



# Farm Labor Contractor Safety and Health Guide

DEPARTMENT OF INDUSTRIAL RELATIONS

**Cal/OSHA Consultation**

Education and Training Unit

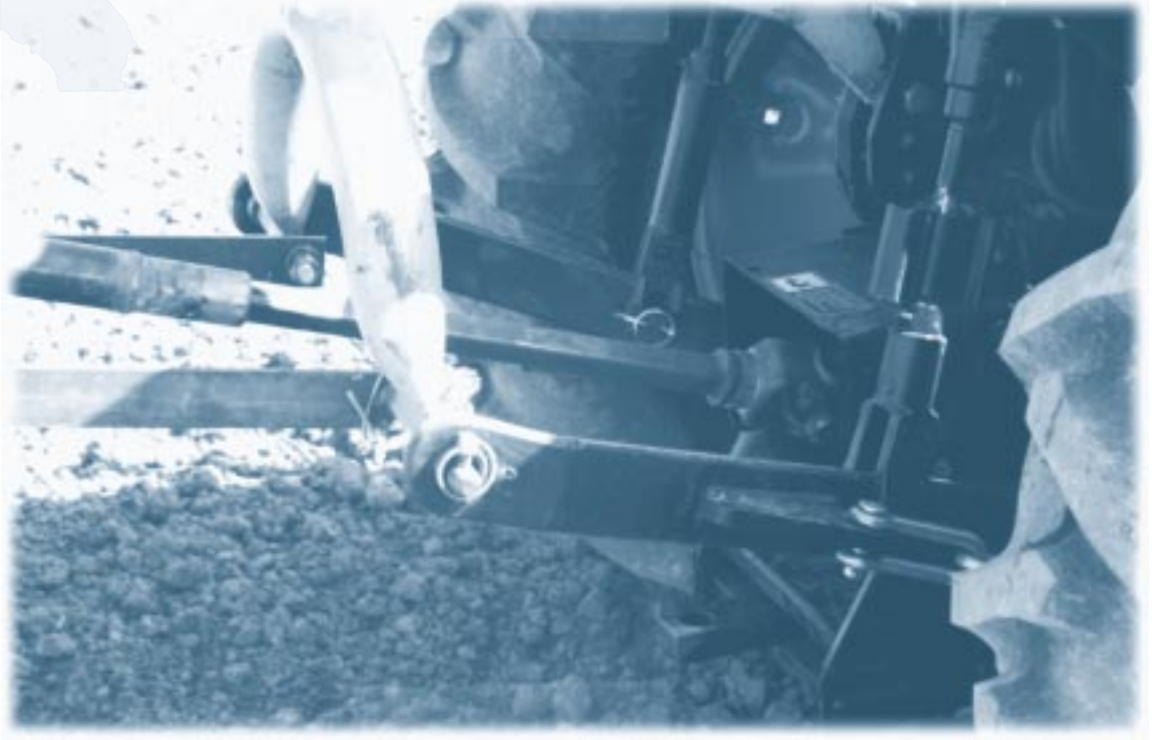


◀ **Prevent back injuries:** Train employees in proper material handling techniques.



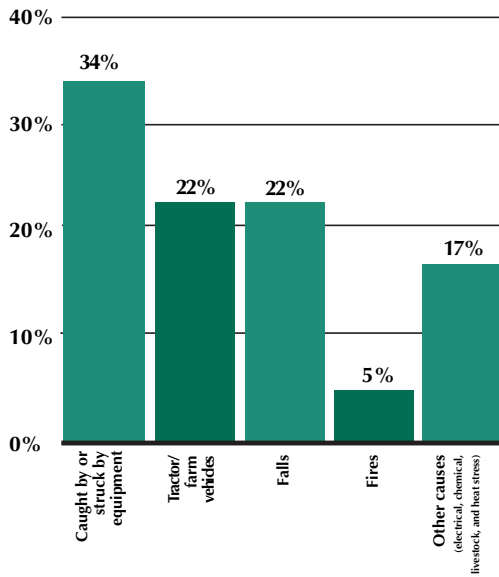
▲ **Prevent livestock injuries:** Train employees in animal handling and emergency procedures in the event of an injury.

Cal-OSHA Reporter<sup>®</sup>  
A WEEKLY PUBLICATION FOR THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY



▲ **Prevent Power Take-Off (PTO) injuries:** Guard all Power Take-Off shafts and couplings.

**Causes of Serious Agricultural Injuries in California,  
1/1/97-12/31/97 (DOSH Compliance)  
Sic Codes 0111 to 0783**



**Top 5 Causes for Fatalities in California Agriculture from 1993-1997  
Sic Codes 0111-0783**

1. Tractor and farm equipment
2. Crushed, struck by a moving or falling object, and caught by equipment
3. Falls
4. Electrocution
5. Drowning

## Five High-Risk Areas

Motor vehicle accidents, electrical contacts, moving or falling objects, back injuries, and slips and falls are *the most common and most costly workplace hazards in agricultural operations.*



▲ **Prevent truck/equipment accidents:** Follow safe operating practices.

### (1) MOTOR VEHICLES, TRACTORS, AND FARM EQUIPMENT ACCIDENTS

Nearly **half of all fatalities** recorded in the California agriculture industry involve tractors or moving farm equipment. This includes driving trucks or cars on and off the

farm and operating tractors, forklifts, all-terrain vehicles (ATVs or 3-wheelers), golf carts, and transporters (*rateros*). Other agencies with overlapping regulatory authority in this area include the U.S. Department of Labor (DOL), California Highway Patrol (CHP), Department of Motor Vehicles (DMV), and the U.S. Department of Transportation (DOT).

#### How can you prevent these accidents?

- Ensure that tractors always have a driver at the controls while in motion.
- Ensure that all traffic laws and rules are followed, including speed limits, signaling, and obeying road and traffic signs.
- Allow only trained and qualified workers to operate farm equipment.
- Ensure that all cars and trucks are operated by drivers with valid California driver licenses.
- Make sure that drivers and passengers use seat belts.
- Teach workers to look out for potential road hazards such as soft shoulders, narrow rights-of-way, loose gravel, bumps, potholes, and deep trenches.

