

Agricultural safety seminars

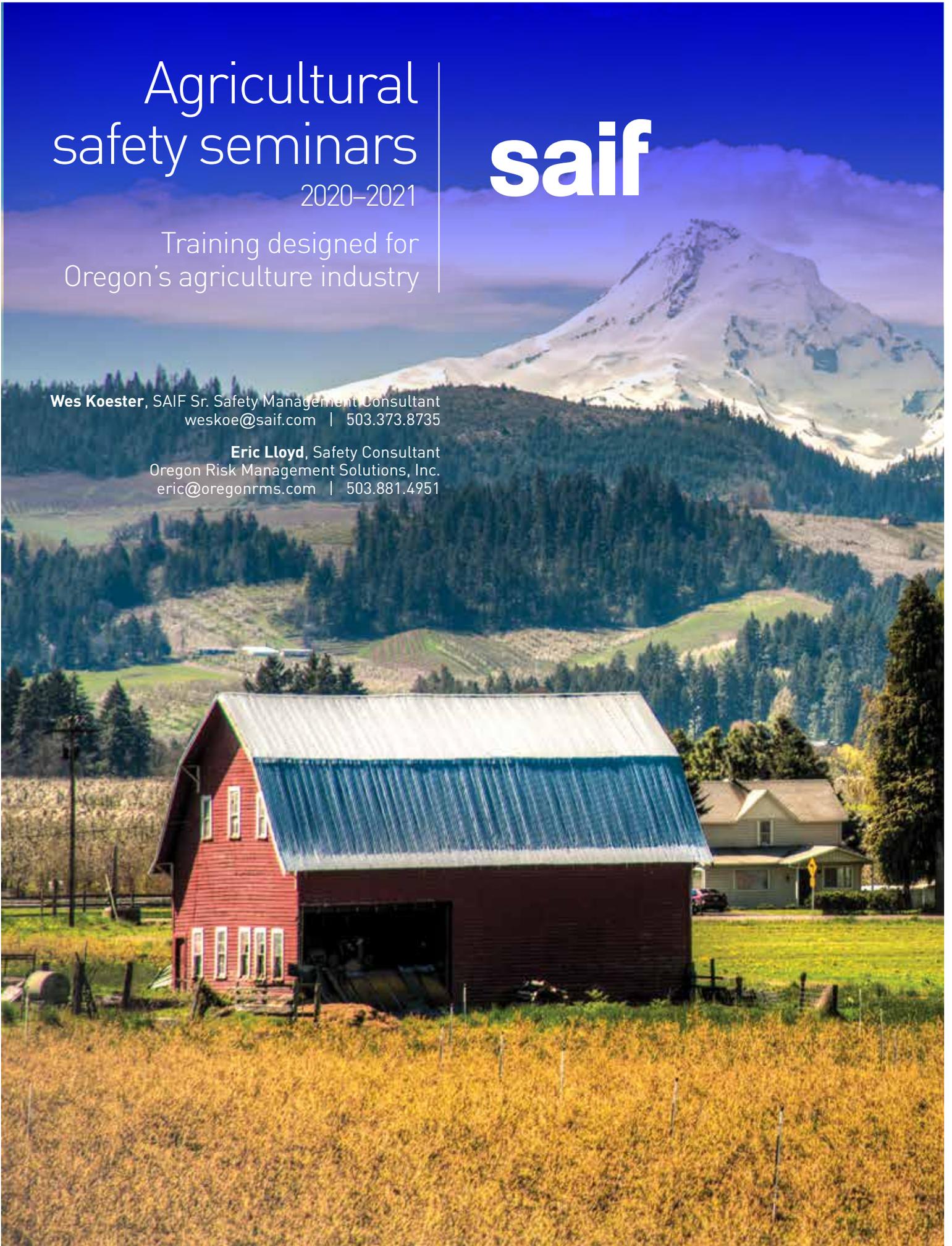
2020-2021

Training designed for
Oregon's agriculture industry

saif

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Conditional exemption from small agriculture employer “random” OSHA inspections

The exemption is available for agricultural employers with 10 or fewer permanent year-round, full-time and part-time employees. For determining the number of employees, exclude members of the agricultural employer’s immediate family from the count.

