

Agricultural safety seminars

2023–2024

Training designed for
Oregon's agriculture industry

saif

Wes Koester, SAIF Sr. Safety Management Consultant
weskoe@saif.com | 503.373.8735

Eric Lloyd, Safety Consultant
Oregon Risk Management Solutions, Inc.
eric@oregonrms.com | 503.881.4951



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

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.

Preventing serious injuries and fatalities (SIFs)

"We must continue to 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."

— 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

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 life-threatening 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.

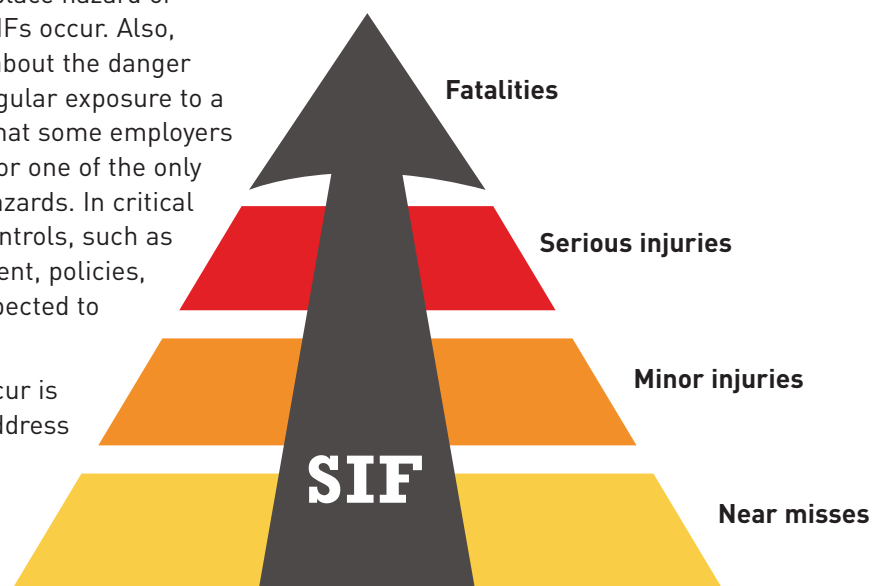
SIF background

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.

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.

The Fatal 10	Conversation with employees	Notes on required actions
<p>Vehicle/equipment operations</p> 	<p>Where do we use vehicles?</p> <p>Where can employees get seriously injured?/Where can fatalities happen?</p> <p>What hazardous work is being done beyond our policies and procedures?</p> <p>When do vehicles and equipment operations combine with red-flag situations in our organization?</p> <p>What preventive measures are in place?</p> <p>Are the preventive measures enough?</p>	
<p>Working at heights</p> 	<p>Where do employees work at heights over four feet?</p> <p>Where can employees get seriously injured?/Where can fatalities happen?</p> <p>What hazardous work is being done outside of our policies and procedures?</p> <p>When does working at heights combine with red-flag situations in our organization?</p> <p>What preventive measures are in place?</p> <p>Are the preventive measures enough?</p>	

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?

Fire/explosion/hot work



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?

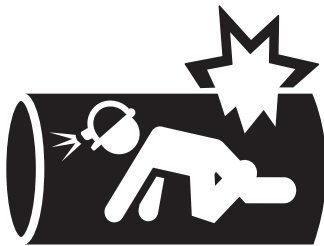
What hazardous work is being done outside of our policies and procedures?

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?

**Confined spaces/
trenching/ engulfment**



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?

Suspended loads



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



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: _____ Date: _____

Employees involved in review: _____

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 sample documents below, and more.



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

Farm: _____ Date prepared: _____

SAFETY PROGRAM	NOT NEEDED	ALREADY DONE	NEED TO WORK ON	PROGRAM COMPLETE
HAZARD COMMUNICATION				
- Written company policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- List of chemicals used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Safety Data Sheets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Pub. 1951 "Safe Practices..."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Training for hand laborers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Training for all others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RESPIRATORY PROTECTION				
- Written company policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Medical evaluation for users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Annual fit testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Annual training for users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Maintenance and repair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SEASONAL WORK TRAINING				
QUARTERLY INSPECTIONS				
SAFETY MEETINGS/COMMITTEE				

Farm: _____

Date prepared: _____

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

Possible topics for job safety orientation

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."