- Try to avoid driving in bad weather conditions such as dense fog, haze, rain, or wind.
- Do not permit the operation of any motor vehicle if you suspect that the driver is under the influence of alcohol or another substance that may impair alertness.
- Discipline operators who do not follow safe driving practices.
- Do not allow riders on trailers, tractors, bailers, or other moving equipment unless a passenger seat and belt have been installed.



▲  
**Prevent electrocution:** Do not store pipes under power lines.

## (2) ELECTROCUTION

The **second leading cause of fatal injuries** in California agriculture is electrocution. Each year, field workers' lives are lost when they are struck by lightning or come in contact with high voltage lines while pruning trees, harvesting, or moving irrigation pipes. Electrical contacts can also occur when workers use metal ladders or fail to unplug electrical equipment before doing maintenance or repair work. Hedgers and toppers, cotton harvesters, land levelers,

pruning towers, cherry pickers, and manlifts have all been involved in electrical contact accidents.

### How can you prevent these accidents?

- Remember the 10-foot rule: Keep all vehicles, equipment, tools, and people at least 10 feet away from power lines.
- Ensure that trees are pruned well before they get close to the power lines. Contact your nearest electrical utility for assistance before pruning the trees yourself. **Call PG&E in Northern California at (800) 743-5000 or Southern California Edison at (800) 655-4555.**
- Teach your workers about avoiding the hazards of working near power lines. This includes keeping hand-held tools (loppers, pruners, etc.) a safe distance of at least 10 feet away from power lines.
- Instruct workers to keep the irrigation pipe horizontal or even with the ground and to avoid standing the pipe upright until making certain that no power line is overhead.
- Instruct workers to check for overhead lines when they tie down loads.
- Ensure that workers seek proper shelter during lightning storms. Avoid standing under a tree.
- Ensure that workers or supervisors receive appropriate lockout/tagout training for electrical equipment. Just turning off the machine is not enough.
- Instruct workers to never attempt to service or repair any electrical equipment if they are not properly trained to do so.
- Follow the *California Code of Regulations (CCR), Title 8, Section 2510.5* for electrical regulations when working at wet and damp locations.
- Ensure that every electrical circuit and breaker is properly covered and maintained.

**Note:** For a free copy of Cal/OSHA's lockout/tagout publication and free assistance on lockout/tagout and de-energizing equipment, contact your nearest Cal/OSHA Consultation Service Office. Phone numbers and addresses are listed on the last page of this publication.

### (3) MOVING OR FALLING OBJECTS

The most common cause of **lost-time work injuries** in the California agriculture industry is being struck by moving or falling objects. Each year over 5,000 workers in California agriculture suffer disabling injuries as a result of accidents involving:

- Moving equipment or vehicles
- Falling or moving heavy objects, such as bales, bags, and cans
- Cows and other large animals, which can cause injury through unexpected movements or kicking
- Being struck by tools such as saws, shovels, hammers, pruning shears, or buckets

#### How can you prevent these accidents?

- Operators and those working around moving equipment should be constantly aware of their surroundings and on the lookout for other workers nearby.
- Always make sure that guards are secured in place on both equipment and vehicles before operating.
- Ensure that hand tools are properly maintained and used in a safe manner.
- Minimize manual handling of heavy objects, working at heights, and working with moving equipment.
- Secure stacked and stored materials to prevent falling.
- Ensure that stored energy is released or otherwise secured.
- Ensure that workers around animals are trained in animal handling, know where

escape openings in the fences are, and know what to do in the event of an injury.

- Ensure that personal protective equipment (PPE) such as eye and face protection is provided and used when required.
- Training, anticipation, and awareness can prevent worker injuries caused by falling or rapidly moving objects.



**Prevent back injuries:** Train employees to use correct lifting techniques.

### (4) BACK INJURIES

Each year, over 3,000 workers in the California agriculture industry suffer costly disabling back injuries. Agricultural work often involves bending, reaching, twisting, lifting and carrying boxes and bags, or other tasks related to growing or picking crops. These activities require workers to bend, twist, stoop, or assume awkward or fixed postures that can lead to back injuries. Other hazards that can cause back injuries include working on elevated or slippery surfaces and the unexpected movement of animals in confined areas.

#### How can you prevent these injuries?

- Educate workers in proper lifting and carrying techniques. Rotate workers

- assigned to perform heavy lifting jobs.
- Encourage a “team lift or assistance” (two or more employees) for heavy loads whenever possible.
- Break down or reduce the size of loads whenever possible.
- Encourage frequent breaks to stretch and rest tired muscles.
- Teach workers to know their limits.
- Minimize overextending.
- Encourage workers to follow safe work practices.



A WEEKLY PUBLICATION FOR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

▲ **Prevent slips and falls:** *Keep steps clean.*

### **Train workers to take special care with ladders when working on:**

- 1) Elevated surfaces
- 2) Uneven or muddy terrain
- 3) Areas with holes and ditches

Also ensure that employees maintain balance and good footing.

## **(5) SLIPS AND FALLS**

Slips and falls are the **third leading cause of lost-time injuries**. Agricultural tasks include working at heights, on uneven surfaces, around moving equipment, and in awkward positions or places. Often these

tasks are done while also carrying or moving a heavy load or other equipment. Barn floors where hay or feed is stored can be slippery when dry or wet, and field conditions are often muddy and uneven. Each year over 3,000 workers in California agriculture suffer disabling injuries from slips and falls.

### **How can you prevent these accidents?**

- Make sure that workers avoid running and that they **DO NOT** jump across canals or ditches.
- Do not allow riders on moving equipment unless a passenger seat has been provided by the manufacturer.
- Make sure that operators and other workers don't jump off equipment, especially when it is moving.
- Keep farm equipment surfaces clean of mud.
- Train workers to take special care around steps or uneven terrain, surfaces with deep holes, and inclined surfaces.
- Keep floors as clean and dry as possible, especially in areas where oil, water, animal wastes, or other slippery materials accumulate.
- When railings are required, make sure that they are installed on the equipment.

#### ***Other hazards related to agricultural***

***operations include:*** Assaults (workplace violence), heat stress, and chemical exposures. For more information contact your nearest Cal/OSHA Consultation Service Area Office or your nearest Workers' Compensation Insurance Loss Control Department.