The immediate family is defined as grandparents, parents, spouses, sisters, brothers, daughters, sons, daughters-in-law, sons-in-law, nieces, nephews, grandchildren, foster children, step-parents, step-children, and any blood relative living as a dependent of the core family.

Requirements for the exemption:

- **Accidents:** Within the preceding two-year period, the employer must not have had an accident resulting in death, in-patient hospitalization, or injury resulting in more than three days of lost work **that was the result of a violation of Oregon OSHA rules.**
- **Consultation:** A comprehensive consultation must be completed within the last four years and all problems identified in the report were corrected.
- **Training:** The employer and principal supervisors must annually attend at least four hours of instruction on agricultural safety or health. Attending a comprehensive safety and health consultation done on an agricultural place of employment is also acceptable as training.

The exemption does not include inspections for:

- Agricultural labor housing or field sanitation
- Valid complaints against the employer filed with Oregon OSHA
- Fatalities, catastrophes, and accident investigations

Sources: OAR437-001-0057 May 4, 2015 Oregon OSHA Program Directive: A-214

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Presenters

Eric Lloyd is a safety consultant with Oregon Risk Management Solutions, Inc. His exposure to safety and agriculture began at an early age, when he spent summers working on the family ranch in Idaho and watching his father provide training and consulting services to promote ag safety throughout Oregon. Eric earned a degree in criminal justice from Western Oregon University, and served in law enforcement for several years until being drawn back to his roots and joining the family business in 2016.

Wes Koester is a SAIF senior safety management consultant living and working in the Willamette Valley area. He grew up working in his family's farm and nursery business in Riddle, Oregon. Wes graduated from the University of Oregon with a Bachelor of Science degree in psychology. Over the past five years, he's helped both farms and businesses with their overall safety compliance by providing over 1,100 on-site walk-through inspections to proactively assist them with their safety needs.

Choosing the right PPE

Personal protective equipment, commonly known as “PPE,” is equipment that’s worn to minimize exposure to certain hazards that cause serious workplace (or even out of workplace) injuries, illnesses, and even death. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

PPE is oftentimes viewed as being the “last-ditch hope” in protecting yourself from a serious or potential hazard.

It also makes sense that we would want to take care of our PPE—a respirator for example. We want to make sure that we have a nice, clean respirator when we need it. It’s important that we know how to clean and sanitize it properly, how and when to replace the filters and cartridges, and how to properly store it.

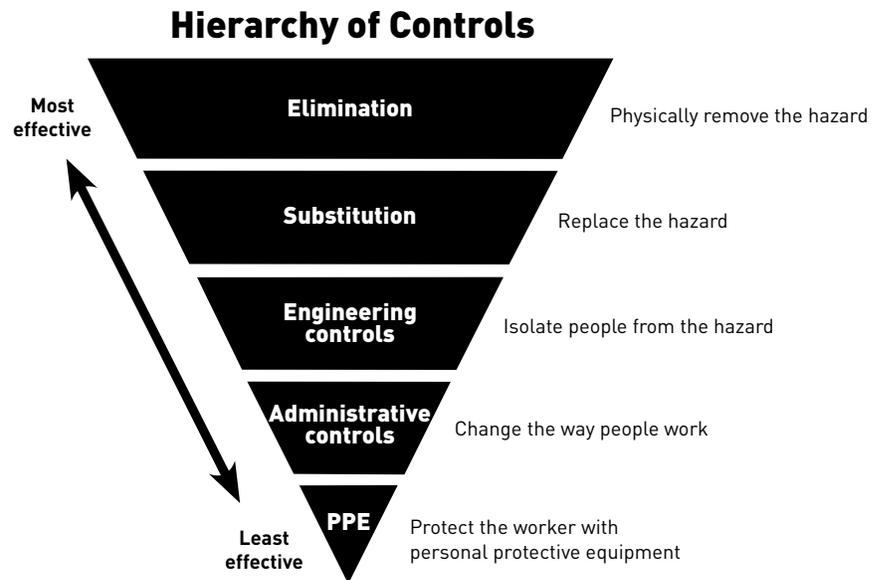


When PPE is taken care of and used properly, it can reduce serious injuries as well as save lives.

