Agricultural safety seminars 2023-2024

Training designed for Oregon's agriculture industry

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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 yearround, 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

Contents

Session 1	Dealing with serious injuries and fatalities on the farm
Session 2	Anatomy of a "comprehensive consultation"
Session 3	Hot work/welding safety: control measures, precautions, and PPE
Session 4	Fields to freeways 2.0

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 educated farms and agri-business around the state through a variety of technical and practical seminar topics. Dealing with serious injuries and fatalities on the farm

11,880 serious injuries

have been reported on U.S. farms over the past year. Many injuries go unreported.

A serious injury is a life-changing event such as a major head injury, a spinal cord injury, an amputation, paralysis, catastrophic fractured bones, and serious burns to name a few.

573 fatalities

have been reported over that same time period.

These are farmers, family members, perhaps members of the next generation who may have grown up to become farmers. Many of these deaths could have been prevented.

Fatalities that occur on farms in the U.S. are **5 time higher** than all the other business industries combined.

The combined grouping of serious injuries along with fatalities throughout all industries is a term that's referred to as

SIFs: Serious Injuries and Fatalities

Overall, farms across Oregon have worked hard at reducing incidents and injuries over the past 20-30 years. Because of your hard work, we've seen an actual decline in the number of less-serious injuries occurring on Oregon farms.

Unfortunately, the more serious injuries and fatalities haven't dropped at the same rate during this same time period.

We are going to begin by looking at why these serious injuries and fatalities in the ag industry are so high. We'll discuss which types of incidents are driving these high numbers. And we'll talk about what you can do to bring these numbers down.

Hierarchy of Controls



Why do SIFs occur?

Failure to recognize the hazard

Sometimes we don't think through an entire process of a job to watch out for areas that can cause us harm. We don't always plan for the unexpected. That's why it's so important that we do periodic refresher training so we are better prepared.

Complacency in living with the hazard

When you are surrounded by hazards all the time and you think nothing has happened so far, it can be too easy to become complacent. Then something does happen and it's too late.

Low-level controls used during critical steps

Too often we rely on workers to be the last, or only, defense against serious hazards rather than eliminating the hazards altogether. This is when we expect workers to watch out for the hazards instead of considering all of the job processes of and eliminating (or minimizing) the hazards that are present, so there is less potential for injury.

Expecting a worker to never make a mistake

Even the most experienced people make mistakes. So, plan ahead. Eliminate or minimize hazards. Schedule training regularly. Be sure to have the right PPE, including appropriate sizes for everyone. Perform regular inspections on the equipment.

Work as imagined vs. work as done.

There is a difference between how we might think work gets done and how it actually gets done. It is important to collectively discuss what the specific job tasks are and how they get done. Identify where and when an injury might occur. Jobs change, so regular check-ins help fill in the gap between what's planned and what's actually being done.

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Preventing serious injuries and fatalities (SIFs)

True story

A 23-year old machine operator went to assist with a piece of equipment that had become jammed. With the machine running, the employee climbed under a guard to release the jam. They were caught in the moving parts of the machine and broke their neck.

What is a serious injury?

A serious injury or illness is any lifethreatening injury or illness that, if not immediately addressed, is likely to lead to death. It usually requires emergency response personnel to provide life-sustaining support. Serious injuries or illnesses can also be life-altering, leaving the worker impaired or without use of an internal organ, body function, or body part. A few examples are significant head injuries, paralysis, amputations, heart attack, and broken or fractured bones.

Why SIFs occur

Failing to recognize a workplace hazard or risk is one of the reasons SIFs occur. Also, complacency or forgetting about the danger can set in over time with regular exposure to a hazard. Another reason is that some employers rely on workers as the last or one of the only defenses against serious hazards. In critical tasks, they use low-level controls, such as personal protective equipment, policies, or training. Workers are expected to never make mistakes.

The biggest reason SIFs occur is the failure to identify and address human and organizational performance (HOP) factors. Even the most experienced people make mistakes, and these mistakes are often a result of the circumstances that were in place before the SIF occurred.

SIF background

For years, safety has focused on a theory that all injuries have the potential to be serious. If we work to reduce all injuries, we will also reduce severe ones. In 2007, a RAND study showed there was no connection between injury rates and the number of workplace fatalities. Indeed, workplace injuries have been declining for years, but we have yet to see the same reduction of serious injuries and fatalities.

That's because SIF causes are often different from those of less-serious injuries; reducing injury frequency doesn't necessarily reduce how severe they are.

New model needed | The SIF triangle

21% of injuries have SIF potential.



Graphic adapted from National Safety Council's Serious Injury and Fatality Prevention: Perspectives and Practices, 2018.

face the real risks of death in our workplaces head on. We must continue to honestly confront them as they occur, and we must continue to truly strive to identify their causes, and to eliminate those causes and to mitigate the underlying hazards."

"We must continue to

Michael Wood, Oregon
 OSHA Administrator

"We can't solve problems by using the same kind of thinking we used when we created them."

-Albert Einstein

Todd Conklin, author of *Workplace Fatalities, Failure to Predict*, says every employer should ask their employees these three questions:

- 1. Where can someone die or get seriously injured?
- 2. What are the controls to prevent it?
- 3. Are the controls enough?

Using this model allows us to examine other causes, instead of just looking at unsafe behaviors.

When do SIFs occur | The fatal 10

A situation on the fatal 10 list is a high-risk situation that will eventually result in a serious injury or fatality if it continues without being identified and controlled. Some work activities have more risk than others, especially when paired with red-flag situations.

Another way to look at it is the context – what are the circumstances right before a SIF? It could have something to do with equipment, production deadlines, or worker fatigue.

SIF prevention best practices

Identifying and controlling red-flags, not as a one-time activity but as an ongoing process, is the best path to prevention. Remember these key points:

- Engage employees in prevention; their daily experience can provide the best insight on identifying and controlling SIF hazards.
- Don't just manage routine safety and OSHA recordables.
- Involve employees in risk assessments.
- Identify red-flags and serious hazards that are part of tasks.
- Add controls to critical steps.
- Flaws in the system impact individuals and vice-versa.
- Educate employees on SIF hazards.
- Provide training on identifying and eliminating SIF potential.

The simpler safety controls



Fatal 10

- Vehicle/equipment operation
- Working at heights
- Workplace violence
- Machine hazards/lockout failures
- Hazardous materials/environmental exposure
- Electrical/arc flash hazards
- Fire/explosion/hot work
- Confined spaces/trenching/engulfment
- Suspended loads
- Struck by objects and equipment

Red-flag situations

- Nonroutine work
- Stressors physical, environmental
- Fatigue
- Production pressures
- Inadequate supervision and follow-through
- Working alone
- Inadequate operating procedures, training, and follow-up
- Poor equipment or task design
- New employees
- Lack of engineering controls

Summary

Every employer has the potential for SIFs, even if your business is considered low-risk. Using this information to identify SIF potential so you can work to prevent serious injuries and fatalities is a good first step to addressing severe workplace injuries.



Serious injury and fatality (SIF) hazard review form

Serious injuries and fatalities are caused by high-risk situations. The hazards listed below are called The Fatal 10 because they have a high degree of risk, especially when paired with "red-flag" situations, such as:

- Nonroutine work
- Stressors physical, environmental
- Fatigue
- Production pressures
- Inadequate supervision and follow-through

- Working alone
- Inadequate operating procedures, training and follow-up
- Poor equipment or task design
- New employees
- Lack of engineering controls

These high-risk scenarios call for an elevated focus to make sure effective prevention measures are in place. This list can be used as a place to start identifying where you have operations on the fatal 10 list and where they pair with red-flag situations. It does not include every scenario that can cause a SIF.

Because employees who do these tasks are most at risk, they should have an active role in completing risk assessments and developing safety policies and procedures. Open and honest discussions, free from retaliation, are critical to identifying issues. For specific definitions of The Fatal 10 and red-flag situations, refer to the SIF definition sheet.