**Note:** Statistics provided by Dr. James Meyers, UC Berkeley, Farm Safety Program and AgSafe Coalition.

# REQUIRED INJURY AND ILLNESS PREVENTION PROGRAM (IIPP)

## What is an IIPP?

Every employer in California is required to have a *written* injury and illness prevention program that contains eight elements:

- 1) Management commitment and assignment of responsibilities;
- 2) A safety communications system with employees;
- 3) A system for ensuring employee compliance with safe work practices;
- 4) Scheduled inspections/a hazard evaluation system;
- 5) Accident investigation;
- 6) Procedures for correcting unsafe or unhealthy conditions;
- 7) Safety and health training and instruction; and
- 8) Recordkeeping and documentation.

The goal is to reduce workplace injuries and illnesses through the identification and control of hazards as well as through employee training. Successful safety programs in high-

risk industries such as agriculture have the following in common:

- **Management commitment**—Effective injury prevention depends on the active involvement of supervisors and managers.
- **Worker involvement**—Successful injury prevention entails worker involvement. *Remember that your workers are your “eyes” in the field for hazard identification, and they often have ideas for making a job safer. Worker involvement provides powerful motivation for improvement.*
- **Elimination of hazards**—Hazard identification and correction as well as proper use of equipment, including personal protective equipment, are effective ways to prevent injuries.
- **Education and training**—Safety training is an important part of preventing injuries. Make sure that your workers know that you value their safety. Teach them how they can be safe at work and praise them when they work safely.



▲ **Employee training:** All workers should participate and receive feedback.

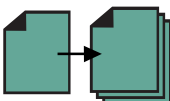


# Do You Have an Effective IIPP?

In order to prevent injuries, accidents, and illnesses, you are required to implement and maintain an effective IIPP at your workplace. This checklist will help you determine whether your current program meets minimal requirements. Pay special attention to giving feedback to—and receiving it from—your workers. Go over each of these questions with them.

If you answer “no” to one or more items, you will need to determine what information you are missing, and you may need to seek further assistance or re-evaluate your existing IIPP.

Topic	Yes	No
<b>1. Have you designated a person with the authority and responsibility for implementing your Injury and Illness Prevention Program?</b>		
Person's name		
Managers/Supervisors in charge		
Do workers know this information?		
<b>2. Do you have a system that ensures all workers are following safe work practices (for example: incentives or rewards for following safe work procedures and established policies for disciplining unsafe behaviors)?</b>		
• How do you motivate your workers to work safely?		
• Do you discipline workers and supervisors who work unsafely?		
• Do workers regularly submit safety suggestions and report hazards?		
• Are your workers involved in helping each other whenever possible to ensure that safe work practices are followed?		
<b>3. Do you have a system of effectively communicating with your workers and supervisors?</b>		
• How do you communicate with workers?		
• Do workers report unsafe job hazards (such as damaged or defective equipment, broken ladders, tractors with defective brakes, or unguarded machinery) or any other unsafe work conditions?		
• Are safety and health complaints and suggestions received and responded to in a timely manner?		
• How are employees encouraged to communicate with you?		
• Can workers inform management anonymously about workplace hazards?		

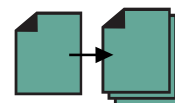


Make copies or tear out all the pages with this symbol.



## Do You Have an Effective IIPP? - Page 2

Topic	Yes	No
<ul style="list-style-type: none"> <li>Do you encourage the reporting of safety violations, health hazards, or unsafe conditions?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you provide safety and health orientations for new employees?</li> </ul>		
<ul style="list-style-type: none"> <li>How often do you have safety meetings for all employees; for example, monthly, weekly, or daily?</li> </ul>		
<ul style="list-style-type: none"> <li>How do you motivate your workers to work safely?</li> </ul>		
<p><b>4. Do you have an effective system to identify and correct job hazards and work practices, including conducting regular safety inspections?</b></p>		
<ul style="list-style-type: none"> <li>How do you identify unsafe work practices?</li> </ul>		
<ul style="list-style-type: none"> <li>How often do you conduct these inspections?</li> </ul>		
<ul style="list-style-type: none"> <li>Who makes the hazard correction?</li> </ul>		
<ul style="list-style-type: none"> <li>If new substances, procedures, or equipment present new hazards, are inspections conducted?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you inspect every new job site before work begins?</li> </ul>		
<p><b>5. Do you have a system of investigating all work-related accidents that result in injury or illness?</b></p>		
<ul style="list-style-type: none"> <li>Who is responsible for investigating accidents? Name:</li> </ul>		
<ul style="list-style-type: none"> <li>Do you interview injured workers and witnesses?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you determine the cause of the accident?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you include recommendations to prevent such accidents from recurring?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you investigate "close calls" (situations that nearly result in an accident)?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you know about reporting serious injuries to Cal/OSHA within 8 hours?</li> </ul>		
<p><b>6. Do you provide training to all new supervisors and workers about safety and health issues that affect them and hazards that are specific to their job assignments?</b></p>		
<ul style="list-style-type: none"> <li>Do you write down the safety and health topics you cover?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you keep track of the number of hours of training you provide each year?</li> </ul>		

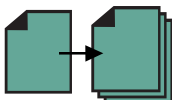


Make copies or tear out all the pages with this symbol.



## Do You Have an Effective IIPP? - Page 3

Topic	Yes	No
<ul style="list-style-type: none"> <li>Do you teach workers about emergency procedures, available medical services, first aid, and how to report accidents and unsafe conditions?</li> </ul>		
<ul style="list-style-type: none"> <li>Are workers trained in proper lifting techniques?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you teach workers about the use of appropriate clothing, including gloves, footwear, and personal protective equipment?</li> </ul>		
<ul style="list-style-type: none"> <li>Is information and training for workers and supervisors provided in a language they understand?</li> </ul>		
<ul style="list-style-type: none"> <li>Do you train your supervisors on the hazards and responsibilities faced by the employees they supervise?</li> </ul>		
<b>7. Do you document your safety and health efforts?</b>		
<ul style="list-style-type: none"> <li>Are rules clearly stated and written?</li> </ul>		
<ul style="list-style-type: none"> <li>Are safety and health orientations for new workers documented?</li> </ul>		
<ul style="list-style-type: none"> <li>Are inspections and hazard corrections documented?</li> </ul>		
<ul style="list-style-type: none"> <li>Are safety training sessions documented?</li> </ul>		
<ul style="list-style-type: none"> <li>Are accidents and investigations documented?</li> </ul>		



Make copies or tear out all the pages with this symbol.