But, one of the main takeaways from this session is not just knowing what PPE to wear for each job on your farm, but also to wear it consistently.

The first step to determine if you need PPE for a specific task is to determine if you can do something else instead to better manage the hazard.

Is there an alternative way to make the hazard less severe or completely disappear?



Can the hazard be **eliminated** completely?

Can a **substitution** or replacement be made to lesson the hazard?

Is it possible to **engineer** a way to isolate people from the hazard?

Perhaps there is a way that people can do their jobs differently through **administrative control** processes, like specialized training.

The last alternative (after all other avenues have been exhausted) is protecting employees through the use of personal protective equipment (PPE).

When you are using PPE, first determine that you are using the right PPE, then ensure that it fits properly, train workers how to use it properly, and enforce consistent usage, maintenance, and storage.



Most of us have a boo-boo kit, an over-the-counter first aid kit nearby. This is typically stocked with Band-aids, antiseptic ointment, and maybe even eye wash and bee sting medicine. This is helpful, and we are likely to visit it often.

However, this is not the kit that's going to help you when someone cuts their thigh with a chainsaw or an arm gets caught in a combine header. What you need at this point is a kit that will give a person the chance to stay alive while you are waiting for the emergency medical technicians (EMTs) to arrive. For that, you need a trauma kit that at minimum has a tourniquet, nitrile gloves, compression bandages, roll gauze, scissors, and a chest seal. Your kit could contain even more, depending on the work you do on your farm.

“But, I could just use my belt!”

It's true that we can often improvise first aid supplies. Grandpa use to say, “rub dirt on it,” and he wasn't entirely wrong. In a pinch, packing a bleeding injury with whatever you can find including mud, might be better than nothing and give a person a chance to stay alive long enough for a BIG shot of antibiotic later. However, improvised techniques are significantly less effective than having the right tools for the job, available immediately. Using a belt for a tourniquet, for example, is significantly less effective, if effective at all.

Junction wounds: neck, armpits, and groin

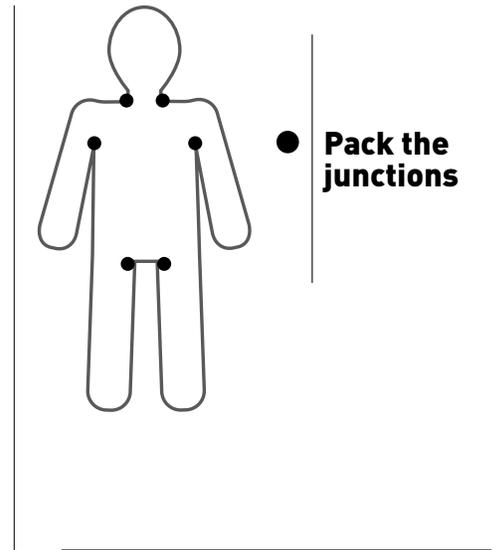
If there is a bad bleeding injury to the neck, we can't apply a tourniquet.

Junction injuries are tricky because they bleed a lot, which means we don't have much time to stop the bleed.

Pack and pressure

When we're treating bleeding injuries in the neck, armpits, or groin, we need to think "pack and pressure." Pack that wound with gauze or whatever else we have available, while maintaining pressure on the material being packed into the wound.

Here is one technique, using gauze and steady pressure, to stop a bleed in the neck junction area.



