

Opportunities for safety training occur when:

A new employee is hired.

A new machine or process is introduced.

An accident or incident has occurred.

A new policy has been implemented.

Increased awareness about a hazard is needed.

An unsafe act is observed and one-on-one training is needed.

MEDIA and DELIVERY

The type of situation and the desired content will have an impact on your presentation and the media, methods, and delivery that you choose to use.

Adapted from Audio-Visual Methods in Teaching, Edgar Dale Dryden Press, NY, 1954, P. 43

Safety training

This section of the supervisor's guide provides an overview of several training aids that can help get you through the risk management process. These are:

Training techniques

A list of 10 training techniques, their relative advantages and disadvantages, and examples

Safety meeting topics

Examples of toolbox or tailgate topics and resources

Training requirements

This section includes an overview of common Oregon OSHA training requirements.

New employee safety orientation

An example checklist and sample training documentation for new employee orientation

People learn in various ways

They are typically auditory, visual, or kinesthetic (hands-on) learners. Catering to all three learning styles can be difficult, making an emphasis on using various training methods important. People generally remember the following:

10%

of what they read
(handbooks, emails, newsletters, print materials)

50%

of what they hear and see
(job shadows, field trips, reading aloud)

20%

of what they hear
(lecture, audiotapes, podcasts, testimonials)

70%

of what they say and write
(note taking, small group writing, testing)

30%

of what they see
(videos, powerpoints, flipcharts, demos)

90%

of what they say and do
(role playing, simulation, games, teach back)

Incorporating the following steps into your training will insure better success for your learners, but the key is to make sure that they understand it:

1. Tell them how to do a task.
2. Show them how to do a task.
3. Let them tell you how they will do the task.
4. Let them do the task.

Sensory learning can increase retention

It is also important to involve as many senses in the learning process as possible. For example:

Brain work

Read, solve a puzzle, analyze an experience, make an acronym.

Sight work

Watch an actual or a simulated task or videos, and hook learners with colorful props, photographs, or graphics.

Sound work

Listen and talk about a topic or experiences; have a guest speaker or use storytelling with a lesson; hook learners with music or other sounds associated with the topic.

Body work

Write notes or complete a written test; demonstrate or actually perform the work; build a 3-D model or do any physical activity associated with the topic.

Consider these three kinds of knowing

1. Head = Knowledge
2. Hands = Skill
3. Heart = Attitude

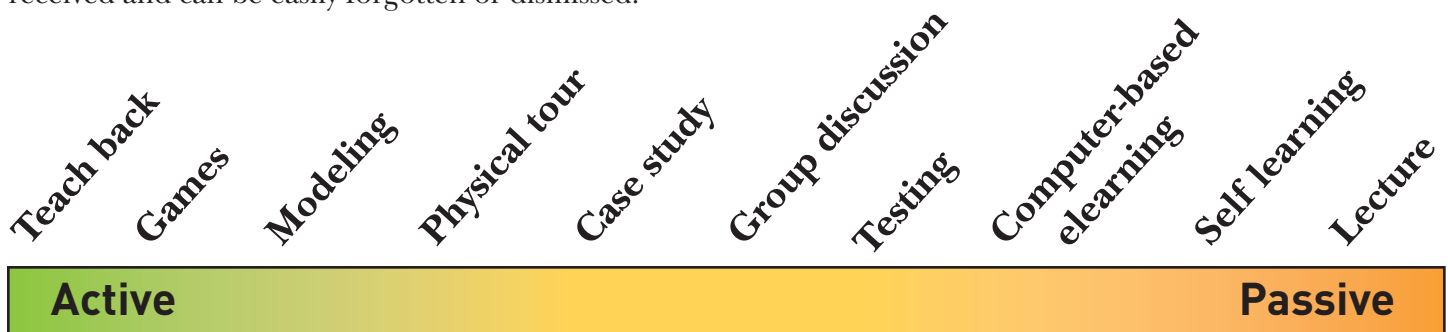
When you evoke emotion during someone's learning process, they tend to remember the lesson better and for a longer duration of time, especially if it is something that has resonated with them on some level, or piqued their interest to learn more. For example, if I get to extinguish a real fire during a fire extinguisher training, I would remember that experience much more than if I only watched a video on how to use the extinguisher.

Make learning fun by trying something new, step outside the brown boring box, and be creative. Put some energy into it, and you will have more fun and so will your learners.