# WORKER TRAINING

## New Employees Are at Greatest Risk

**The first few days and weeks of employment are when most accidents happen.** This is why it is extremely important to set a good example during and after new employee training—especially in the field, where workers can observe you.

- Don't expect employees to find their own way safely just because they are "experienced."
- Provide interactive safety training before an employee begins working. Proper training can save a person's life.
- Practice what you preach, and your workplace will become safer. Always follow safe work practices.
- Supervisors must be committed to the established safety training program.
- A well-organized safety training program can save lots of money in comparison to an accident or costly fines levied by governmental regulatory agencies.

## S U C C E S S

### A Success Story from the Central Valley

A farm labor contractor in Avenal, California, started his farm labor contracting business with 80 employees in 1992. Today, six years later, he has over 8,000 employees and an insurance experience modification rate of 46 percent. In 1996, he saved approximately \$750,000 in workers' compensation costs.

This farm labor contractor attributes the company's growth and low accident rate primarily to his commitment to training and employee involvement by:

- Providing information on how workers can protect themselves and how to recognize job hazards
- Giving workers an understanding of the painful consequences of injuries and how important it is to bring hazards to your attention before such an accident occurs



▲ *This farm labor contractor has an incentive program that reinforces the employer's safety and health program.*



# Cal-OSHA Reporter<sup>®</sup>

A WEEKLY PUBLICATION FOR THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY

# Documentation/Recordkeeping

## Which training records do I need to keep and for how long?

### When you have 10 or more employees:

- Record the employees' names, the training date(s), type or topic of the training, and the training providers' names.
- Maintain the records for at least one year. It is a good idea to keep records longer in case you need them later for legal reasons.

### When you have fewer than 10 employees:

- Keep a log of instructions that states the employee's or employees' unique job hazards; and
- Provide employees with copies of their records upon termination of employment (See *California Code of Regulations, Title 8, Section 3203* for exceptions); or
- Maintain records of training you provide to these employees, as you would for long-term employees.

**Note:** If you are cited under *California Code of Regulations, Title 8, Section 3457, "Field Sanitation,"* annual field sanitation reports are required to be filed with Cal/OSHA for the next five years. See Form C-46-C.

- Toilet maintenance and service records must be kept for at least two years.

*For more information or further assistance, contact your nearest Cal/OSHA Consultation Service Area Office or your Worker's Compensation Insurance Loss Control Department.*

Use the following checklists to assist you in evaluating the training needs of your supervisors. Encourage supervisors to use the employee training evaluation checklist to evaluate the training of their crews.



# Employer's Checklist for Supervisors' Training

**Note:** If you can't answer "yes" to all of these questions, you may need to reassess your current practices.

**YES    NO**

- Do you ensure that your supervisors inform workers about the information contained in the required posters?
- Do you explain and demonstrate to supervisors their tasks and responsibilities, as well as the hazards that may exist in the field?
- Do you reinforce safety behaviors that supervisors and workers perform?
- Do you compliment and/or reward supervisors for following safe work practices?
- Do you make periodic checks of your supervisors and talk to workers to ensure that they understand work hazards?
- Have you used your insurance carrier or other safety provider for safety and health training?
- Do supervisors conduct effective safety and health training sessions, encourage discussion and participation, ask questions, share ideas, and give feedback to the workers?
- Is training provided in a language that workers understand?
- Do supervisors demonstrate the safe use of the equipment and tools provided to workers?
- Do supervisors encourage experienced workers to work with new employees?
- Do you conduct safety meetings and use safety audiocassettes or videocassettes to train workers?
- Do you and the supervisors make sure that directions are understood by asking workers to demonstrate or to repeat the main points in their own words?
- Do supervisors reinforce the safe work practices performed by workers?
- Do supervisors compliment and/or reward employees for following safe work practices?
- Are supervisors disciplined when they don't follow safe work practices?
- Do supervisors use relevant workers' experiences, brief stories, or summaries to train all workers?



Make copies or tear out all the pages with this symbol.



# Supervisor's Checklist for Effective Training



## As a contractor and or supervisor do you:

**YES NO**

- Ask your crew members what they are most concerned about or would like to know about?
- Involve employees as much as possible during your training sessions?
- Ask for volunteers and use "real-life" examples that employees can relate to, role-plays, exercises, demonstrations, group discussions, and/or a question-and-answer format?
- Use examples from your own operation or ask the crew members to share their own work experiences or stories of prior accidents?
- Tell your crew members how failing to follow safety precautions or misusing safety tools could hurt them?
- Ask specific questions regarding hazards?
- Praise employees who ask questions or offer you their comments—even if you disagree with their point of view?

## Cal/OSHA safety and health professionals may evaluate the adequacy of training by:

- Reviewing the content of training materials and curriculum.
- Asking employees questions that relate to the subject matter.
- Watching employees carrying out their work to see whether they use safe work practices.
- Reviewing or conducting accident investigations to determine whether lack of training was a factor.

## Can an employer be cited if an employee acts improperly?

Yes, unless the employer proves the following elements:

1. The employee was experienced in the job being performed;
2. The employer has a well-devised safety program that includes training employees in matters of safety respective to their particular job assignments;
3. The employer effectively enforces the safety program;
4. The employer has a policy of imposing sanctions upon employees who violate the safety program; and
5. The employee caused a safety infraction that he or she knew was a violation of the employer's safety program.



Make copies or tear  
out all the pages with  
this symbol.

# Cal/OSHA Agricultural Training Requirements

Employers must always provide training for their supervisors and their other employees. The following training topics are required for almost all agricultural employees, depending on the specific operations performed in the workplace. These checklists can help you comply with most common training requirements for agricultural workers. For specific requirements, please refer to *California Code of Regulations, Title 8*, or contact your nearest Cal/OSHA Consultation Service Area Office.