Conversation with employees	Notes on required actions
Where do we use vehicles?	
Where can employees get seriously injured?/Where can fatalities happen?	
What hazardous work is being done beyond our policies and procedures?	
When do vehicles and equipment operations combine with red-flag situations in our organization?	
What preventive measures are in place?	
Are the preventive measures enough?	
Where do employees work at beights over four feet?	
Where can employees get seriously injured?/Where can fatalities happen?	
What hazardous work is being done outside of our policies and procedures?	
When does working at heights combine with red-flag situations in our organization?	
What preventive measures are in place?	
Are the preventive measures enough?	
	Conversation with employees Where do we use vehicles? Where can employees get seriously injured?/Where can fatalities happen? What hazardous work is being done beyond our policies and procedures? When do vehicles and equipment operations combine with red-flag situations in our organization? What preventive measures are in place? Are the preventive measures enough? Where do employees work at heights over four feet? Where can employees get seriously injured?/Where can fatalities happen? What hazardous work is being done outside of our policies and procedures? When does working at heights combine with red-flag situations in our organization? What preventive measures are in place? Are the preventive measures are in place?

The Fatal 10

Conversation with employees

Notes on required actions

Workplace violence



Where do we have potential for workplace violence?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When does workplace violence combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Machine hazards/ lockout failures



Where do we have machines with moving parts?

Where can employees get seriously injured?/Where can fatalities happen?

When do employees use lockout? What circumstances might come up where lockout is not used?

What hazardous work is being done outside of our policies and procedures?

When do machine hazards and lockout combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Hazardous materials/ environmental exposure



When do we work with or have hazardous materials?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do hazardous materials and environmental exposure combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Electrical/arc flash hazards



Where do we work on, around, or have contact with electricity?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do electrical and arc flash hazards combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

The Fatal 10

Fire/explosion/hot work



Conversation with employees

When do we do electrical, arc, or torch welding? Other hot work, or exposure to fire or explosions?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do fire/explosion/hot work combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Where do we have employees who enter or work around confined spaces or trenches? Do we have employees who could be engulfed?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do confined spaces/trenching and engulfment combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Where do we have or work around suspended loads?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do suspended loads combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Struck by objects and equipment

Suspended loads

car Wh and Wh wit Wh

Where do employees work around moving objects or equipment? Could employees be struck or crushed?

Where can employees get seriously injured?/Where can fatalities happen?

What hazardous work is being done outside of our policies and procedures?

When do struck by objects and equipment hazards combine with red-flag situations in our organization?

What preventive measures are in place?

Are the preventive measures enough?

Manager/supervisor:

Employees involved in review: _

Confined spaces/ Wh trenching/ engulfment Wh can Wh

Date:

Notes on required actions

Fatality and serious event reduction

A serious injury or fatality (SIF) is an event that is likely to lead to death or permanent/long-term limitation. The potential for a SIF exists in many work environments, but simply managing routine safety programs does not necessarily address them.

Instead, engage employees to help find and focus attention on where potential for a serious injury exists. Use this worksheet to discuss the potential for a SIF in your workplace by job task and to guide your team to finding a path to prevention.

You should ask your employees:

Job task: _____

Where can you get seriously injured/Where can fatalities happen?

What are the controls or protective measures in place?

Can you describe any gaps in the protective measures? What have we missed?

Before an incident or event occurs ask these three questions:

- 1. Where can you get seriously injured or where can a fatality happen?
- 2. What are the controls or protective measures in place?
- 3. Are there any gaps in the protective measures or anything we have missed?



Best practices

- Engage employees in prevention •
- Don't just manage routine safety and OSHA recordables
- Identify red flags and serious hazards
- Add controls to critical steps
- Educate employees on SIF hazards
- Provide training on identifying and eliminating SIF potential

Find more information at www.saif.com/seriousinjury including Serious Injury and Fatality (SIF) resources in both English and Spanish. Here you will find the SIF documents in this book, the samle documents below, and more.



Preventing serious inj Action plan: and fatalities in the w This action plan introduces a framework for understanding and defining what a se

This action plan introduces a tramework for understanding and defining what a s a workplace may identify this exposure, and steps to take for ongoing prevention. prevention and hold open, honest discussions. Define - Involve all employees in the defining process:

- What a serious injury and fatality is
- Why this happened
- Best practices for prevention
- Step 1: Managers, supervisors, and leads read Preventing Serious Injuries Step 1: Managers, supervisors, and leads read Preventing Serious Injuries a watch the SIF video Serious Injuries and Fatalities on YouTube (bit.ty/456)0C Step 2: Managers, supervisors, and leads lead training for all workers on [saif.com/S1184] and show the SIF video, Serious Injuries and Fatalities on

Identify - Involve all employees in the identification process:

- Where your workplace has operations on the fatal 10 list Where those operations pair with red flag situations Step 3: Managers, supervisors, and leads are to have workers compl
- Step 4: Managers, supervisors, and leads are to review the Fatality 510978) completed by workers and report findings to the safety i

prevent - Involve all employees in the prevention process: Guard against injuries and fatalities by actively incorporating

- Regularly review risky tasks for gaps and add controls to cr
- Step 5: Managers, supervisors, and leads repeat steps 1-4 ev Step 5: Managers, supervisors, and job responsibilities, or new hazards.
- Step 6: Safety committee completes Serious Injury and Fatali
- Step 7: Safety committee will review the Serious Injury a quarterly by the safety committee and the Fatality and ser

by workers.

Find more on sail.com Search Q Serious injuries and fa

Serious injuries and fataliti

SIF card definitions

SIF stands for serious injury and fatality. A serious injury is a life-changing event such as a major head injury, a spinal cord injury, amputation, catastrophic fractured bones, and serious burns.

Since employees who do these tasks are most at risk for SIFs, they should be given an active role in completing risk assessments and developing safety policies

Job tasks on The Fatal 10 list, especially paired with red-flag situations, are a sign that a closer look is needed to identify gaps and make sure light prevention measures identity gaps and make sure tight preven are in place. This list is not all-inclusive.

Additional information and resources about SIFs can be found on SAIF's SIF resource page.

The Fatal 10

Vehicle/equipment operation

Vehicle/equipment operation Work done around or with vehicles and power-operated mobile equipment, including forklifts and vehicles with electric motors. Motor vehicle, ATVs, and vehicles with electric motors accidents are the number one cause of untroduced double in the U.S. and strong preventions. electric motors accidents are the number one cause of workplace deaths in the U.S., and strong preventative measures should be in place to prevent them. Examples are regular maintenance, additional safety features in vehicles, and driver safety training. Resources:

- Safe driving (saif.com/safedriving)
- Trucking safety (saif.com/truckingsafety)

Working at heights

working at neights Defined as any work completed above four feet. Though there have been significant injuries and fatalities from work at the same height, any work completed over four feet is at an even greater risk. Consider loading docks, road work, scatted time, ladder use and any work of the reer is at all even greater risk. Consider loading doc roof work, scaffolding, ladder use, and any work at heights no matter the duration.

 Construction and maintenance (saif.com/construct) Ladder safety (saif.com/ladders)

Workplace violence

Workplace violence Often viewed as shootings, this can also include person-on person contact in settings such as health care and schools. Those working alone, with unstable people, or with money on-site may be at risk. Violence can be acts committed by criminale, but also consider many wident with money on-site may be at risk. Violence can be acts committed by criminals, but also consider many violent episodes in the workplace are a result of interactions with customers, current or former employees, and personal Resources

Violence in the workplace (saif.com/violence)

 Health care (saif.com/healthcare) Education (saif.com/education) Machine haz Includes wo failures Red-flag situations of all kinds unjam, cle parts. Ma part, any Stressors: physical, environmental, etc. limbs to on an Reso Fatigue Production pressures • Inadequate Supervision and follow-through Working alone Inadequate operating nocedures over auny nocedures, training, and follow-up Poor equipment or task d_{esign}

- New employees Lack of engineering controls
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Anatomy of a comprehensive consultation

A comprehensive consultation can be conducted by a SAIF consultant, an OSHA consultant, or a private consultant. What does it consist of?

It is generally broken up into two big parts – **facility** items such as buildings, equipment, vehicles, physical items, etc, and **administrative programs**, such as written programs, training records, safety meeting minutes, etc.

Remember, safety and compliance are not always the same thing.



Safety and compliance overlap in the middle. There are some things we do to keep OSHA, ODA, Global GAP, or other regulatory agencies happy with us, and other things we elect to do because it's gives us the best chance of staying safe and healthy.