1. Unroll a length of gauze. **2.** Wad up the end to create a ball of gauze still attached to the roll.



3. Pack the ball into the junction wound. **4-5.** While maintaining pressure on the wound, alternate thumb pressure while adding more gauze each time until the wound is packed and the bleeding stops.

Clotting gauze

While normal gauze, or other types of cloth, work well for packing a junction wound, there are products that can stop the bleed faster. These are gauze products combined with blood-clotting agents. This type of gauze can help stop the bleed in half the time.

Common brand names for these products are: Quick-Clot, CeeLox, and Combat Gauze, but there are many others.

Pressure bandage

Maintaining pressure on the wound is vital, but if you have trouble doing that for a length of time, or you need to move the victim, you can use a compression bandage. This is really just a section of gauze that has been attached to an Ace bandage.

Place the gauze over the wound and wrap the bandage around the victim to secure it in place. How you wrap the bandage will depend on the location of the wound. You can improvise this type of bandage by using a combination of gauze or cloth and an Ace bandage or even duct tape.



Seal the box

For a deep puncture wound to “the box,” often the best thing to do is to “seal the box” using a chest seal. These are essentially pieces of heavy plastic that are lined with glue.

Here is how it is done:

Expose the skin of the victim.

Wipe away any surface blood as best you can.

Peel away the chest seal cover.

Position the seal in place.

Monitor the victim until emergency responders arrive.



Improvise

If you don't have a chest seal you can improvise with plastic wrappers from the medical kit, plastic wrap from the kitchen, or maybe even duct tape. If it can create an air-tight seal over the wound and keep the victim alive while you wait for help, it is worth trying.

Ag hacks

An “ag hack” is an adopted strategy, tool, or technique that is added to your normal, day-to-day ag activities that enables you to better manage your time and work in an efficient and creative way while keeping safety in the forefront.

An “ag hack” can be an innovative tool used to make a job easier or run smoother, or it can be a creative process whereby better communication on the farm can lead to a safer workplace.

Here is an example:

Problem: moving heavy-duty water hoses

Ag hack: fasten a hose hanger to a two-wheeled dolly



Some ag hacks already exist for purchase, like these:

Problem: muscle fatigue due to prolonged grip

Ag hack: ergonomic spray nozzle



Problem: unorganized cables and tools need to be transported to job site

Ag hack: the Cable Wrangler



Here are a couple of new ones we'd like to recommend:

Problem: clearing snow off sidewalks, moving bark dust, piling up soil, or cleaning out stalls.

Ag hack: the PushAll multipurpose pusher



Plus, here is the latest in wearable technology:

Problem: back strain and fatigue due to bending, lifting, and leaning

Ag hack: HeroWear Apex exosuit that reduces over 50 lbs. of strain on the back



Our friends at the Pacific Northwest Agricultural Safety and Health Center up in Washington have created publications focused on several ag hacks that they refer to as practical solutions.

You can find these publications at:
<https://deohs.washington.edu/pnash/handheld-psps>

Practical Solutions For Pesticide Safety

Pesticide warning signs: portable traffic cones

Place highly visible signs on traffic cones to alert workers from entering restricted areas. Signs on poles are harder for workers to see.

Idea...
 The nursery manager learned about putting warning signs on traffic cones during a class on forestry insecticides.

Alert
 Remember, stick up the cones when the REI is over. Workers may ignore the warning signs if they are left in the field.

Setup & Use

- Attach adhesive warning signs to orange traffic cones.
- Place cones along the edge of treated areas before applying pesticides. Locations include: corners, points of entry, roads & pathways, edges within 100 feet of worker housing.
- Ensure that 2 cones are visible at any point along the edge of the treated area.
- Put up cones promptly after the REI is over.

Tips

- Selected traffic cones for the durability and stability. Sport cones are too lightweight.
- Use lime green cones for other temporary hazards like potholes and broken irrigation pipes.
- Attach a pole stand to application equipment or farm vehicle.
- Use pole stands and hand carts for moving and storing stacked cones.