**+** **First Aid and CPR (Title 8, Section 3439)**—There should be at least one person trained in administration of emergency first aid for every 20 workers. If the field is within 15 minutes of a medical care facility, then the trained first aid people and safety communication system are not required. **What is first aid?** It is simply those things you can do for the victim before professional medical help arrives. Train workers in the following:

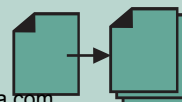
- Providing immediate treatment for injuries
- Maintaining first aid kits that are provided in each foreman's vehicle and/or at the work site
- Knowing where first aid kits can be found
- Replenishing first aid materials, keeping them sanitary and in usable condition
- Knowing the basics of first aid
- Taking precautions against bloodborne pathogens
- Reporting all injuries to the immediate supervisor
- Using eye wash and showers, available at the work site, in the event of exposure to chemicals
- Taking first aid provisions to remote work sites
- Knowing the communication system to use in the case of an emergency: radio or cellular phone \_\_\_\_\_
- A CPR qualified person should be available to provide required medical assistance to an injured worker within 4 minutes.

The name of the medical facility where injured workers should be taken is:

---



**Field Sanitation (Title 8, Section 3457)**—Toilet and handwashing facilities must be located within one-quarter mile or a five-minute walk from the work site, and must be accessible to each employee throughout the workday. It is important that employees understand the field sanitation requirements. Please refer to page 38, “Water and Sanitary Facilities in the Field.”







## Cal/OSHA Agricultural Training Requirements - continued

**Note:**

- Service records for toilets must be maintained for two years.
- If cited under Section 3457, employers must file an annual field sanitation plan for the next five years.
- Employees should be encouraged to drink water and to urinate often.
- Employees should be encouraged to wash their hands before eating.



**Cleaning, Repairing, Servicing, and Adjusting Machinery and Equipment, Including Unjamming Pneumatic Cutters and Conveyor Belts (Lockout/Tagout)**

**(Title 8, Section 3314)**—Each year many employees die or are seriously injured on the job because they did not follow proper lockout/tagout procedures.

- Whenever employees adjust, clean, or repair equipment, the employer must meet all the requirements of Section 3314, including employee training. Field equipment includes machines such as mobile harvesting platforms and pneumatic cutters for broccoli, cauliflower, etc.
- When machinery or equipment is stopped, the power source should be de-energized and, when required, the moveable parts should be mechanically blocked or locked out to prevent inadvertent movement.
- To minimize the hazards of movement, the employer should require the use of extension tools (extended swabs, brushes, scrapers, or other methods).
- To obtain a **free copy** of the lockout/tagout procedures, contact your nearest Cal/OSHA Consultation Office. This publication is also available in Spanish.



**Operation of Agricultural Equipment (Title 8, Section 3441)**—Every employee shall be instructed in the safe operation and servicing of all equipment that he or she is assigned to operate.

- All guards must be kept in place when a machine or tractor is in operation.
- Only operators and other persons required for instruction or assistance are permitted to ride on agricultural equipment.
- When servicing, adjusting, cleaning, or unclogging the equipment, stop the engine, disconnect the power source, and wait for all machine movement to stop.
- Before starting the engine, engaging power, or operating the machine, make sure that everyone is clear of the machinery.
- Lock out electrical power before performing maintenance on agricultural equipment.



Make copies or tear out all the pages with this symbol.

## Cal/OSHA Agricultural Training Requirements - continued

- All self-propelled equipment, including tractors, must have an operator at the controls when the vehicle is in motion. (See Section 3441[b] for exception.)
- The driver **is prohibited** from climbing onto or down from the tractor while it is operating.



**Transporting of Employees (Title 8, Sections 3701, 3702)**—Only licensed drivers of the appropriate class shall operate a farm labor truck or bus. Trucks or buses should have at least a 46-inch-high rail or enclosure on the sides and back of the vehicle to prevent falls. The vehicle should also be equipped with handholds, steps, stirrups, or similar devices arranged for the safe mount and dismount of employees. Please refer to page 33, “Farm Vehicle Safety.”



**Manual Lifting and Carrying: Techniques to Avoid Musculoskeletal Injuries**—Agricultural workers have a high risk of back injury. Long hours of heavy lifting, carrying, bending, and stooping can lead to back pain or serious injury. We encourage you to train your workers on proper lifting procedures using the fact sheet, “Back Safety on the Farm,” on page 35.



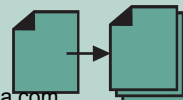
**Tools (Title 8, Section 3456)**—Using short-handled tools (less than four feet in length) for weeding and thinning while in a kneeling or squatting position is prohibited. Instruct workers on the following:

- Tools that are worn, defective, spliced, or broken should always be replaced or repaired.
- Striking tools shall be free of mushroomed or burred heads.
- Metal poles or poles that conduct electricity **may not be used** for fruit picking or nut knocking.



**Tree Work and Pruning Operations (Title 8, Section 3428)**—Weather conditions such as fog and rain make ladders and shears more slippery. Employees need to take extra precautions in such weather to prevent injuries to themselves and to others. Employees should be instructed to do the following:

- Do not throw or drop tools from trees, unless warning has been given and the ground area is clear.
- Stop powered saws for all cleaning, refueling, adjusting, and repairs unless otherwise indicated by the manufacturer.
- Hang pole saws with the sharp edge pointing away from the employee.
- Climbers: Inspect ropes for cuts or abrasions and remove from service any ropes that have deep cuts.
- Do not hang pole pruners, pole saws, and pruning shears on utility wires or cables.
- Maintain pruning shears; keep them sharp and in good condition. Defective shears must not be used.





## Cal/OSHA Agricultural Training Requirements - continued

- Always carry pruning shears with the point facing down when walking or standing.
- Always know where your fingers and hands are before making a cut. Hand shears used on grapes pose a special hazard for hands.
- Know where your other hand is when you are using a saw, and carry folding saws in a locked position. Folding saws should be sharp.
- Be alert and aware of other employees working nearby.



**Working at Heights (Title 8, Section 3210)**—Guardrails shall be provided on working surfaces more than 30 inches above the floor, ground, or other working surface. Guardrails, toeboards, and stair rails must comply with *Title 8, Sections 3209, 3210, and 3214.*



**Mounted Air Compressors and Air Tanks (Title 8, Section 4070)**—Any exposed v-belts must be guarded. A permit for pressure vessels is required if the tank is larger than 1.5 cubic feet or has more than 150 psi.