A comprehensive consultation does some of both.

Senate Bill 592

Increases the minimum penalty for a serious violation from \$100 to \$1,116, and forbids a reduction below that level.

It also requires Oregon OSHA to issue penalties between \$1,116 and \$15,625 for each serious violation committed by an employer.

A serious violation that is not a willful or repeat violation carries a minimum penalty of \$100 and a maximum penalty of \$13,653.

Today, violations are a lot more expensive than in the recent past.

In the past we've talked about **facility** items such as: Chemical storage Slip, trip, and fall hazards, Ergonomics Shielding Environmental hazards PPE and more

A good "walk around" can help you keep up on **physical hazards**.

Take a look at this photo and see how many hazards you can spot.



Compliance checklist

COMPLETE PROGRAM Date prepared: NOTES WORK ON ALREADY NEED TO DONE NEEDED NOT Pub. 1951 "Safe Practices..." Medical evaluation for users SAFETY MEETINGS/COMMITTEE Training for hand laborers Annual training for users SEASONAL WORK TRAINING Written company policy Written company policy RESPIRATORY PROTECTION Maintenance and repair HAZARD COMMUNICATION List of chemicals used SAFETY PROGRAM Training for all others QUARTERLY INSPECTIONS Safety Data Sheets Annual fit testing Storage Farm: ı 1 1 ī ı ı ı ı ı ı ı ı

Farm:				Date prepared:	
SAFETY PROGRAM	NOT	ALREADY DONE	NEED TO WORK ON	NOTES	PROGRAM COMPLETE
TRACTOR TRAINING					
FORKLIFT TRAINING					
ATV/UTV TRAINING					
DRIVING POLICY					
EMERGENCY PLANS					
ENERGY CONTROL (LOCK OUT TAG OUT)					
CONFINED SPACE ENTRY					
OSHA 300 LOG					
WORKER PROTECTION STANDARD					
- Central posting and worker info.					
- Training workers and handlers					
- Decontamination, PPE, and more					
PPE ASSESSMENT					
HEAT SAFETY					
WILDFIRE SMOKE					
HOT WORK					

Visit www.saif.com/agseminars for resources.



Or, scan this QR code.

Please keep in mind that there may be other programs that are relevant to your farm that are not covered here.

Hazard communication

A hazard communication plan is going to be required for nearly everybody. A common misconception is that this refers only to pesticides. While it includes those, it isn't limited to them. Businesses that don't use pesticides still need a hazard communication plan. This covers any products used on a commercial scale that we wouldn't want to drink or splash in our eyes. For example: gasoline, diesel, propane, motor oil, break cleaner, etc.

Your hazard communication program is required to include:

- A written company policy that summarizes your program and hazcomm information
- Identification of a person in charge of the program
- A list of the hazardous materials present on your farm
- A current Safety Data Sheet book (remember, MSDS format is no longer accepted)

If you do use pesticides:

- A review of the OSHA Publication 1951 "Safe Practices In An Agricultural Work Environment" book
- Training on the program

Respiratory protection program

If you are using respirators, even optionally for things like nuisance dust, you are going to be required to have a respiratory protection program.

This includes:

- A written company policy
- Employee medical evaluations before they use a respirator to make sure they are healthy enough and its safe for them to do so
- Conducting annual fit testing
- Maintenance and storage procedures

Annual training:

- When to use a respirator
- How to inspect/maintain/store it, etc.

Seasonal worker training

Seasonal employees require a training and orientation program to make sure they're getting the info needed to safely and legally perform their seasonal jobs.

Seasonal vs. contract workers

Seasonal workers are the farm's employees

Contract workers are a contract labor company's employees.

In years past, contract labor seemed simple and convenient – pay to have help show up on the farm. No worries about hiring, onboarding, training, liability, etc.

However, in recent years we've seen more and more examples of this not being the case, regarding no training obligations or liability. Contracted labor has been injured or killed on the job, and the farms on which they were working at the time of the incident were investigated by OSHA and held liable. While you may not be responsible for some or all of the training for contract workers, it's important to make sure you communicate with contract labor providers about who is responsible for training, and have confirmation that its being completed.

Quarterly inspections

Once per quarter, we're required to stop and go look for hazards and potential hazards. If there is a formal safety committee in place, this can take the place of the committee meeting for one month each quarter.

You may want to develop a checklist, especially if you're just starting out. Remember, if you rely only on a checklist, you may or may not catch what is unique to you and your farm. Use some critical thinking skills as you're walking around.

Ask yourself:

"What could go wrong here?" "What could cause an injury?" "How does this compare to the last time I saw this area?"

These types of open-ended questions might lead you to discovering opportunities for improvement that might never make it onto a generic boilerplate template.

Keep a written record of what you find. OSHA can ask you to produce these. Also, a written record makes it easier track follow through on any corrective actions you identify.

Temporary workers: New employee safety orientation

Employee's name:	Position:	Hire date:

Department assigned: ______ Supervisor: _____

General safety orientation (to be completed by temp/staffing agency)

Topics	Employee initial	Topics	Employee initial
Issue employee safety handbook		Safety committee functions	
Company safety policy		How to report an unsafe work practice or condition	
Safety and accident prevention goals		Accident reporting procedures	
Worker safety responsibilities		Early return-to-work program	
General safety rules		Emergency evacuation plan	

Employee signature	Date	Personnel representative signature	Date

Job safety orientation (to be completed by the host employer/client)

Topics	Employee initial	Topics	Employee initial
Issue employee safety handbook from host employer/client			
Introduction to work area, danger areas, exits, AEDs, first aid supplies			
Issue required personal protective equipment (PPE)			
Hazard communication/safety data sheets (SDS)			
Department safety rules			
Equipment tools, and machinery safety procedures (including guarding and lockout/tagout)			
Emergency evacuation plan			
Hazard and incident/accident reporting protocols			

Employee signature	Date	Supervisor signature	Date

Protective equipment

- Use of safety glasses
- Use of gloves and protective clothing
- Hearing protection
- Head protection
- Footwear requirements
- Respiratory protection

Tool use

- Tool selection
- Knives and razors
- Non-powered hand tools
- Pneumatic tools
- Use of nail guns
- Hand-held grinders
- Skill saws
- Spray finishing equipment

Equipment and machinery

- Lockout/tagout program
- Pinch, shear, and crush points
- Equipment guarding practices
- Clearing jams
- Lubrication and adjustments
- Jogging procedure
- Cranes and hoists

Electrical safety

- Location of emergency shutoffs
- Inspection and maintenance of power cords
- Maintaining clearance at electrical panels

Chemical safety

- Hazard communication program
- Reading labels and safety data sheets (SDS's)
- Chemical storage procedures
- Personal hygiene
- Cleanup and disposal methods

Forklifts

- Operator training and certification
- Working around forklifts
- Visible and audible alarms
- No rider policy

Fire prevention

- Smoking policy
- Trash disposal
- Sources of ignition
- Flammable liquids
- Fire extinguishers

Ergonomics

- Standing and seated task adjustments
- Job rotation/avoiding repetitive motion
- Rest break scheduling
- Awareness of cumulative trauma
- Tool use
- Setting up computer workstation

Manual material handling

- Basic lifting techniques and use of lifting aids
- When to get help
- Special lifting tasks
- Limitations of lifting belts

Fall prevention

- General rules for working from heights
- Ladder safety
- Personnel lifts
- Cherry picker operation
- Guard rails
- Use of harness and life lines
- Fall prevention plan

Housekeeping

- Disposal of trash and oily materials
- Prevention of slip, trip, and fall hazards
- Maintenance of aisles and exits
- Trash compactor operation

General work practices

- Emergency procedures
- Reporting hazards, incidents, and accidents
- Clothing, hair, and grooming standards
- Break scheduling
- Alcohol/drug policies
- Workplace violence and harassment
- Horseplay, running in work area
- Avoiding risks
- Flexibility stretching program
- Distractions: phones, headphones

Safety meetings - Safety committees

Take what you learned from your quarterly inspections to your safety meetings or safety committee meetings and integrate your inspection findings into your meeting minutes. This gives you an easy way to document findings and keep track of the progress as you improve your workplace. It also helps you brag about your success to OSHA.

