be seriously injured or killed if you fall through an _______________ in the roof, floor or wall.

4. Make sure floors are clean and dry and work areas are free of _______________.

Match the safety sign with its meaning:

CAUTION: SLIPPERY WHEN WET

DANGER: FALLS FROM ELEVATION WILL RESULT IN SERIOUS INJURY OR DEATH

Lesson 2, Page 13

1. Clean up _______________ immediately.

2. If the tread on your shoes is ____________, you should replace them.

3. Keep _______________ clear of clutter and unused machinery. Park lift trucks and pallet jacks away from pedestrian traffic.

4. Always turn ____________ on when you enter a dark room, even if you only need to be in the room briefly.

(continued on next page)
Lesson 2, Continued

1. Always face ________ the ladder when climbing up or down.
2. Do not use ladders as a ________ work platform.
3. The top of an extension ladder should extend ________ above the top landing.
4. Do not use metal ladders near _________. Use a fiberglass ladder instead.

Is this safe?
Circle the correct answer.

You decide to use a stepladder leaned against a wall to reach this roof because you don’t have an extension ladder.

Lesson 3, Page 20

1. Always face ________ toward the ladder when climbing up or down.
2. Do not use ladders as a ________ horizontal work platform.
3. The top of an extension ladder should extend ________ 3 feet above the top landing.
4. Do not use metal ladders near ________ electrical equipment. Use a fiberglass ladder instead.
Lesson 4, Page 26

1. Use **ladders**, personnel lifting devices or scaffolds to access hard-to-reach areas.

2. Tell your supervisor if you see **unguarded** skylights or openings.

3. Never reach over or **lean** against guardrails. You could lose your balance or the rail could give way and you could fall.

Fall Protection Devices
Use the list of words to label the fall protection devices.

![Diagram of fall protection devices]

access gate  guardrails  toe board

Conclusion, Page 28

1. Do not reach away from the **center** of the ladder.

2. Never use a folded-up **stepladder** instead of a straight or extension ladder.

3. Do not work while under the influence of **alcohol**.

4. Use a **flashlight** in dark areas that have no overhead lights.

5. Clean up **spills** immediately. Make sure areas around machines are free of debris.