

Agricultural Safety Fact Sheet



Safe Use of Tripod Orchard Ladders

Every year many workers are injured from using tripod orchard ladders. These incidents are preventable. Workers, such as fruit pickers and landscapers, use this type of ladder regularly. Employers can prevent worker falls and injuries by following the safety measures described in this fact sheet.

A tripod orchard ladder is a portable, self-supporting ladder used in orchards and landscape maintenance, for tasks such as pruning and fruit harvesting. This type of ladder should not be used as an all-purpose ladder. They are designed with a flared base and a tripod pole that provides support on soft, uneven ground. In addition, these ladders have no spreader bar or locking mechanisms to hold its front in place or to stabilize the ladder. For a tripod orchard ladder to function properly and remain stable, the ladder side rails and tripod pole must slightly penetrate the ground.



Tripod Orchard Ladder Injuries and Hazards

Sprains and strains are the most common types of ladder injuries and are caused by overreaching, moving, lifting or carrying ladders. Fractures, concussions and dislocations are caused by falls as a result of an unstable ladder, overextension of the ladder's tripod pole, slipping or being struck by a falling ladder. In addition, poor weather conditions such as high winds or ladders too close to electrical lines have also caused fatalities. Back injuries can also occur from carrying the ladder incorrectly for long periods of time and over long distances.



Fall Prevention

When working on a ladder, falls are the most common hazard. More falls occur on the upper part of the ladder than in the middle or lower portions. Most falls are due to slippery steps, unstable ladders, and by not maintaining proper contact with the ladder. Employers can prevent most tripod ladder fall hazards by training workers and taking the following safety measures:



- Place the ladder firmly in the ground to keep it from collapsing, slipping, moving, or falling. Make sure that the ladder is not positioned over a soft spot or hole.
- Ladders placed on sloped ground must have the tripod pole positioned uphill.
- Routinely inspect ladders.
- Train workers to center themselves between the ladder's side rails and to use both hands to climb up and down the ladder.
- Select and provide required personal protective equipment (such as eye protection) for workers.
- Have workers wear non-slip shoes with stiff soles and a good sized heel.

- Train workers not to overreach beyond the ladder's side rails; the ladder should be moved to perform orchard work.
- Do not overfill produce bags.
- Do not stand or work on the ladder's top three steps.
- Train workers to never move from a ladder onto a tree branch or to stand on or use the branch for balance.

General Safety Precautions

Before work begins, hazards should be identified and eliminated by the employer. Some safeguards employers should implement include:



- Mark dangerous areas for workers to avoid, such as trees and electrical lines.
- Establish and enforce ladder safety rules.
- Ensure that only one worker is on each ladder.
- Do not allow other types of ladders to be used.
- Conduct daily safety talks.
- Select and use ladders appropriate for the worker and tree size.

Carrying, Lifting and Moving Ladders

Workers carry, lift and move ladders throughout the workday. To prevent injuries from carrying, lifting and moving ladders, employers should train workers to properly handle one ladder at a time. Employers should also train workers on the following:



- To place their arm through the ladder and to balance it on their shoulder.
- To carry ladders in a horizontal position with the top of the ladder facing forward, firmly securing the tripod pole to keep it from slipping out of the ladder notch.
- For moving long distances, the horizontal (side-to-side) position is especially useful in carrying ladders, either by one or two workers.
- To watch for other people and nearby trees.

Proper ladder lifting and handling techniques can protect workers from back injuries, as well as ease the work. Throughout the workday, employers should remind workers of the proper lifting and handling techniques.

Training

Employers should train full-time and seasonal workers to recognize hazards and set up a process for workers to report unsafe conditions to supervisors immediately.



Ladder safety training should be conducted by an experienced/knowledgeable person. Training should include ladder maintenance and storage, and how to properly respond to ladder injuries and incidents.

Employers should train workers to:

- Never leave a ladder standing open at the end of the workday
- Limit or reschedule work on ladders during high winds, heavy rain, or thunderstorms.
- Avoid walking under or near ladders in use by using a barrier or having a coworker act as a lookout.
- Never use ladders on hard surfaces.
- Use and carry tools on a ladder in a safe manner.



Ladder safety training should be provided before any worker is allowed to work on a tripod orchard ladder.

Inspecting, Maintaining and Storing Ladders



Before a ladder is used, the employer must inspect it to ensure that it has no defects and that it is in good working condition. Employers should focus on:

- Checking ladders daily in accord with the manufacturer's guidelines to ensure components are in good working order.
- Checking ladders for missing, loose, or sheared rivets, broken steps, and bent rails or tripod poles. After a ladder tips over, inspect it from top to bottom before placing it back in service.

- Removing defective or damaged ladders from service immediately. Placing an “out-of service” tag on damaged ladders, and separating them from non-damaged ladders. Repairing damaged ladders must not be done by the worker.
- Storing ladders in accord with the manufacturer’s instructions and away from excessive heat and cold.

Emergency Response Procedures



Employers should develop an emergency response plan that is tailored to their facility and operations. This includes training workers to call 911 and to not move an injured worker suspected of having a neck or spinal injury. Also, first-aid and CPR training should be provided to workers by their employer.

Prior to use, workers should be trained on how to use a ladder safety checklist. The following checklist identifies inspection requirements (not all-inclusive) that can be applied to a tripod orchard ladder safety program.

Workers’ Rights



Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.

- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA’s rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For more information, see [OSHA's Workers page](#).

Tripod Orchard Ladder Safety Checklist

- Rivets/joints and fastenings are in place and secure.
- Steps are in place and secure.
- Steps are free of dents, bends, and damage.
- Free of rust, grease or oil.
- Safe Working Load label is attached to the ladder’s side rails.
- Top cap is tightly secured to the ladder’s side rails and tripod leg hinge.
- Tripod leg is intact and not able to bend.
- Tripod leg is free of cracks and dents.
- Footplate is free of cracks and rust.

For questions or to get information or advice, to report an emergency, fatality, inpatient hospitalization, amputation, or loss of an eye, to file a confidential complaint, or to request OSHA’s free on-site consultation service, contact your nearest OSHA office, visit www.osha.gov, or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

For more information on ATV safety and other issues affecting farmworkers, visit OSHA’s Safety and Health Topics Agricultural Operations website at www.osha.gov/dsg/topics/agriculturaloperations.

For assistance, contact us. We can help. It’s confidential.



OSHA[®] Occupational Safety and Health Administration



U.S. Department of Labor

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