If you have fewer than 10 employees, you have the option to do informal monthly safety meetings. If you have more than 10 employees you are required to have a formal safety committee.

Here is a suggested structure for your safety committee meetings:

- Discussion and analysis of recent injuries, accidents, close calls
- Old business looking at last month's meeting minutes
- Status check on your to-do list
- New business management and employees bring up concerns, needs, ideas, and suggestions

Document who attended and what was discussed. Retain those records for at least three years.

Tractor safety training

You might consider delivering training by watching a video and having a discussion. SAIF provides a tractor safety video, available on YouTube, in English and Spanish.

In YouTube.com, search "SAIF tractor safety."

At the end of this video, it prompts you to have a discussion about how that information applies to your team, and any hazards unique to your farm related to tractors.

Keep records of your trainings. For example, provide a sign-in sheet. Be sure to keep those for at least three years as well.

Forklift training

If you have forklifts on your farm, employees are required to receive an initial forklift certification that is fairly in depth, and includes requirements for an instructional portion, a testing portion, and an observed drive test to make sure they can apply the safety skills they've been taught. That certification must be done by the current employer and, for Division 4 employers, there is an annual refresher requirement.

Watching a video followed by a discussion, participating a tailgate talk, or reviewing the test together are examples of a refresher.

General Industry employers can provide a forklift refresher training every 3 years, or as needed if unsafe behaviors are seen.





ATV/UTV training

Quads and side by sides are also commonly used pieces of equipment on a lot of our farms. In some cases, recreational use of these machines can adversely influence behavior on the job. A solid training program can help promote appropriate use of these vehicles.

SAIF provides an ATV video on **YouTube.com**. Search "Understanding ATV Stability."



Driving

OSHA has been consistently asking for driving policies after on the job vehicle crashes. While this document doesn't need to be elaborate, it is a good idea to have something in writing that outlines training efforts, safety procedures, maintenance/inspection procedures, and behavioral expectations for employees. See the last section of this book for information on written driver policies.

Emergency plan

One idea for capturing your emergency plans is to make a binder with labeled tabs for the different sections, rather than having one long written program.

The tabs could look like this:

- Emergency contacts
- Farm maps
- Field addresses
- Employees with first aid training
- Fire extinguishers locations
- Etc.

This modular system can allow you to gradually build up your plan and it is easily duplicated and passed off to our first responders when needed.

One of the items we discussed at last year's ag seminar was doing a better job at mapping our farms and documenting hazards, emergency supplies, assembly areas, and more, to communicate to staff and first responders. We've seen some great examples from Oregon farmers this past year.



Energy control/lockout tagout

Your lockout/tagout program may be simple or in depth, depending on your specific needs. A written program for your hard-wired equipment should describe where the energy should be controlled.

Hazardous energy control plan template

In some cases, a simple chart detailing equipment and control location will do.

Or, a more elaborate set of directions, with pictures or additional information might be more helpful.

SAIF has a template for a thorough energy control program that can be found on **saif.com**. From the home page select: Safety and health > Topics > Prevent injuries > Lockout/tagout.

The resource is called "Hazardous energy control template." It is an editable document that you can customize to your program.

Even if you don't have hardwired equipment that would require a written program, it's still an important best practice to keep some Out of Service tags or other lockout/tagout supplies on hand to be able to mark equipment that's unsafe to use.

Receiving Area: Wash Line #1 Machine: **Control Location:** In-feed Conveyor Control Cab #4 Control Cab #4 Blower Shaker Control Cab #4 Air Lock Control Cab #4 Debris Conveyor Control Cab #4 Control Cab #4 Out-feed Conveyor LMC Bucket Elevator Control Cab #4

Wash Line #2 Machine: **Control Location:** Blower Wash Line #2 Plug Bundle Wash Line #2 Plug Bundle Shaker Air Lock Wash Line #2 Plug Bundle Debris Convevor Wash Line #2 Plug Bundle In-feed Conveyor Wash Line #2 Plug Bundle Twist-Lock next to Bundle eyor evator Electrical Room #1 ze Silos Electrical Room #1 Electrical Room #2

Confined space entry

A confined space entry program is one of the more complicated written programs you might ever have to create for your farm.

SAIF provides streamlined and linear written program templates that gives you lots of supporting information to create your program. It can be found on **saif.com**. From the home page select: **Safety and health >** Topics > Prevent injuries > Confined space. The editable document is called "Confined space plan template."

In order for an area to be considered a "confined space", three things must be present:

- 1. Large enough to enter
- 2. Not designed for continuous occupancy
- 3. Limited access/egress

If all three are present, you need a confined space program.



Confined space permit or no permit required?

If your confined space has hazards from engulfment, configuration, atmospheric, or others, it's going to qualify as a **permit required confined space entry**. Issuing that permit is an internal process. (You do not need to go to the county to get this.) It does require you to have the paperwork and adds complication.

Confined space entry programs are complicated. If it's relevant to you, check out the sample program, and then talk to a safety consultant and get some support while you're creating this.

What's more common than confined space ENTRY on a lot of farms, is having areas that are confined spaces present, but you don't need to enter them. In this case, you don't need a whole written program, but you should be identifying and labeling them.

OSHA 300 Log/300A Summary

If you have 10 or more employees on any one given day of the year (not counting immediate family or contract labor) you're also required to complete an OSHA 300 Log and 300A Summary.

The 300 log form, from OSHA, identifies what qualifies as "recordable incidents" that should go on your log. This includes "every workrelated injury or illness that involves loss of consciousness, restricted work activity, or job transfer, days away from work, or medical treatment beyond first aid." You must also record "significant workrelated injuries and illnesses that are diagnosed by a physician or licensed health care professional."

Remember that this log will contain HIPPA protected information, so it should be stored in a secure manner.

At the end of the year, take the OSHA 300 Log information and summarize it into the 300A Summary.

This is a basic summary of injuries throughout year, and is designed to give OSHA a snapshot of your safety record during an investigation and offer transparency for your employees regarding your safety track record.

Only the 300A Summary is required to be posted in conspicuous location where employees can find it, from February 1 through April 30, every year. Do not post the 300 Log.

Worker Protection Standard (WPS)

If you apply agricultural chemicals to harvested crops, you're subject to the WPS, which includes training and documentation requirements.

You must have a central posting log of our chemical applications, which includes info like the date of application, common name and EPA number of applied product, location of application, and length of restricted entry interval (REI), which needs to be updated regularly and be available to all employees to review.

There are two types of WPS training. Worker-level training for employees who work on farms subject to the WPS and handler-level training for employees that mix or apply chemicals.

Also, you must provide sufficient decontamination supplies and PPE to meet the requirements spelled out in the labels.

Additionally, you must provide Application Exclusion Zone (AEZ) information to ensure an understanding of spray zone hazards and how to avoid them.

PPE Assessments

OSHA provides information and guidance in the Personal Protective Equipment Hazard Assessment document to help you determine:

- The jobs (or tasks) employee perform
- The hazards employees are exposed to
- Where the hazards are located
- The likelihood those hazards could injure employees
- The severity of a potential injury
- The types of PPE necessary to protect employees from those hazards



OSHA Creat

One way to look at PPE assessment is job-by-job. This method is very straight-forward and detailed. In general, however, there may be too many jobs on your farm to make this practical.

Another way to approach PPE assessment is to approach it by PPE item. For example: What jobs require hearing protection? What jobs require respiratory protection?

- Hearing protection
- Eye protection
- Respiratory protection
- Hand protection
- Head protection
- Leg protection
- Foot protection

Requirements are different depending on whether your farm falls under General Industry or Division 4/Ag rules.

Ag businesses are required to "select PPE that protects employees from hazards, communication selection decisions to affected employees, ensure PPE fits employees, and require employees to use their PPE". General industry is required to "prepare a document that says they have done the hazard assessment" along with some other details. Under Division 4, we don't have a lot of paperwork requirements on this, and have a lot of latitude on what our PPE assessment looks like. For many of us, the most effective way to handle this is to do it in our safety committees.

Heat safety

One of the new additions to the compliance checklist is OSHA's new requirements for a heat safety program.

OSHA provides an easy-to-use template for our written programs for heat safety which are broken up into two big pieces.