Supplies

- Orange traffic cones (24" H)
- Lime traffic cones (24" H)
- Adhesive vinyl sign warning signs that comply with EPA regulations (18" x 14")
- Post up cones promptly after the REI is over.

For more information:
 Email: Practical@pnash.wa.edu
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deohs.washington.edu/pnash/practical-solutions

Practical Solutions For Pesticide Safety

Mixing and loading: keep herbicides separate

The color-coding system provides a visual reminder to prevent herbicide contamination of other plant protection products.

Take note
 Color-coding shows handlers which containers are only for herbicides and which are for plant protection products. Keeping these products separate helps prevent plant damage from herbicides residues.

Idea...
 An applicator observed another applicator using the herbicide measuring pitcher while mixing products for an insecticide application.

Alert
 Use the same color for all herbicide containers including measuring pitchers and backpack sprayers. Mark the outside measuring pitchers and backpack sprayers with the correct color.

Setup & Use

- Use red for herbicides.
- Use green for other plant protection products.
- Mark the outside measuring pitchers and backpack sprayers with the correct color.

Supplies

- Measuring pitchers
- Backpack sprayers
- Two colors of spray paint or colored markers.

Tips

- Apply paint or permanent marker before it fades.
- Train all pesticide handlers about the importance of the color-coding system to prevent herbicide contamination of other product mixes.
- Choose other colors. For example, black for herbicides.

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Practical Solutions For Pesticide Safety

Respirator storage: ready to use

Clean respirators stored in a covered box stay clean and ready to use.

Idea...
 Pesticide handlers like the respirator storage box because it is easy to use and keeps their respirators clean.

Alert
 Remember to replace respirator cartridges after using them for a maximum of eight hours. Check the package for the manufacturer's instructions.

Setup & Use

- Decontaminate facepiece and cartridges.
- Inspect the straps, valves, and facepiece for wear and damage.
- Replace worn or damaged parts.
- Put cartridges to be reused in a new sealable bag.
- Put respirator and cartridges in a clean dry storage box.
- Store box in a clean room away from pesticides.

Supplies

- A separate clean box with a tight seal & lid for each handler's respirator.
- Sealable plastic bags for cartridges.
- Replacement cartridges and respirator parts.

Tips

- Put respirator cleaning and storage checklist on the inside of the box lid.
- Post a chart for easy tracking of cartridge use times.
- "The checklist reminds me that I need to wash my respirator before putting it in the box."

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Practical Solutions For Pesticide Safety

Remote control for hose reels

Easier, safer, and faster. Control the reel so you apply.

Idea...
 An applicator wanted to make application in the greenhouse more off-plant. Using the remote control prevents tangled hoses and reduces the spraying time. It's safer and you don't need to haul the hose.

Alert
 Check the batteries on the remote control before each application to ensure the remote is working. Replace batteries before they run out.

Setup & Use

- Consult with an electrician to select and safely install the remote.
- Wear the remote controller under PPE.
- Control the remote from outside the PPE.
- Sport with the hose extended.
- Apply pesticides moving towards the reel cart. Reel in the hose as you go.

Supplies

- Powered hose reel
- Radio controller
- Hand held remote

Tips

- Use the remote control hose reel both outside and inside the greenhouse.
- Select a simple, sturdy, waterproof remote with control push buttons that can be used when worn under PPE.
- Watch for pinch points when using a hose reel.

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Practical Solutions For Pesticide Safety

Drying rack for reusable gloves

Use an industrial rack to dry reusable gloves after decontamination.

Idea...
 Pesticide handlers like using the rack because it provides a way for the inside of a glove to dry after decontamination.

Alert
 Remember to inspect your reusable gloves for holes each time you clean or wear them.

Setup & Use

- Mount the glove rack in a clean area.
- Decontaminate reusable gloves after use.
- Check gloves for holes and wear.
- Hang gloves on the glove rack until they are dry inside and out.
- Store clean gloves in the PPE storage area.