**Emergency Action Plan (Title 8, Section 3220)**—The employer is not required to have a written Emergency Action Plan, but if you have one it should tell the employees what to do in the event of fire and other emergencies. The plan should be kept at the workplace and made available for employee review. *This section applies to maintenance shops and fixed structures.* Identify the location of the following items on your escape plan:

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> First aid kits       | <input type="checkbox"/> Posted emergency numbers | <input type="checkbox"/> Pipeline valves        |
| <input type="checkbox"/> Main water valve     | <input type="checkbox"/> Fire extinguishers       | <input type="checkbox"/> Emergency eye wash     |
| <input type="checkbox"/> Backup communication | <input type="checkbox"/> Alarm system switches    | <input type="checkbox"/> Chemical storage areas |

Discuss the following question:

- Are there any critical operations or unique hazards? \_\_\_\_\_



**Fire Prevention Plan (Title 8, Section 3221)**—Employers are not required to have a fire plan (except in lieu of Section 6151[a]), but you should tell employees of any potential fire hazards of materials to which they are exposed. If you have fewer than 10 employees, verbal instruction is sufficient. *This section applies to maintenance shops and fixed structures.* Employees should be apprised of the following:

- Safe use of welding and cutting torches
- Proper storage of flammable or combustible liquids
- Dangers of using damaged electrical cords
- Storage of oily rags in enclosed metal containers
- Dangers created by smoking and other open flames



Make copies or tear out all the pages with this symbol.

## Cal/OSHA Agricultural Training Requirements - continued

- Importance of bonding and grounding to eliminate static charge
  - Classification of flammable storage and fueling areas
  - Posted warning signs prohibiting sources of ignition
  - Location of fire extinguishers or other apparatuses (specify)
- 
- Initial training, then follow-up training each year if employees are expected to use a fire extinguisher

**Note:** If the employer does not expect employees to use fire extinguishers at the work site, then a written Emergency Action and Fire Prevention Plan must be in place. The training requirements for the emergency plan and fire plan must also be implemented.



### **Immediate Reporting of Any “Serious” Injury, Illness, or Death of an Employee at the Workplace (Title 8, Section 342)**—

Reporting *immediately* means reporting as soon as is practically possible, but no longer than eight hours after the employer knows of the death or serious injury/illness. Report by phone or by fax to the nearest Cal/OSHA District Office. Telephone numbers for Cal/OSHA offices are provided on page 24. The reporting party will need to have the following information at hand:

- Time and date of accident
- Employer’s name, address, and telephone number
- Name and job title of person to contact
- Name and address of injured employee(s)
- Nature of injury
- Location where injury occurred

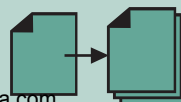


**Access to Medical and Exposure Information (Title 8, Section 3204)**—Each employer shall inform current employees of the existence, location, and availability of their medical and workplace exposure records. Tell your employees the name of the person responsible for maintaining and providing access to these records.



**Hazard Communication Program (Title 8, Section 5194)**—You must maintain and develop a written program that gives employees information about hazardous substances to which they may be exposed at the workplace. Employee training must include:

- Material Safety Data Sheets (MSDS), reports/records, and information on use of hazardous substances, including pesticides, cleaning agents, fuel, oil, etc., in an accessible location for





## Cal/OSHA Agricultural Training Requirements - continued

employee review. (Have information available to take to a doctor in the event of a chemical reaction or chemical contact.)

- Location of the employer's list of the hazardous substances that employees use in their work
- List of Material Safety Data Sheets (MSDS)
- Purpose of the MSDS (to describe the substance[s], the hazardous properties of the substance[s], and protective measures for safe use)

---

**Note:** Department of Pesticide Regulations (DPR) and Worker Protection Standard require a completed **A-8** or **A-9** form to be displayed in an appropriate location. See the last pages of Section 5 for copies of the forms.

---



**Personal Protective Equipment (PPE) (Title 8, Section 3380)**—The employer shall ensure that employees are instructed on where and how to use PPE, which includes equipment designed to protect the body, eyes, hands, ears, and feet. Employees must be trained to:

- Wear appropriate gloves and a full body suit when in contact with chemicals.
- Use such eye protection as safety glasses, goggles, or face shields when using grinders, saws, buffers, or hazardous chemicals or when taking part in any other activities that could cause eye injuries.
- Safeguard against falling objects from trees, such as limbs, branches, buckets, and scissors.
- Wear head protection (hard hats, bump caps) with proper eye protection or shields when welding or doing electrical work and when working in areas that are exposed to overhead hazards.
- Remove wristwatches and jewelry and secure long hair.
- Wear proper respirators for protection against atmospheres that may contain toxic gases, vapors, mists or inadequate oxygen. Such atmospheres may exist in grain vaults, manure pits, tanks, pipes, silos, vats, disposal pits, and equipment repair pits.

**Caution:** Do not enter a confined space (silo, bin, manure pit, etc.) *even to attempt a rescue* without specific equipment and approval unless you have been trained and have backup support. For more information, call your nearest Cal/OSHA Consultation Office and request a free copy of the *Confined Space Guide*.



**Respiratory Protection (Title 8, Section 5144)**—If the employer provides negative-pressure respirators, then a written respirator program must be developed and implemented. A respirator program is **NOT** required when disposable paper dust masks are provided for nose and mouth protection from nuisance dust. However, the employer is required to evaluate the levels of airborne contaminants when reasonably expected to go above the permissible exposure limit (PEL). The employer is always required to ensure that no employee is exposed over the PEL. The use of respirators is one way to protect employees from these kinds of exposure.



Make copies or tear  
out all the pages with  
this symbol.

# Farm Labor Contractor Safety and Health Guide



Cal-OSHA Reporter®

A WEEKLY PUBLICATION FOR THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY

**This guide is not meant to be a substitute for—or a legal interpretation of—the occupational safety and health standards.** The reader is cautioned to refer directly to the *California Code of Regulations, Title 8*, or the *Labor Code* for detailed and exact information, specifications, and exceptions.