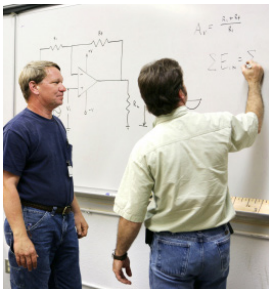


Having a good understanding of the audience and clear objectives is the first step in developing an effective training program.

Make the objectives and approach relevant, engaging, and memorable. The more effort and energy that you invest in training, the better it will be. And if you don't put much energy, effort, or creativity into it, then it may not be as well received and can be easily forgotten or dismissed.



Teach back



After learners have been trained, they are asked to take on the role of the trainer by teaching back what they have just learned. They can teach back to either a peer or to the trainer.

Ideas

- Materials for teach back
- Video demonstration
- Step-by-step visuals

Advantages

- Reinforces the learning
- Provides an opportunity to check for understanding and ask questions for success
- Fosters retention

Disadvantages

- Can be intimidating
- Styles are different
- Varying comprehension levels
- Incorrect information can be taught back

Games



Participants learn information or practice new skills by participating in games that are often modeled after a real world situation. Games are often used as refresher training rather than primary training.

Ideas

- Themed game shows (Jeopardy, Who Wants to be a millionaire, Bingo, Jenga, Word Search, Crosswords)

Advantages

- Engaging—learning can be fun
- Fosters participation
- High energy, interactive

Disadvantages

- Fun can overshadow the learning
 - Can disinterest some
 - May not show a lot of value
-

Modeling/demonstration/hands-on



Trainer properly performs the task in front of the learners, using the skills and steps that should be followed. Then it is repeated by the learners.

Ideas

- Materials for demonstration
- Video demonstration
- Step-by-step visuals

Advantages

- Captures attention and fosters engagement
- Able to receive step-by-step instruction and feedback
- Builds confidence

Disadvantages

- Equipment may not be available
 - More difficult for larger groups
-

Physical tour



A “field trip” is taken for the sole purpose of learning a new environment or reviewing the operations of equipment or processes.

Ideas

- Guided tour
- Process and procedure explanations
- Treasure hunt

Advantages

- Interesting and engaging
- Real world experience
- Easier to understand by seeing the area or process

Disadvantages

- Time-consuming
 - Difficult to control the learning environment and the learner group
 - Interruption of others’ work
-

Case study/simulations



A situation or real life story is reviewed. Participants review information that simulates a real world event while practicing new skills within the context of the situation.

Ideas

- Stories
- Media clips

Advantages

- Piques interest
- Approximates the real world
- Fosters dialogue and engagement

Disadvantages

- Examples may not be relevant enough
- Difficult to get everyone engaged
- May require expert facilitation

Group discussion/brainstorming



Discussion and information exchange takes place between anyone in the group wanting to share. This is often facilitated by a trainer or supervisor.

Ideas

- Icebreakers
- Access to internet for research
- Dry erase boards
- Flip charts

Advantages

- Learn from each other's many viewpoints
- Fosters dialogue and engagement
- Cover a lot of information

Disadvantages

- Can be dominated by a few unless you have a good facilitator
- Time-consuming
- Hard to hear/confusing

Testing/questionnaires



Participants provide answers to questions which are posed to them. (true/false, multiple choice, essay) These may be on paper, on the computer, or verbal.

Ideas

- Access to internet to develop test questions

Advantages

- Piques interest
- Objective look at learning
- Identifies weak areas in both the learners and trainers
- Cover a lot of information

Disadvantages

- Test anxiety
- Hard to measure the application
- Can be difficult to design and time-consuming

Computer-based/ e-learning



Information is delivered by a trainer, guest speaker, or experienced subject matter expert in front of several learners. This is typically one-way sharing of information.

Ideas

- Internet: OSHA or SAIF training

Advantages

- Self-paced
- Involves many media sources
- Can be completed anywhere there is a computer

Disadvantages

- One-sided
- Need a computer
- Possible inability to ask questions

Self-learning/reading



Learners are asked to read materials either silently by themselves or aloud in a class.

Ideas

- Reading materials provided
- Videos

Advantages

- Break from usual training
- Self-paced and covers a lot of information
- Consistent sharing of information

Disadvantages

- Lack of reading skills
- Passive and one-sided
- Lack of comprehension
- Can't ask questions

Lecture



Learning occurs in the classroom, listening to a teacher, and interacting with other students.