Visit: www.osha.gov/heat/

Heat illness prevention plan

The Heat Illness Prevention Plan includes: Purpose Scope Background **Risk factors** NIOSH heat stress app information Heat-related illness Preventing heat-related illnesses Water Shade Mandatory training requirements Acclimatization Heat illness prevention rest breaks Emergency medical plan Use of alternative cooling methods Responsibilities

Rest and Acclimatization Plan

This is separated out into it's own document.

OSHA requires both of these forms to exist for your farm, and one or the other alone won't be considered compliant.

At present, OSHA is looking for a good-faith effort to comply with the major components of these rules.

Wildfire smoke

OSHA has issued an easy-to-digest guide on these rules too, which breaks down all the program and training requirements.

Visit: www/osha.gov/wildfires

Managers/Supervisors are required to monitor Air Quality Index in their areas, and take action at three points, 101, 250, and 500.

101 to 249: Required to notify employees we have hit that point which is *potentially harmful for people with compromised respiratory systems*. N95's must be offered for optional use. Close doors and windows and setup fans and filters to minimize smoke levels if possible. Also, maintain two-way communication with employees. **250-499:** Required to notify employees we have hit that point, which is *potentially harmful for all people*. N95's are required to continue working in the smoky conditions. This does not apply to employees working indoors, in filtered equipment or vehicle cabs, etc.

500+: Required to wear half mask respirator if continuing to work in smoky conditions. Non-critical employees should be sent home until conditions improve.

All employees should be trained on health impacts of exposure to wildfire smoke:

- Short term headache, cough, irritated eyes, sore throat, etc.
- Long term asthma, cardiovascular issues, cancer, etc)
- How to find AQI (air quality) information
- How employees will be protected from smoke

Hot work

OSHA has been consistently asking for written programs regarding hot work due to an uptick in incidents related to fires and welding/ torching injuries.

We'll dive deeper into this topic in this seminar.

What do you already have done that you feel best about?

What program is your highest priority to create?

What training is your highest priority to complete?

Hot work/welding safety: Control measures, precautions, and PPE

"Hot work" can be:

- Soldering
- Brazing
- Flame cutting
- Hot riveting
- Welding

Welding is a fabrication process that joins two or more items (usually metals or thermoplastics, but can even be done with wood). It uses high heat, pressure, or both. It melts the parts together and allows them to cool, resulting in fusion.

Types of welding include: gas metal arch welding (MIG), Shielded metal arc welding (stick welding), and Gas tungsten arch welding (TIG).

Think carefully about quick-fix welding. It can be easy to decide that there isn't time to take a project to a professional shop. Performing a quick fix that is beyond a person's skill level may even produce a greater hazard.

Identify nearby fuel sources

Fuel sources are not just gas, diesel, and propane. They include newspaper, oily rags, sawdust, cardboard, old paper bags. If you are outside, fuel might be dried grass or dried leaves. Remove combustibles from at lease 35 feed around the welding area before you begin.

There are three elements that are required to create fire. The key is to keep these three elements from coming together at the same time.



Have fire fighting resources already in place What kinds of things can you have available to put out a small fire

before it grows into a large fire?

In most cases, a common ABC fire extinguisher will put out a small fire before it spreads. Keep in mind that a 10 pound fire extinguisher only sprays for about 20 seconds before it is empty.



Fire extinguisher use

It is critical to know where the nearest fire extinguishers are located so they can be quickly accessed in an emergency.

Do not expect employees to use a fire extinguisher in the event of a small fire in its early stages, unless they have been trained.

Key takeaways:

- Type A extinguishers: ordinary fires, such as paper and wood
- Type B extinguishers: flammable liquids
- Type C extinguishers: electrical
- Type D extinguishers: flammable metals
- To operate a fire extinguisher, remember "PASS":
 - Pull the pin.
 - Aim the nozzle.
 - Squeeze the trigger.
 - Sweep the stream toward the base of the fire.
- Document monthly fire extinguisher inspections on an attached tag.

Before using an extinguisher, confirm the correct type of fire based on hazards in your work area.



There are four very basic steps to extinguishing a fire.



Fire extinguishers should be inspected monthly to confirm adequate pressure (gauge in the green zone), the pin is in place, and it is stored off the floor in a marked location. Initial and date the monthly inspection of each extinguisher on an attached tag. If an extinguisher has been used, never return it to its original location until it has been refilled and pressurized, or replaced with a new extinguisher.

Take action (Complete one or more activities as a team)

- A. FIELD TRIP: Locate the closest fire extinguisher to your team's location. Confirm that it's ready for use.
- B. PRACTICE: If facilities permit, practice using a fire extinguisher on a mock fire, using the PASS system.
- C. EQUIPMENT REVIEW: Review your facility's materials and confirm your fire extinguishers are the correct type to put out a fire.

Safety talk	Instructor's name.	
sign-in sheet		
Record your attendees for compliance	Date of training:	
	ATTENDEE NAME (Print)	ATTENDEE SIGNATURE
	·	

Water

Keep multiple 5-gallon buckets full of water strategically placed around the welding area for the unexpected flare up. You may never need to use them, but they'll be ready in the event that you do need to use them.

If welding outdoors, keep your garden hose with an attached hosesprayer nearby so you can easily grab it if necessary. Consider spraying down the immediate area with a garden hose before you begin and after you're done welding. This can help extinguish those small embers that might be hidden and flare up suddenly.

Sand

You may already have bags of sand on hand. Spreading sand on top of the fire absorbs the heat and suffocates the fire by cutting down the oxygen supply. After deploying the sand, you might even spray down the area with water to smother flames and hot ashes.

Fire blanket

A fire blanket is a highly flame-resistant blanket that can be used to quickly wrap around a person to prevent them from becoming burned in a fire. It can also be used to throw over a small growing fire to quickly put it out. The fire blanket chokes out the oxygen – one of the three elements that creates a fire.

PPE - Personal Protective Equipment

Per Oregon OSHA, employees exposed to the hazards created by welding, cutting, or brazing operations shall be protected by PPE. Appropriate protective clothing required for any welding operation will vary with the size, nature and location of the work to be performed. PPE must protect against hazards such as burns, sparks, spatter, electric shock, optical radiation, and inhalation hazards as identified below.

Eye and face protection

- All filter lenses and plates must meet the test for transmission of radiant energy prescribed in the ANSI standard Z87.2010
- Helmets and hand shields shall protect the face, forehead, neck and ears to a vertical line in back of the ears, from the arc's direct radiant energy, and weld splatter.
- Welding helmets with filter plates are intended to protect users from arc rays and from weld sparks and spatters which strike directly against the helmet. They are not intended to protect against slag chips, grinding fragments, wire wheel bristles, and similar hazards which can ricochet under the helmet. Spectacles, goggles or other appropriate eye protection must also be worn to protect against these impact hazards.
- OSHA requires that when arc cutting and arc welding with open arcs, helmets or hand shields with filter lenses and cover plates shall be used by operators and nearby personnel viewing the arc also subject to wear proper protection. Spectacles with a shade 2 lens are recommended for general purpose protection for viewers. When resistance welding or brazing; operators of resistance welding must use face shields, spectacles, or goggles depending on the particular job to protect their faces and eyes from welding hazards.

Protective clothing with adequate body coverage. This includes leather boots and hand protection.

- Appropriate protective clothing for any welding and cutting operation will vary with the size, nature and location of the work to be performed. Clothing shall provide sufficient coverage and be made of suitable materials to minimize skin burns caused by sparks, spatter or radiation. Covering all parts of the body is recommended to protect against ultraviolet and infrared ray flash burn.
- Dark clothing works best to reduce reflection under the face shield. Heavier materials such as wool clothing, heavy cotton or leather are preferred as they resist deterioration. Materials that can melt or can cause severe burn due to sparks that may lodge in rolled-up sleeves, pockets of clothing or pant cuffs are not recommended.
- Other protective clothing includes durable, flame-resistant aprons made of leather or other suitable materials to provide protection to the front of the body when additional protection against sparks and radiant energy is needed.

Gloves

• The standard requires all welders and cutters to wear protective flame-resistant gloves, such as leather welder's gloves, which provide the heat resistance needed for welding. A gauntlet cuff offers additional arm protection, and insulated linings shall be used to protect areas exposed to high radiant energy.