Supplies

- Industrial or lab rack for drying containers.

Tips

- Use the glove type listed in the product label.
- Ensure reusable gloves are at least 14 mils thick.
- To find holes stretch the gloves or fill with water.

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Practical Solutions For Pesticide Safety

Pesticide warning signs: greenhouse door handle

Post the warning sign over the door handle. No one can miss it as they will need to reach under the sign to find the door knob.

Idea...
 A pesticide handler was preparing to apply pesticides in a greenhouse room. He posted the large warning sign on the door. Then an employee entered and claimed that he did not see the sign. Since the sign cover the door handle, no one has entered a posted restricted area.

Alert
 Remember to remove the warning sign each time after the REI ends. People may start to ignore signs, if they are left up after the REI.

Setup & Use

- Use the full size (14" width x 18" height) warning sign.
- Cut a slot in the warning sign just big enough to slip over the fixed staple.
- Slip the sign over the staple and insert the linchpin.

Supplies

- Warning sign (14" x 18"). Stiff and waterproof
- Linchpin
- Fixed staple with screws

Tips

- Center the sign horizontally.
- Place the staple and linchpin where they don't obscure the words or images.
- Store the linchpin in the staple to be ready for next time.
- Use a lock in place of a linchpin for outside doors.

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Making the most of safety committee meetings

OSHA requirement

“If you are an employer in Oregon, your business must have a safety committee or hold safety meetings - unless you are the sole owner and the only employee of a corporation.”

If we’re going to take the time to pull everybody together, why not use the opportunity to:

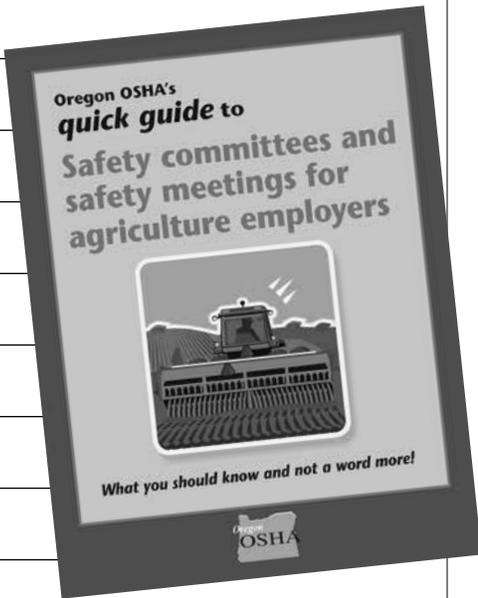
- Perform thorough and detailed incident analysis of any injuries or close calls we’ve had on the farm
- Keep track of ongoing safety issues that we know we need to get tackled
- Conduct risk assessment for upcoming tasks
- Give our employees an opportunity to provide feedback on any safety concerns they might have on the farm

Here’s document from Oregon OSHA that can help you out:

osha.oregon.gov/OSHAPubs/4908.pdf

The first decision you’ll need to make is, are you going to hold “safety meetings” or form a “safety committee.”

These two programs are similar, and in a lot of ways interchangeable. However, in the eyes of OSHA, they’re two separate programs with some unique advantages and requirements. Some farms are eligible for either program, and some are required to form a formal safety committee. The difference is based on your number of employees. This diagram from Oregon OSHA can help you make that determination.