# FATAL FACTS

## Tractor Driver's Head Crushed by Moving Tractor

A tractor driver fell to the ground when his tractor ran into a row of grapevines. The tractor continued moving forward. A rear wheel crushed the tractor driver's head. He died instantly.

*How could this have been prevented?*

- ✓ Do not climb on or off moving tractors.
- ✓ All tractors should be equipped with seat belts and rollover protective structures (ROPS).
- ✓ Workers should not try to operate equipment when they are feeling sick.
- ✓ Tractors should have safety devices that stop them from moving forward when the driver is not in the seat.

## Fruit Picker Dies of Heat Stroke

When fruit bags are full, they often weigh about 50 pounds. Workers carry them from the field to the truck, and crews usually do not stop for breaks. One fruit picker collapsed and died of heat stroke after just four hours of work. He was on a bus to go to another field when he began to pant and get sick to his stomach. The foreman stopped the bus and called an ambulance. The worker was taken to the hospital and treated, but died 36 hours later of heat stroke.

*How could this have been prevented?*

- ✓ Workers should be instructed to be aware of dangers while working in the heat.
- ✓ Encourage workers to take breaks and drink water.

## Tree Trimmer Electrocutted in Orchard

A tree trimmer was pruning walnut trees in an orchard. He was using a lift bucket "cherry picker." High voltage power lines crossed over the last row of trees just above the tree tops. The power company was usually called in to trim these trees; however, on this day no call was made. The worker began



▲ **Prevent electrocutions while pruning:** Always maintain at least a 10-foot clearance from power lines. Do not prune tree branches that cross power lines. Notify your employer to contact the utility company. **PG&E in Northern CA at 1-800-743-5000, or Southern California Edison at 1-800-655-4555.**

pruning the last row of trees, and when he raised his lift bucket to the top of a tree, his pruning shears touched the power line and electrocuted him. Although co-workers pulled the lift bucket and platform away from the power lines with a truck, the worker died instantly. His body was badly burned.

*How could this have been prevented?*

- ✓ Hold safety meetings before every shift and instruct workers of dangerous power lines in their work areas.
- ✓ Be aware of the location of all power lines, and stay at least 10 feet away.
- ✓ If possible, ask the power company to shut off power to lines in the work area.
- ✓ Use tree trimmers or companies who are specially trained to work near power lines.
- ✓ Mark dangerous areas that employees should avoid, such as trees near power lines.
- ✓ Work as a team. Other tree trimmers in the orchard should be on the lookout for maintaining a 10-foot clearance.

Cal/OSHA Education & Training Unit  
Reports provided by the Nurse Project,  
Berkeley; telephone (510) 849-5182.

# TABLE OF CONTENTS

<b>Acknowledgments</b> .....	iv
<b>Introduction</b> .....	v
<b>Section 1</b>	
<b>Background Information</b> .....	1
Defining the Problem .....	1
Five High-Risk Areas .....	3
<b>Section 2</b>	
<b>Required Injury and Illness Prevention Program (IIPP)</b> .....	7
Do You Have an Effective IIPP?.....	8
<b>Section 3</b>	
<b>Worker Training</b> .....	11
New Employees Are at Greatest Risk .....	11
A Success Story from the Central Valley .....	11
Documentation/Recordkeeping .....	12
Employer’s Checklist for Supervisor Training .....	13
Supervisor’s Checklist for Effective Training .....	14
Cal/OSHA Agricultural Training Requirements .....	15
<b>Section 4</b>	
<b>Employers’ Obligations Under the Law—The Cal/OSHA Program</b> .....	23
Cal/OSHA District Offices (Compliance) Directory .....	24
Top 10 Cal/OSHA Violations in Agricultural Operations .....	25
Agricultural Posting Requirements .....	26
<b>Section 5</b>	
<b>Fact Sheets and Checklists</b> .....	29
Farm Machinery Safety .....	32
Farm Vehicle Safety .....	33
Protecting Workers from Heat Stress .....	34
Back Safety on the Farm .....	35
Installing Rollover Protective Structures (ROPS) on Tractors .....	37
Water and Sanitary Facilities in the Field .....	38
Orchard Inspection Checklist .....	39
Irrigation Inspection Checklist .....	42
Tractor Safety .....	46
Worker Training and Instruction Record.....	50
Targeted Industries Partnership Program (TIPP) Checklist .....	51
Examples of Safe Work Practices by Job Classification .....	54
Pesticide Safety Information Series (A-8 and A-9 Pesticide Handling) .....	58
<b>Section 6</b>	
<b>Other Available Assistance</b>	
References .....	64
<b>Questionnaire</b> .....	65



# ACKNOWLEDGMENTS

## Writers and Editors

**Michael Alvarez**, Cal/OSHA Consultation Service Education and Training Unit, Sacramento

**Elizabeth Lopez Manzo**, Cal/OSHA Consultation Service Education and Training Unit, Sacramento

## Peer Technical Reviewers and Editors

Special thanks also to the following professionals who devoted their time and contributed their expertise to the development of this publication:

- **Michelle Gonzales Arroyo**, Labor Occupational Health Program (LOHP), School of Public Health, University of California at Berkeley
- **Garrett Brown**, Cal/OSHA Compliance, Oakland District Office
- **James Meyers, Ph.D., M.P.H.** Outreach Coordinator, Agricultural Health and Safety Center, University of California and AgSafe Coalition Advisor, University of California, Berkeley and Davis Campuses
- **Jenny Rodriguez**, U.S. Department of Labor Investigator and Public Agricultural Educator, Fresno
- **Dave Strickler**, Cal/OSHA Compliance, Concord District Manager
- **Lennox Welsh**, Cal/OSHA Legal/Bureau of Investigation (BOI) Unit, San Francisco

## Special Thanks to:

- **Piedad and Alfredo Ayala** and their employees for their hospitality and permission to take photographs and to the farm labor contractors who participated in the Fresno focus groups.
- **Green Dale Dairy**
- **Pacific Gas and Electric Company (PG&E)** for sponsoring the bilingual translation of this project and for providing valuable input.