Ideas

- PowerPoint
- Media clips
- Stories

Advantages

- Quickly covers a lot of information
- Maintains control of the learners if skilled
- A good presenter can capture and hold attention of learners

Disadvantages

- Passive exchange of information
- One-sided
- Easy for learners to tune out and can be boring if not a good presenter

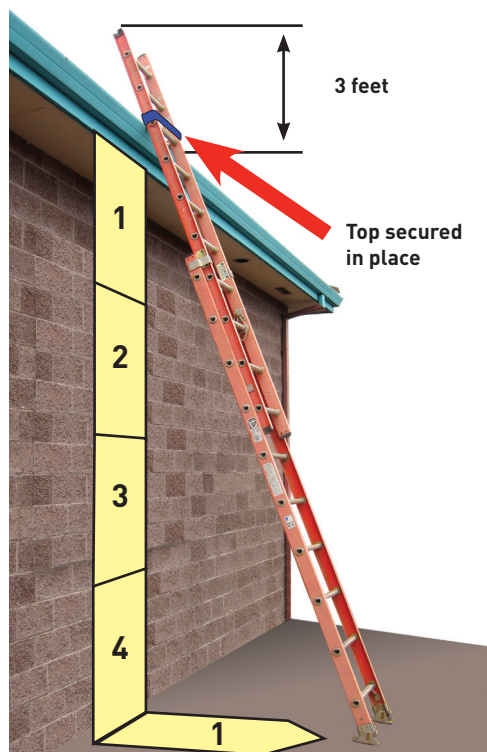
Ladder Safety

We have all worked with ladders at some time in our lives, either at work or at home. The following are some tips that may make your interaction with ladders less hazardous:

- Before using a ladder, inspect it for faults, such as broken rungs or rails. If it is an extension ladder, inspect the pulleys, ropes and locks for excessive wear. Also, check the footings and pads to make sure they still provide a non-skid surface. If any defect is found, the ladder should be tagged unsafe and taken out of service. If it cannot be fixed, make sure it is disposed of properly.
- When setting up a ladder, make sure the ground it is set upon is level and stable. Do not set the ladder up on a muddy surface or you may find yourself falling over. Do not use bricks or other material to raise the height of the ladder. If it is not tall enough, you are using the wrong ladder.
- The ladder should reach a minimum of three feet above the “point of support” and should be secured at this point.
- When using extension ladders, abide by the 1:4 rule. This means if you are using a 12 foot ladder, the base should be three feet from the structure. Some ladders provide a picture guide on the ladder itself to assist you in this. When using a stepladder, make sure the folding cross braces are locked in the proper position before you step onto it.
- Always face the ladder when ascending or descending, and have both hands free to grasp it securely. If you need tools, they should be carried in a tool belt or pulled up with a rope once you have reached your destination.
- Remember the “3-Point Rule”: At least two hands and one foot, or two feet and one hand, should be in contact with the ladder at all times.
- Keep your body between the side rails of the ladder. This reduces the chance of tipping it over and/or falling off.
- Do not climb higher than the third rung from the top on straight or extension ladders or the second tread from the top on stepladders.

By following these rules, you greatly reduce your chances of being injured while working on ladders.

Remember, the life you save may be your own.



Short, frequent safety meetings send a message that safety is an ongoing value for the company.

Example of toolbox topic approach for ladder safety training

Teach back. Train a small team of employees and have them teach the material to you and then follow-up with their peers.

Games. Show photographs of ladders being used incorrectly. Have employees form teams and identify as many problems as possible.

Worksafe BC has developed several staged photographs that lend themselves to this type of game: www.worksafebc.com/en/about-us/news-events/worksafe-magazine/whats-wrong-with-this-photo

Modeling/demonstration/hands-on. Set up ladders in a room. Have employee conduct a check of the ladder and set it up correctly. Use a ladder safety checklist.

Case study/simulations. Use newspaper article of a recent ladder injury and discuss what causes this to happen. The CDC has a Fatality Assessment page that includes dozens of investigations into ladder fatalities: www.cdc.gov/niosh/face/ Other fatalities are also listed on the page.

Group discussion/brainstorming. Ask open-ended questions such as: “What poor ladder practices have you seen?” “Why do these practices take place?” “What can prevent them from happening?” Record results and follow-up on ideas.

Computer-based/e-learning. Take the Ladder Challenge from Worksafe BC: www.worksafebc.com/en/resources/health-safety/interactive-tools/ladder-challenge-game?lang=en

Self-learning/reading. SAIF has classroom training, online training modules, webinars, and videos on its training page. saif.com/trainings You can also sign up for the SAIF Learning Center for access to on demand training modules on several business topics. www.saif.com/trainings/learning-center-information.html

Lecture. Use www.saif.com/safety-and-health/topics/be-a-leader/safety-and-health-talks.html or another website to find materials for a short lecture on ladder safety.