SAIF "Tractor Safety Elements" English Version

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.



Load & Lift: A Guide to Agricultural Lift Truck Safety

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

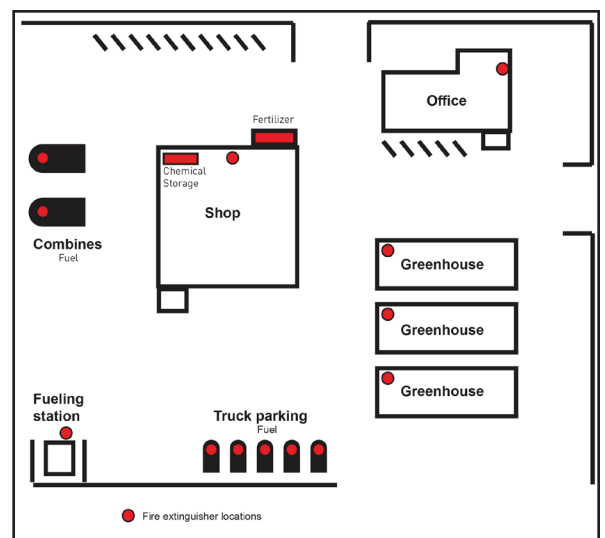
One idea for capturing your emergency plans is to make a binder with labeled tabs for the different sections, rather than having one long written program.

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.

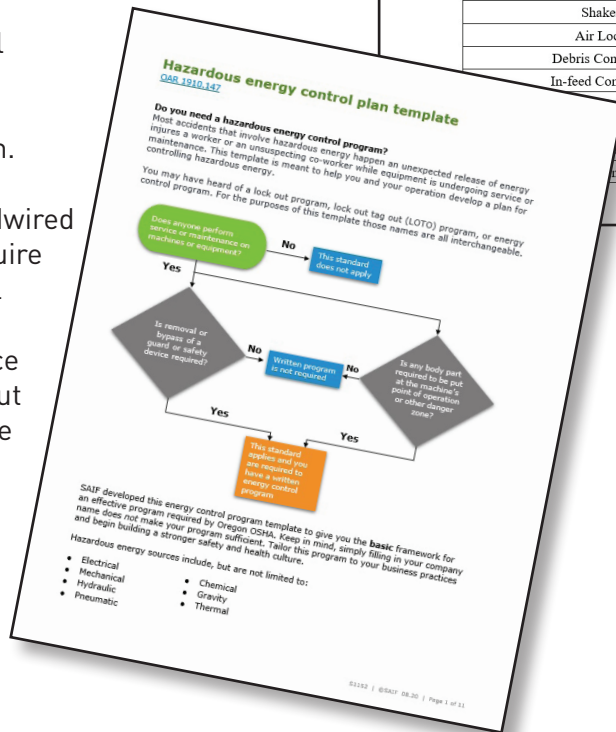
In some cases, a simple chart detailing equipment and control location will do.

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
Blower	Control Cab #4
Shaker	Control Cab #4
Air Lock	Control Cab #4
Debris Conveyor	Control Cab #4
Out-feed Conveyor	Control Cab #4
LMC Bucket Elevator	Control Cab #4
Wash Line #2	
Machine:	Control Location:
Blower	Wash Line #2 Plug Bundle
Shaker	Wash Line #2 Plug Bundle
Air Lock	Wash Line #2 Plug Bundle
Debris Conveyor	Wash Line #2 Plug Bundle
In-feed Conveyor	Wash Line #2 Plug Bundle
Conveyor	Twist-Lock next to Bundle
Elevator	Electrical Room #1
Grain Silos	Electrical Room #1
Bundle	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.



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

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](http://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.

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.

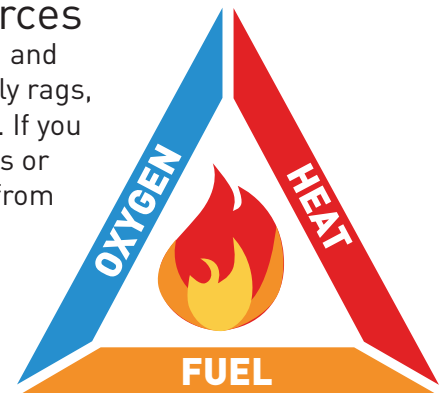
Types of welding include: gas metal arc welding (MIG), Shielded metal arc welding (stick welding), and Gas tungsten arc welding (TIG).