Respiratory protection

• Respiratory protection is recommended for all welding, cutting, or brazing operations regardless of ventilation due to the variable nature of potential toxic exposure to fumes that are carcinogenic or toxic at very low levels as in the case of manganese or hexavalent chrome. It is precautionary to assume that fumes will be above the level of acceptable risk during all welding, cutting, and brazing (WCB) activities.

Hearing Protection

- May need to conduct personal noise monitoring to determine possible hearing loss exposures
- If 8-hour TWA (time-weighted average) noise exposures exceed 85 dBA, then a hearing conservation program is required under OSHA 1910.95 "Occupational Noise Exposure"
- Also pay attention to exceeding 115 dBA at any time
- Ear damage from hot slag is rare but can occur

Best control practices:

- Wear a full-face welders helmet to protect ears
- Use foam or silicone earplugs
- Wear cotton welder's cap over ears

Auto-darkening welding helmet

- Featherweight, reducing neck fatigue
- No need to flip the helmet mask up or down
- You can see the work piece before, during, and after striking an arc

Protect your eyes and the eyes of those around you

One way to do this is by using a welding flash screen. It creates a buffer that can literally help save the eyesight of those we work with. Keep in mind that welding arc should never be viewed with the naked eye within a distance of 50 feet.

Signage

Where the Hot Work area is accessible to persons other than the operator of the hot work equipment, conspicuous signs shall be posted to warn others before they enter the work area. Sign shall read:

Caution Hot Work in Progress Stay Clear



Hot Work Permit

This is a document that is required when the task requires the use of a flame, sufficient heat, or sparks to generate or serve as a source of ignition. Permits are issued by Safety and Risk Management (SRM) under the hot work permit program.

Hot work area

Designated hot work areas shall be made of non-combustible, fire-resistive construction and essentially free of combustibles and flammables (also applies to the working surface for the use of soldering and brazing operations). These areas shall be suitably segregated from adjacent areas and equipped with a fire extinguisher, mechanical ventilation and a heat detector rather than a smoke detector. All designated areas must be inspected and approved by SRM prior to use of the site.

The following conditions must be maintained at all times at a designated hot work area:

- At least a 35-foot clearance from combustibles
- Inspect the oxy-acetylene hoses for defects and ensure the hoses fit securely on the gas valve and the burner/torch. Replace any hoses that are defective
- Loose clothing and jewelry will not be worn at the time of using the burner. Long hair must be tied back and secured
- Shop/lab personnel must be notified while the burner/torch is in use and burner/torch shall never be unattended
- Shut off gas supply promptly when done

Have the right tools for the job Grinders

Do you have to the correct grinding tool, and it is in the right size? Does it have the most appropriate disk? Is the disk worn down or worn out? Is the disk mounted properly? Is the guard in place?

Welding machines

It's important to have proper welding training, know how to handle the equipment settings, understanding the manufacturer's specifications, and more.

Welding injuries

Most frequent injuries: (SAIF claim data, 2018-22)

51% Burns 27% Eye 10% Strain 4% Cuts 4% Struck by 3% Ingestion/inhalation 1% Caught in 1% Falls/slips Claims cost: (SAIF claim data, 2018-22)

54% Sprains and strains 20% Struck by 11% burns 7% Caught in 3% Eye 2% Cuts 2% Falls/slips 1% Ingestion/inhalation

Welding injury patterns

Musculoskeletal (Awkward positioning) Welding and cutting processes place physical demands on the knees, wrists, elbows, arms, shoulders, neck and back. Common reasons for awkward positioning:

- Reaching
- Bending
- Heavy lifting
- Using force
- Repetitive motions
- Awkward postures

Slips and falls

Common causes of slips are: Wet or oily surfaces Occasional spills Weather hazards Loose, unanchored rugs or mats Flooring

Common causes of tripping are: Obstructed view and poor lighting Clutter in your way Uncovered cables Bottom drawers not being closed Uneven (steps / thresholds) walking surfaces

Welding fumes

Fumes are formed when a metal is heated above its boiling point and its vapors condense into very small metal particles and oxides.

Make sure that clean respirators are available when needed. It's important that we know how to clean and sanitize it properly, how and when to replace the filters and cartridges, and even how to properly store it. If we don't take care of our respirator, it may not be able to do what it was designed to do: save our lives.

Reusable half mask respirator is created with low profile design that fits comfortably underneath a welding helmet without obstructing your field of vision.

The pleated filter design allows for greater surface area to ease breathing resistance.



This offers 99.97% filtration of airborne particles.

PPE is often viewed as being the 'last-line-of-defense' (or the final step) in protecting yourself from a serious or potential hazard.

Metals

Stainless steel

Stainless steel contains chromium for anti-corrosion, and nickel for strength. When welded or torch cut, hexavalent chromium oxide welding fume is given off. It can damage the eyes, skin, and the respiratory tract.

Chromium

Chromium is a metal that exists in several oxidation or valence states, ranging from zero (0) to six (VI). Chrome metal is at a zero valence state. Stainless steel has varied concentrations of elemental chromium, which undergo oxidation change at temperatures above 1400 °F. Chromium in stainless steel ranges from 10% up to 27% depending on the grade

Hexavalent Chromium

Hexavalent Chromium is a confirmed carcinogen. Possible health effects are:

- Lung cancer
- Asthma
- Nasal septum ulcerations and perforations
- Skin ulcerations ("chrome holes")
- Allergic and irritant contact dermatitis

"Metal fume fever"

Metal fume fever from zinc oxide typically begins about 4 hours after exposure and full recovery occurs within 48 hours. Symptoms include fever, chills, thirst, headache, and nausea.

Ventilation helps protect you by removing air containments from the breathing zone and adding new, fresh air. Open overhead bay doors. Strategically place fans and position them toward the weld.

In a confined space, atmospheric monitoring shall be conducted before anyone enters the space, and periodically during the entry to ensure that the welding process is not creating a hazardous atmosphere.

Welder's flash

Welder's flash, or arc eye, is a burn of the outer layer of your eye ball caused by the intense ultra-violet radiation that occurs when a welding arc is generated.

Symptoms

You may not notice any symptoms for a few hours after exposure to the UV light.

Common symptoms include:

- Pain! Depending on your level of eye ball burn this can range from a mild feeling of pressure in the eyes to intense pain requiring pain relief and treatment.
- Puffy, red eyes caused from tearing of the eye and membranes around the eye.
- A gritty sensation like having dry, sandy eyes.
- An abnormal sensitivity to light or inability to look at light sources.

How long does it last?

Symptoms should clear up within 24-72 hours, however just like sunburn, the more it happens, the higher the likelihood of permanent damage such as cataracts. While there is no cure for welder's flash, a trip to the doctor is always recommended. This should earn you some eye drops to lessen any discomfort. Other than that, be prepared to wear sunglasses for at least the next 24 hours or stay in a dark room away from the light.

Who can get welder's flash?

It is important to note that it is NOT just those directly involved in the welding job that can get welder's flash. Anyone who is in the general area where welding is taking place can be exposed to the arc light that causes welder's flash if precautions are not taken.

Other welding injuries

Radiation burns caused by ionizing radiation produced by the electron beam welding process for thoriated tungsten electrodes for "TIG"

Electrical shock from welding and cutting can cause injures, burns, and possible death.

Injuries caused by heavy, compressed gas cylinders tipping over, releasing contents through a leaky valve.

Flashback by a faulty torch or incorrect gas pressure.

Intermittent or sustained backfiring at the blowpipe causes gas hoses to burst, flame at the pressure regulator, explosion of he gas cylinder.

A pacemaker can be effected by the electromagnetic field of the arc welder.

Noise - from plasma or carbon arch welding, grinding, and chipping.

Be careful where you weld

and what you weld on

- Do not touch an energized electrode while you are in contact with the work circuit
- Never stand on a wet or grounded surface or use bare hands or wet gloves when changing electrodes
- Do not allow the electrode holder or electrode to come in contact with any other person or grounded object
- Ground all frames or welding units
- Insulate yourself from the work piece and ground using dry insulating mats or covers big enough to prevent physical contact with the ground, or wear approved rubber-soled boots
- Suspend cables overhead when working with long lengths of cable

55-gallon drums

Take extra precautions when welding on an old, used drum or any other tank. Make sure it its completely empty. Fill the empty tank or drum with water up to seven eighths full to displace any remaining chemical or fumes that may still be in the container. Even the smallest amount of chemical or fuel can cause a fire or explosion.