*Special acknowledgments to Farm Labor Contractor Committee members, who devoted their time and contributed with their expertise to the development of this publication: **Alfredo Ayala, Piedad Ayala, Yolanda Cervantes, Manuel Flores, Estella Lopez, Trino Maciel, Jim Meyers, Daniel Robledo, Jenny Rodriguez, Esther Santiago, Steve Sutter, and Joe Zavala.***

## Draft Document Preparation

**Bernadine Osburn**, Cal/OSHA Consultation Service Education and Training Unit, Sacramento

## Layout and Design

Publications Division/CDE Press, California Department of Education

# INTRODUCTION

This document was developed with the help of farm labor contractors (FLCs) and agricultural safety and health professionals to provide general guidance for employers and employees about preventing work-related injuries and illnesses. *The biggest challenge is to give this vital information to all your supervisors and workers and to ensure that they clearly understand the job hazards before starting a new crop or task.* Information described in this guide also applies to growers who directly hire their own crews. Each section, including the checklists and fact sheets, can be used individually. Fact sheets and checklists may be reproduced as handouts and distributed during employee training.

**This guide has six sections that address farm labor contractors' main concerns:**

## **Section 1. Background Information**

Emphasizes the five most common areas in which fatal and serious injuries occur in California agriculture.

## **Section 2. The Required Injury and Illness Prevention Program (IIPP)**

Contains valuable Injury and Illness Evaluation Sheets. *This checklist alone can help you preserve lives, prevent injuries, and save money in worker's compensation costs.*

## **Section 3. Worker Training**

Assists employers in evaluating training for supervisors and employees. Effective training for supervisors is essential to make the workplace a success in injury prevention. New employees are at greatest risk; they should receive hands-on training if possible. Effective training includes employee participation and feedback.

## **Section 4. Employers' Obligations Under the Law—The Cal/OSHA Program**

Informs employers of the Cal/OSHA Program and other cooperating units. Included are the "top 10" violations and posting requirements. Refer to page 24, "Cal/OSHA District Offices (Compliance) Directory," in the event that you need to report a fatal or serious accident. The directory includes names of bilingual Cal/OSHA personnel.

## **Section 5. Fact Sheets and Checklists**

Includes handouts for your supervisors and employees, including tractor drivers. Educational fact sheets and checklists are provided to help you and your supervisors conduct safety meetings. Train your workers before employees start a new crop or before new work begins. Examples of codes of safe work practices by job classification are also included.

## **Section 6. Other Available Assistance**

Includes a reference list of various free services (such as free pesticide training for your employees) from nonprofit agricultural safety and health organizations. The Cal/OSHA Consultation Area Offices can also assist you at no cost, and their telephone numbers are listed in this section. You can request free copies of the Spanish-language publications, the IIPP for Intermittent (seasonal) Employers, and the Lockout/Tagout from your nearest Cal/OSHA Consultation Area Office.



▲ ***Prevent bodily injury:*** Never insert any part of your body to unjam equipment



▲ ***Prevent falls:*** Always use proper ladders



▲ ***Prevent tractor accidents:*** An operator must be at the controls of equipment in motion.



▲ ***Prevent vehicle/woker accidents:*** Always check underneath and behind vehicle before starting vehicles or tractors.

# BACKGROUND INFORMATION

The farm labor contractor, like all other employers, holds ultimate responsibility for the health and safety of his or her employees. Operating in full compliance with the law is challenging but not impossible. This guide was written to help you protect your workers and to prevent or reduce the high number of injuries and illnesses that occur in the agricultural industry.

Labor laws and regulations are intended to preserve the health and safety of your workers. Farm labor contractors will benefit from increased competitiveness, increased productivity, and reduction of operation costs by following the regulations.

## Why was this guide written?

- To save farm workers' lives.
- To reduce the number of disabling injuries.
- To save money in worker's compensation and avoid costly Cal/OSHA penalties:
  - The average cost for a back injury that results in serious disability is \$25,000 in workers' compensation.
  - A severe fall from a ladder that results in an injury requiring surgery can cost as much as \$85,000 in workers' compensation. (Figures provided by SCIF Claims Department, 1997.)
  - Each willful violation can result in penalties up to \$70,000.

showed that 92 percent of California's crop workers were born outside the United States; the overwhelming majority are from Mexico.<sup>1</sup>

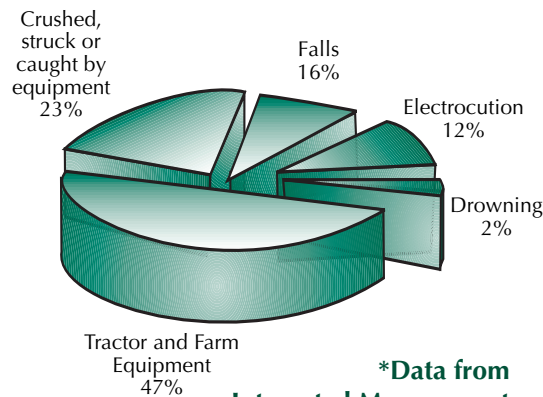
There are over 1,500 farm labor contractors statewide responsible for managing, directing, and training much of the agricultural workforce. In California, about one of every three farm workers is a contract employee working for a labor contractor.<sup>2</sup> For every one farmer in California, there are 18 hired agricultural workers.<sup>3</sup>

**Workers in the California farming, forestry, and fishing industries are at the greatest risk of being fatally injured on the job!**

## Defining the Problem

California is the most productive agricultural state in the nation. More than 250 agricultural crops are produced commercially by more than 84,000 farms, generating a yearly farm income of over \$25 billion. California's agricultural workforce totals more than one million workers, who primarily speak Spanish and other non-English languages. A 1993 statistical report

**Agricultural Fatalities Inspected in California, 1993–1997**  
Standard Industrial Classification (SIC) Codes 0111 to 0783



Total fatalities: 90

**\*Data from Integrated Management Information System (IMIS)**

<sup>1</sup> H. R. Rosenberg and others, *California Findings for the National Agricultural Workers Survey*. Research Report No. 3, U.S. Department of Labor, Office of the Assistant Secretary for Policy, Office of Program Economics.

<sup>2</sup> K. Weeks and others, "The Nation's Most Hazardous Industry," *Agricultural Health and Safety Report* (University of California, Davis, 1993).

<sup>3</sup> M. Schenker, "Preventive Medicine and Health Are Overdue in the Agricultural Workplace," *Journal of Public Health Policy*, No. 17 (1996) 3:275–305.