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 least 35 feet 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

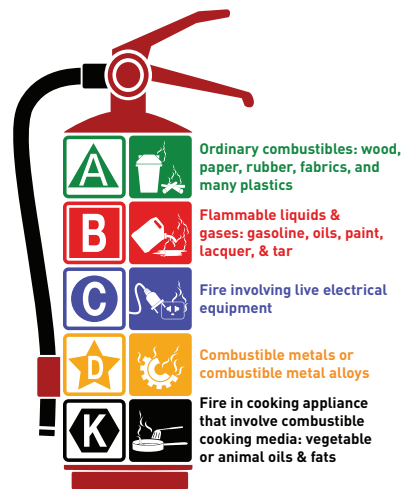
It is critical to know where the nearest fire extinguishers are located so they can be quickly accessed in an emergency.

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.

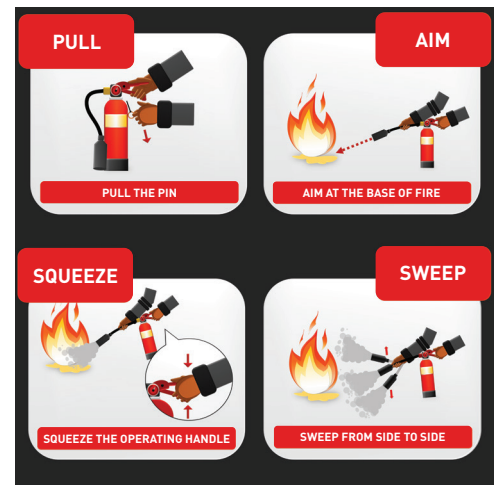
Key takeaways:

- **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)

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

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

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 injuries, 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 the gas cylinder.

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

Noise - from plasma or carbon arc 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 is 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.

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?

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.

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

<input type="checkbox"/>	Emergency equipment
<input type="checkbox"/>	High-visibility vest
<input type="checkbox"/>	Traffic cones or triangles
<input type="checkbox"/>	Flares
<input type="checkbox"/>	Emergency escape tool (seatbelt cutter and window breaker)
<input type="checkbox"/>	Bottled water and food
<input type="checkbox"/>	Flashlight
<input type="checkbox"/>	Jumper cables
<input type="checkbox"/>	Ice scraper
<input type="checkbox"/>	Blanket
<input type="checkbox"/>	Maps
<input type="checkbox"/>	Lighter
<input type="checkbox"/>	Pen and paper
<input type="checkbox"/>	First-aid kit
<input type="checkbox"/>	Chains, snow tires, or traction devices (weather dependent)

<input type="checkbox"/>	Organizational accountability
<input type="checkbox"/>	Schedule ride-along driving assessment and coaching
<input type="checkbox"/>	Implement a telematics program
<input type="checkbox"/>	Conduct root-cause analysis of every incident
<input type="checkbox"/>	Review incidents and follow-up on corrections
<input type="checkbox"/>	Perform annual program management review
<input type="checkbox"/>	Promote positive reinforcements to improve driving behavior
<input type="checkbox"/>	Encourage discussion with employees that highlights challenges, opportunities, and successes
<input type="checkbox"/>	Avoid recognition for absence of collisions or vehicle damage

<input type="checkbox"/>	Vehicle inspection and maintenance
<input type="checkbox"/>	<p>Pretrip inspection</p> <ul style="list-style-type: none"> • Walk around - look behind and under for obstacles, people, or leaks • Tire pressure or damage • Look for damage to vehicle body or glass • Look in vehicle before entering • Ask yourself "Am I well rested and alert to be driving?" • Have navigation setup or your route planned in advanced (download map to devices for availability offline) • Ensure cell phone is off and silent
<input type="checkbox"/>	Verify that scheduled maintenance meets or exceeds manufacturer's recommendations
<input type="checkbox"/>	Ensure there is a method for reporting maintenance problems
<input type="checkbox"/>	Address any reported problems in a timely manner