Never use old containers as welding worktables.

Fire watch

The standard rule is to give time for a 'fire watch' for at least 60 minutes after the last weld you do in an area. You need to stay in the immediate area to make sure that no unseen sparks or smoldering embers or flames suddenly flare up.

Many welders plan their day around their welding so that they do their welding in the first half of the day and then continue their other work within the same area while doing their 'fire watch' at the same time.

Make sure the welding area has been made safe and properly cleaned up. If the welding work was performed outdoors, and you're able to do so, spray the area down with water, especially in areas near dry grass.

Fire watch is responsible for:

- Ensuring proper firefighting equipment is readily available
- Locating the nearest fire alarm pull station
- Having a means of communicating and alarm
- Inspecting hot work area before any hot work is conducted
- Consulting with Safety and Risk Management if unsure if any health or safety issues may arise during welding, cutting or brazing operation
- Extinguishing fires only when within trained capabilities to safely do so

Fields to freeways 2.0

Charting risk



- •
- .
- _____
- •
- - •

13,102

injures from work-related crashes

761 injuries from

ag work-related crashes

79 deaths

6 Ag deaths

\$192,549,301 claims costs **\$16,908, 328** Ag claims costs

(SAIF crash injury data 2012-22)

What close calls have you experienced?

What worries you the most when driving?

What is one thing you could do differently to be a safer driver?

Tractors are consistently one of the biggest sources of serious injuries and fatalities on farms. They're large, strong, and unforgiving. They can be taken into steep and difficult terrain. Farmers spend a lot of hours in them.

This is why we are required to conduct annual safety refresher trainings for anyone who operates tractors. If any injury occurs with any vehicle or piece of equipment on our farm, we're going to be asked when was the last time they received training?

ATVs, UTVs, and side by sides like Gators, RTVs and Mules are another class of equipment that is commonly used on farms. We may not think of these as being as dangerous as tractors, but they continue to be another major source of serious injuries and fatalities.

ATV training video available on YouTube. Search: **Understanding ATV Stability** (The UTV training video is coming soon)

So, how do we handle training if there "isn't a video" or a good resource from SAIF or OSHA? One way, is to ask us to make one. We're always looking for new ideas and expanding our material.

But, if you've got "weird" equipment, or maybe perform an unusual task on your farm, don't be afraid to create your own training material. Write a policy, hold tail gate talks with your crew, discuss items like our charting risk exercise, conduct PPE assessments, or provide supervised observation of employees operating the equipment. Sometimes you are the best person to know exactly what can go wrong and what the training and preparations need to look like to address it.

Public roads

Driving farm equipment on public roads introduces a major "X" factor. We can be doing everything right, and still have something go wrong if someone else on the road makes a choice that increases their risk while driving.

Using pilot vehicles or flagging vehicles can decrease risk when moving equipment on a public road. There's more to it than just turning on your flashers in your pickup and following a tractor down the road though.

It's important to discuss flagging strategies: close vs. far groups, front vs. rear vs. both, what lights/signs will be used, and communication between vehicles. This is great item to discuss at a quick tailgate training or safety brief, to make sure everyone is on the same page. Also, consider scouting the route you'll be moving the equipment on, if you're unfamiliar with it. Just like we talked about previous years, why use administrative/ engineering controls to reduce hazard when we can substitute for something much less hazardous? For our larger equipment, busier roads, or more difficult or longer routes especially, consider making the choice to eliminate the risk of roading your equipment altogether, and take the time to just load it on a trailer.

3 is Key

While driving our equipment safely is critical, remember that the statistics tell us that consistently, the most frequent injury related to our equipment doesn't happen behind the wheel, but slips and falls while we're climbing up and down from the cab.

If you haven't seen it before, SAIF's *3 Is Key* video is a quick and easy refresher on the importance of maintaining three points of contact

while climbing up and down from equipment, on ladders, etc. It's a handy addition to a safety meeting, or can be texted out to larger teams to watch individually.



On YouTube, search **SAIF 3 is Key**

Maintenance and inspections

Whether it is a tractor, forklift, ATV, or pickup, proper maintenance and pre-use inspections can prevent us from getting a dangerous surprise at the wrong moment.

A pre-use inspection can be done in a lot of ways. A written inspection checklist can ensure you are consistently looking at the same items. It creates some accountability. And, it generates a paper trail to track problems and show OSHA that inspections are occurring.

The trade off is the time, handling of papers, plus storage and processing of the records.

There are several app-based pieces of software. They provide the same consistency and produce the same verifiable records without the hassle of handling and storing paper sheets. When maintenance needs are discovered, frequently they can be immediately reported to the person responsible for the repairs.

At minimum a quick visual inspection should be conducted on any vehicles or farm equipment before we hop on them and take off.

What if you find a problem? Report it to the correct person. And tag it out until it can be fixed. Even if you are in the middle of harvest it is important to make sure your equipment is safe to use. Stop and make the choice to get the equipment fixed.



Driver safety program checklist

This checklist was developed to provide employers with important elements to be included in a driver safety program. Whether your employees are driving for deliveries, or to travel from one location to another, driving any type of motor vehicle involves a high level of risk. Employers that develop driver safety programs with these elements can greatly reduce the risk of motor vehicle crashes and minimize injuries.

	Written driver safety policy		Vehicle selection process
	Seat belts – Ensure all drivers and passengers are using seatbelts		Safety ratings – Buy vehicles that come with high safety ratings based on crash testing.
	Impaired-free driving - Prohibit workers from operating a vehicle while impaired (substances, fatigue, and aggression). Include language to not schedule drivers for irregular hours or excessive		Safety features – Look for advanced safety features such as lane departure warning systems, collision warning systems, rear facing cameras, and adaptive cruise control
	Distraction-free driving - Ban the use of cell phones and other electronic devices while		Driving conditions anticipated – Consider vehicle options based on location, weather, and roads traveled
	driving, even hands-free Courteous driving – Adopt a courteous driving policy that clearly outlines responsible driving behaviors		Employee needs – Select design features that address task needs and offer adjustability
			Driver colection exientation and training
	Organizational responsibilities – Define and		Enroll in DMV's automated reporting service or
	leaders, supervisors, and workers clearly		review DMV and background checks annually
	Driver responsibilities – Clearly outline driver responsibilities including pretrip tasks, safe		Driver orientation of safe driving policy and procedures
Netoc	driving practices, and accident reporting		Driver training upon hire
Notes:			Ride-along driving assessment
			Explain in-vehicle monitoring systems if present; focus on safety, not productivity
			Provide refresher training after a collision or driver infraction

Emergency equipment		Vehicle inspection and maintenance
High-visibility vest		Pretrip inspection
Traffic cones or triangles		 Walk around - look behind and under for obstacles, people, or leaks
Flares		• Tire pressure or damage
Emergency escape tool		Look for damage to vehicle body or glass
(seatbelt cutter and window breaker)		Look in vehicle before entering
Bottled water and food		 Ask yourself "Am I well rested and alert to be driving?"
Flashlight		Have navigation setup or your route planned in advanced (download man to
Jumper cables		devices for availability offline)
lce scraper		Ensure cell phone is off and silent
Blanket		Verify that scheduled maintenance meets or exceeds manufacturer's recommendations
Maps		Ensure there is a method for reporting
Lighter		maintenance problems
Pen and paper		Address any reported problems in a timely manner
First-aid kit		
Chains, snow tires, or traction devices		Post-incident
		What to do in the event of common roadside problems (animals, flat tire, snow, emergency,
Organizational accountability		weather event, downed power line, flooding, fires)
Schedule ride-along driving assessment and coaching		Review Oregon Traffic Accident and Insurance Report to determine the appropriate information to collect
Implement a telematics program		Company incident report and procedures
Conduct root-cause analysis of every incident		Communication expectation
Review incidents and follow-up on corrections		Recordkeeping and documentation
Perform annual program management review		
Promote positive reinforcements to improve driving behavior		
Encourage discussion with employees that highlights challenges, opportunities, and successes		

vehicle damage

Avoid recognition for absence of collisions or



Driver safety training checklist

Many organizational leaders underestimate the risk driving has on their workforce. Vehicle accidents remain the leading cause of death in the workplace nationwide and in Oregon. Effective driver safety training is an important part of a comprehensive safety culture. This checklist can be used as a guide to provide instruction and clear expectations from the onboarding process to the ongoing management of safe driving habits.