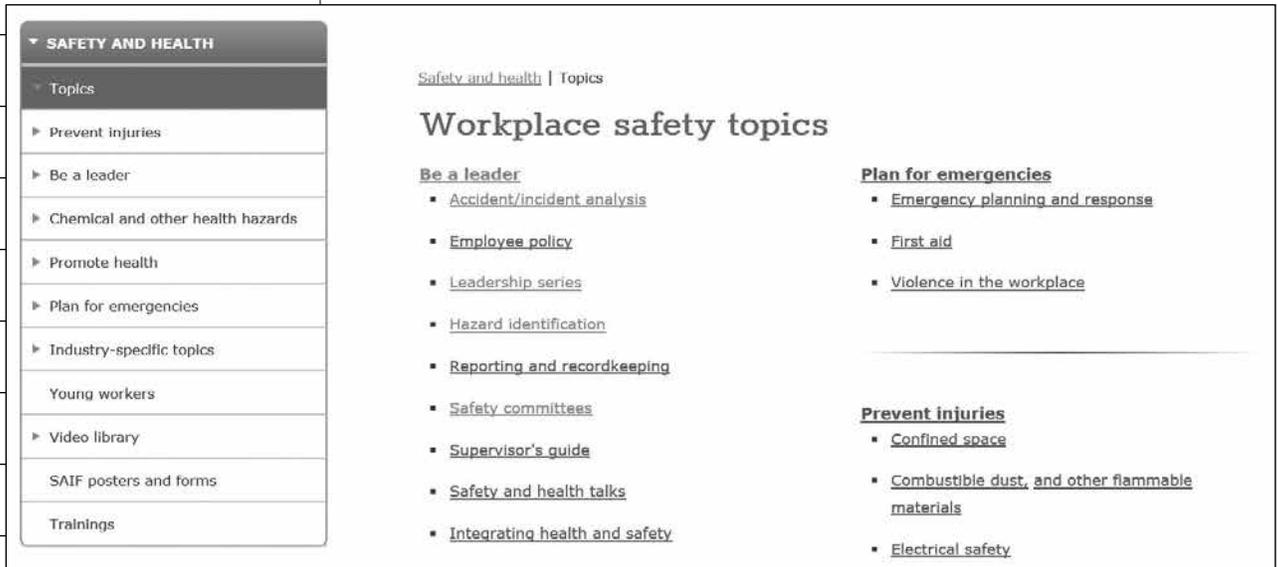
Should you have a safety committee or hold safety meetings?

All agricultural employers can have safety committees. Use this table to find out if you can hold safety meetings instead of a safety committee. (Count both full- and part-time workers. Don't count seasonal workers.)

IF:	You can have a safety committee	You can have safety meetings
You have 10 or fewer workers at a location.	Yes	Yes
You have more than 10 workers at a location.	Yes	No
You have satellite or auxiliary worksites with 10 or fewer workers at each location.	Yes	Yes

In addition to attending meetings, safety committee members need to receive training on the purpose of the safety committee, incident analysis, and hazard identification.

SAIF has developed quite a bit of training material on these topics. They can be found online at saif.com. Look under Safety and Health ► Topics



SAIF website screenshot showing a navigation menu on the left and a main content area titled "Workplace safety topics". The main content area lists various resources under sub-headings: "Be a leader", "Plan for emergencies", and "Prevent injuries".

- Be a leader**
 - Accident/incident analysis
 - Employee policy
 - Leadership series
 - Hazard identification
 - Reporting and recordkeeping
 - Safety committees
 - Supervisor's guide
 - Safety and health talks
 - Integrating health and safety
- Plan for emergencies**
 - Emergency planning and response
 - First aid
 - Violence in the workplace
- Prevent injuries**
 - Confined space
 - Combustible dust, and other flammable materials
 - Electrical safety

A good way to start the safety committee meetings is with the question **“Have we had any injuries, accidents or close calls since the last time we met?”** If injuries have already been reported and documented throughout the month, this is a great time to review our Incident Analysis forms and make sure that the root cause was sufficiently determined, and that appropriate corrective actions have been identified and implemented. This also might be the first that you’re hearing of an injury or close call, and you can conduct on-the-spot incident analysis and documentation as appropriate.

This is often a good time for some “storytelling” as well. If someone caught wind of an injury or accident that occurred on a neighboring farm, saw a relevant story in the news or on Facebook, etc., sharing stories of injuries that have occurred elsewhere can lead to learning moments without having one of your own folks actually get hurt.