<input type="checkbox"/>	Post-incident
<input type="checkbox"/>	What to do in the event of common roadside problems (animals, flat tire, snow, emergency, weather event, downed power line, flooding, fires)
<input type="checkbox"/>	Review Oregon Traffic Accident and Insurance Report to determine the appropriate information to collect
<input type="checkbox"/>	Company incident report and procedures
<input type="checkbox"/>	Communication expectation
<input type="checkbox"/>	Recordkeeping and documentation

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	
1. New employee orientation (NEO) training	
<input type="checkbox"/>	Company driver safety policy
<input type="checkbox"/>	Insurance requirements
<input type="checkbox"/>	Sample cell phone/texting policy (bit.ly/3xBdDN0)
2. Motor vehicle records review	
<input type="checkbox"/>	Employee motor vehicle records report (MVR) (bit.ly/3wW0NJf)
<input type="checkbox"/>	Consequences of moving violations or accidents
3. Basic driver safety training	
<input type="checkbox"/>	Pre-trip inspection (sample: bit.ly/3tku1zC)
<input type="checkbox"/>	Emergency equipment kit (bit.ly/360PzbH)
<input type="checkbox"/>	Local driving environment and inclement weather conditions <ul style="list-style-type: none"> • Snow tires or traction devices • bit.ly/3tkJVKa
<input type="checkbox"/>	Driver fitness to drive (alert, sober, focused, distraction free)
<input type="checkbox"/>	Driving behavior expectations
<input type="checkbox"/>	Incident reporting procedures (saif.com/analysis)
<input type="checkbox"/>	Basic defensive driving techniques (bit.ly/3JkXHSM)
<input type="checkbox"/>	Standard vehicle safety features (seatbelts, brakes, anti-lock brakes, e-brake, airbags, stability control)
<input type="checkbox"/>	Reporting vehicle maintenance issues
4. Specific vehicle safety systems	
<input type="checkbox"/>	Overview training on specific vehicle features and general vehicle safety systems that might be found in newer vehicles (www.mycardoeswhat.org).
<input type="checkbox"/>	Review the use and benefit of any telematics or vehicle monitoring system if applicable (strivesafe.com).

First trip	
5. Ride-along driving assessment and coaching	
<input type="checkbox"/>	When starting the job and as needed
<input type="checkbox"/>	Use a ride-along risk assessment worksheet as a guide (bit.ly/3KTCyiP)
<input type="checkbox"/>	Demonstrate vehicle safety systems
<input type="checkbox"/>	Coach to address risky behaviors
Within six months	
6. Comprehensive driver training	
<input type="checkbox"/>	Describe the three main categories of collisions: <ul style="list-style-type: none"> • Driver behavior • Environmental conditions (roadways, weather, other road users) • Vehicle conditions (brakes and tires)
<input type="checkbox"/>	Include essential elements of defensive driver training <ul style="list-style-type: none"> • Focus on driver actions to spot hazards • Learn to anticipate dangerous situations • Combine classroom and computer learning with practical, behind-the-wheel training
<input type="checkbox"/>	Tailor topics based on driver assessment and/or telematics report
<input type="checkbox"/>	Describe the top five causes of crashes: <ul style="list-style-type: none"> • Speeding • Aggressive driving • Drugs and alcohol • Distractions • Bad weather
<input type="checkbox"/>	Cover vehicle safety best practices guide (bit.ly/3NAySDT)
<input type="checkbox"/>	Include journey management planning (bit.ly/3CRSJJC)
<input type="checkbox"/>	Demonstrate vehicle safety systems

Periodic	
7. Refresher training	
<input type="checkbox"/>	Classroom review every two years
<input type="checkbox"/>	Remedial training for high-risk drivers when <ul style="list-style-type: none"> • Vehicle monitoring systems show unsafe driving behaviors • Driver is involved in a collision • MVR shows a history of moving vehicle violations

The information provided should not be construed in any way as an endorsement of any good, service, or business, or as giving business, legal, or other advice. Any specific product references may include a product that was provided without cost to author by a company selling the product. Please note all disclaimers and representations described at www.saif.com/privacy-and-legal-information apply.

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 (bit.ly/3BPf0vt). 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/3o1j6H8). 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 (bit.ly/3nVUyil) or hydroplanes (bit.ly/3bKoYi2), 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

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.