Before operating the vehicle			Local driving environment and inclement weather	
1. New employee orientation (NEO) training			Snow tires or traction devices	
	Company driver safety policy		• <u>bit.ly/3tkJVKa</u>	
	Insurance requirements		Driver fitness to drive (alert, sober, focused, distraction free)	
	Sample cell phone/texting policy (<u>bit.ly/3xBdDN0</u>)		Driving behavior expectations	
2. Motor vehicle records review			Incident reporting procedures (<u>saif.com/analysis</u>)	
	Employee motor vehicle records report (MVR) (<u>bit.ly/3wW0NJf</u>)		Basic defensive driving techniques (<u>bit.ly/3JkXHSM</u>)	
	Consequences of moving violations or accidents		Standard vehicle safety features (seatbelts, brakes, anti-lock brakes, e-brake, airbags, stability control)	
3. Basic driver safety training			Reporting vehicle maintenance issues	
	Pre-trip inspection (sample: bit.ly/3tku1zC)	4. 9	4. Specific vehicle safety systems	
	Emergency equipment kit (<u>bit.ly/360PzbH</u>)		Overview training on specific vehicle features and general vehicle safety systems that might be found in newer vehicles (www.mycardoeswhat.org).	
			Review the use and benefit of any telematics or vehicle monitoring system if applicable (<u>strivesafe.com</u>).	

First trip

5. Ride-along driving assessment and coaching				
	When starting the job and as needed			
	Use a ride-along risk assessment worksheet as a guide (<u>bit.ly/3KTCyiP</u>)			
	Demonstrate vehicle safety systems			
	Coach to address risky behaviors			
Wi	thin six months			
6. Comprehensive driver training				
	 Describe the three main categories of collisions: Driver behavior Environmental conditions (roadways, weather, other road users) Vehicle conditions (brakes and tires) 			
	 Include essential elements of defensive driver training Focus on driver actions to spot hazards Learn to anticipate dangerous situations Combine classroom and computer learning with practical, behind-the-wheel training 			
	Tailor topics based on driver assessment and/or telematics report			
	 Describe the top five causes of crashes: Speeding Aggressive driving Drugs and alcohol Distractions Bad weather 			
	Cover vehicle safety best practices guide (<u>bit.ly/3NAySDT</u>)			
	Include journey management planning (<u>bit.ly/3CRSJKC</u>)			
	Demonstrate vehicle safety systems			

Ре	Periodic		
7. Refresher training			
	Classroom review every two years		
	 Remedial training for high-risk drivers when Vehicle monitoring systems show unsafe driving behaviors Driver is involved in a collision MVR shows a history of moving vehicle violations 		

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Driving in extreme weather



Before you go:

- Know your car's safety features

 (www.mycardoeswhat.org), such as antilock brakes and electronic stability control, and prepare for how to respond in a skid (bit.ly/3nVUyil). Don't assume that four-wheel or all-wheel-drive vehicles will handle better on ice.
- Make sure tires are properly inflated and have plenty of tread (<u>bit.ly/3BPfOvt</u>). If necessary, install all-weather or snow tires.
- Make sure snow chains are in good repair.
- Test battery.
- Top up anti-freeze and winterized windshield fluid. Replace worn wiper blades.
- Keep your tank at least half full.
- Stock your car's emergency supply kit.
- Never warm up a vehicle in an enclosed area, such as a garage, to avoid the risk of carbon monoxide poisoning.
- Adequately clear windshield of snow and ice.
- Know your route, including fuel stops and chain-up areas. Share it with others.
- Check weather and road conditions (bit.ly/301j6H8). Monitor safety advisories.
- If in doubt, stay home.



Behind the wheel:

- Increase following distance. (*Rule of thumb: Add one* second for each additional road hazard, such as heavy rain, ice or snow, low visibility, or slow-moving vehicles.)
- Take extra care when rain starts, as oils can make the road slicker.
- Accelerate and decelerate slowly. Minimize braking by using lower gears for better control.
- Avoid unnecessary stops, especially going uphill.
- Never use cruise control when roads are wet or icy.
- Turn on low beams to improve visibility. (High beams can cause glare and decrease visibility.)
- If your vehicle skids (<u>bit.ly/3nVUyil</u>) or hydroplanes (<u>bit.ly/3bKoYi2</u>), ease off the gas and avoid hard braking. Steer gently in the direction of the skid; stay focused on where you want to go.
- Don't drive (or walk) through flood waters. Twelve inches of moving water can sweep away your vehicle; six inches can knock you off your feet. Remember: "Turn around. Don't drown."
- Use caution when approaching bridges or shaded areas, which are more prone to freezing.
- If snow chains are required, pick a safe pull-out area. Use flares or reflective triangles and reflective vest for visibility.



In an emergency:

- Find a safe place to pull over. Avoid the shoulder of the road or pull as far away from traffic as possible. Turn on hazard lights.
- Stay with your vehicle. To alert responders, tie a bright cloth to the antenna, raise hood (if feasible), and turn on interior lights (when engine is running).
- If you're stranded in winter weather
 (bit.ly/3wklkny), clear exhaust pipe of snow and ice to
 reduce risk of carbon monoxide poisoning. Run heater
 for short periods only.
- If you're trapped in flood water (ready.gov/floods) that is rising inside the car, immediately remove your seatbelt, roll down the window, and exit the vehicle as quickly as possible, pushing children out first. Hang on to the roof of the car and call for help.



Emergency kit for car:

- High-visibility vest
- Traffic cones or triangles
- Flares
- Bottled water and food
- Headlamp or flashlight with extra batteries
- Jumper cables or jump starter
- Ice scraper
- Blanket or sleeping bag
- Maps
- Lighter
- Pen and paper
- First-aid kit, including prescriptions
- Chains, snow tires, or traction devices (weather dependent)
- Warm clothes and outerwear, including hat and gloves; sturdy shoes/boots
- Cell phone charger

Roadside safety supplies

- First aid supplies/Trauma kit
- Fire extinguisher
- Reflective triangles
- LED electronic flares

Distracted driving

Phone are a common distraction while driving, but they're not the only one.

List distracted driving examples

Impairment

When we say "driving impaired," the first thing that usually comes to mind is alcohol. But this isn't the only substance that can cause impairment.

We need to be thinking about things like cannabis, decriminalized street drugs, prescription medications, even over the counter cold meds that can make us groggy, dizzy, and not focused on the road.

However, there is another category of impairment that is caused by working long hours, many days in a row - fatigue.

60%

of adult driver, about 168 million people, say they have driven a vehicle while feeling drowsy in the past year.

One-third

have actually fallen asleep at the wheel.

Source: National Sleep Foundation 2005 Sleep in America Poll

At least **100,000** motor-vehicle crashes each year

More than **1,500** deaths per year

A factor in **1 in 8** fatal crashes

Source: American Academy of Sleep Medicine

Fatigue management

Get enough sleep. Eight hours each night are recommended to maintain good health and optimum performance.

Do not drink and drive. Taking the wheel after having just one glass of alcohol can affect one's level of fatigue.

Do not drive late at night. Avoid driving after midnight, which is a natural period of sleepiness.

Schedule breaks every two hours or 100 miles.

Things happen fast on the road

65 miles per hour = 95 feet per second

= 1 football field every three seconds

That moment of distraction or that long blink can have disastrous consequences.

Every time you hop in any piece of equipment or vehicle, forklift, tractor or UTV with ROPS, pickup, semi, whatever it is – please take the time to buckle your seat belt to give yourself that fighting chance if something bad does happen.

The National Highway Traffic Safety Administration reports on average over 10,000 unbuckled passenger vehicle occupants killed in crashes in the United States per year (nearly 30 each day) and over 14,000 lives saved due to seat belt use.