(continued on page 29)

Incident/Accident Analysis

Company name: _____

Employee: _____ Department: _____ Supervisor: _____

Date and time of incident: _____ Date and time reported: _____ Incident location: _____
mm/dd/yy hh:mm tt mm/dd/yy hh:mm tt

Witnesses: _____

Describe incident completely.

Identify system problems that contributed to the incident/accident:

System factors	Management <i>Consider:</i> Policy enforcement Hazard recognition Accountability Supervisor training Corrective action Production priority Proper resources Job safety training Hiring practices Maintenance Adequate staffing Safety observations	<u>M</u> anagement systems	<u>E</u> mployee systems	System factors	
	Equipment <i>Consider:</i> Proper tool selection Tool availability Maintenance Visual warnings Guarding	<u>E</u> quipment systems	<u>E</u> nvironment systems		Employee <i>Consider:</i> Procedures followed Shortcuts taken Appropriately trained Experience with the task Physically able to do the work PPE used Stressful conditions Safety attitude Environment <i>Consider:</i> Plant layout Chemicals used Temperature Noise Radiation Weather Terrain Vibration Ergonomics Lighting Ventilation Housekeeping Biological
<i>Consider:</i> Elimination/substitution Engineering controls Administrative controls Personal protective equipment (PPE)	Corrective actions/best practices:		Who will implement?	By when?	Date done.
Person(s) conducting analysis: _____ Date: _____			Copy to: Safety committee, management, owner or president		

Conducting an incident/accident analysis

All workplace accidents, incidents, close calls, and near-misses should be promptly analyzed and corrected, regardless of severity.

This incident/accident analysis form should be completed by the immediate supervisor, with assistance from managers, safety committee members, safety coordinator, or analysis team as needed.

The form explores four organizational systems: management, employee, equipment, and environment (MEEE). Prompts alongside each box are designed to encourage open dialogue and communication about any factors, however minor, that may have contributed to the incident. The intent is to discover system failures so they can be corrected, and future incidents and accidents can be prevented.

There are four steps to this analysis: fact gathering, system analysis, corrective actions, and monitoring. (You may need additional pages to record your findings.)

Step 1: Fact gathering

For each of the four systems (MEEE), record any facts that contributed to the incident. (Some items may fall into more than one category.) Ask open-ended questions such as: How did this happen? Tell me what you and others were doing? What tools were you using? What were the conditions around you?

Step 2: System analysis

For each of the facts you record, try to determine what caused or allowed this condition or practice to occur. Asking “why” will help you get to the core of the problem. Record your findings.

Step 3: Corrective action

For each cause you’ve identified, develop solutions or corrective actions. (The solution could be the same for more than one fact.) Determine who is responsible for fixing the problem or implementing the solution, and when it should be done. This information can be updated or revised as needed. The following are descriptions of ways to control hazards:

Elimination/substitution—Remove or replace the hazard. While this is the most effective at reducing hazards, it also tends to be the most difficult to implement in an existing process.

Engineering controls—Isolate people from the hazard. Engineering controls (such as equipment guards or shields) are highly effective because they are designed to remove the hazard at the source, before coming in contact with the worker.

Administrative controls/PPE—Change the way people work, including adding personal protective equipment. Administrative controls and PPE are frequently used with existing processes where hazards are not particularly well controlled. They are helpful but have been proven to be less effective than thoughtful design or engineering measures.

Step 4: Monitoring

Management and the safety committee should follow up to make sure corrective actions were taken and countermeasures were used effectively.

If an injury requires medical treatment beyond first aid, you must complete the workers’ compensation claim form (801). Legal requirements for recording and reporting work-related fatalities, injuries, and illnesses also may apply. Please visit [osha.oregon.gov/Pages/topics/recordkeeping-and-reporting.aspx](https://www.osha-oregon.gov/Pages/topics/recordkeeping-and-reporting.aspx) for additional information.