Minding your p's and q's: how to hold a safety training or toolbox meeting

One way for a supervisor to communicate safety is to hold frequent short training sessions. Some companies refer to these as toolbox or tailgate meetings. Safety tailgate meetings are an important way to alert employees to potential hazards and prevent injuries. By increasing two-way discussions about work challenges and your safety expectations, these meetings can also be a very powerful tool for building a positive safety culture, improving morale, and increasing productivity.

Like most things we do, training others is a skill that is learned through practice. The following tips can help you become more skilled at delivering tailgate or toolbox meetings:

Pertinence:

select a pertinent topic

- Determine the objective of the meeting. For example, you can provide employees with a specific skill, such as how to use a particular hand tool safely, or teach them how to recognize hazards associated with a specific environment. You could also instruct them on what to do in a specific situation.
- Use a recent incident at your workplace or other place of employment, borrow from a story in a newspaper, use Oregon OSHA's newsletters and hazard alerts, or use other safety newsletters to find true stories that apply, or can be modified to

apply, to your workplace. If you have seen an increase in the number of liquid spills, use your observations as the basis of the training. See "Online Occupational Safety and Health Resources" [osha.oregon.gov/pubs/Pages/index.aspx](https://www.osha-slc.gov/pubs/Pages/index.aspx) for tailgate safety meeting resources.

- Talk about the specific tools and work practices used by your employees.
- Address the hazards that could be present in your work environment.
- Be sensitive to seasonal issues. For example, train them on how to avoid heat stress in June, not how to drive in the snow.
- Select a home safety topic occasionally to show your employees' that their personal welfare and family are important, too.
- Consider wellness topics as you see fit.

Prepare

- Once you have selected a topic, it is important to prepare what you will say. Reading from a document someone has given you or that you printed from the internet just before your meeting will send the message that safety isn't important to you. Remember the reason you are discussing the topic is to keep your employees safe.
- Identify the key points you want to make. Write them down and practice them.
- Consult "Training Methods" (see page 3) to select an effective training strategy.
- You don't have to be an expert on every

REMEMBER TO
WALK YOUR TALK

Follow-up:

Reinforce major points through a short quiz, observation, or other technique. Check back with employees after several days to confirm that the information is being internalized and acted on. Use two-way communication to uncover barriers.

topic. Allow time to get help. If you will be talking about a specific piece of equipment, contact the manufacturer or ask a skilled and knowledgeable employee to share what they know

- If you are going to provide handouts, make sure they are prepared before you meet with your employees.
- For work groups using multiple languages, make sure you have the necessary support for communicating information to employees in their own language. Do you have employees with hearing loss? Be sure to address their needs as well. For example, you could hold the meeting in a quiet place or have someone available to sign the meeting.
- Hold the meeting on the job site in a place where employees will be comfortable

Participation

- Involve employees in the discussion.
- Ask questions to ensure they understand the key points.
- Use demonstrations by employees to increase interest.

- Solicit input for future topics
- Provide positive feedback
- Describe positive practices and actions you have observed.
- Recognize employee contributions to a positive workplace environment.

Quick:

keep it short and simple

- Keep the number of key points to three or four so employees can absorb the information.
- Repeat the key points several times to improve intake and retention of the information.
- If a topic is complex, break it into multiple tailgate sessions.

Quality

- Followup with employees. If employees ask questions that cannot be answered at the time of the meeting, be sure to get back to them as quickly as possible with the information.
- Be sincere.

Oregon OSHA regulations, "Safety Committees and Safety Meetings," 437-001-0765, allow small companies (companies with 10 or fewer employees) and/or companies with mobile employees to hold safety meetings instead of having a safety committee. For the agricultural sector, see 437-004-0240.

Oregon OSHA compliance

If you are using tailgate meetings for compliance with Oregon OSHA safety meeting regulations, you need to be familiar with the requirements because there are specific items you must cover and information you must retain including:

- All employees and at least one management representative must attend.
- Meetings must be held at least monthly (office workers can meet quarterly).
- Construction workers must also meet at the start of each job that lasts more than one week.
- Meetings must include safety concerns and recent accidents, including what caused them and how they can be prevented.
- You must keep minutes if employees do construction, utility, or manufacturing work. In other types of industry, you must keep minutes if not all employees attend.
- Minutes must be made available to all employees and retained for three years.
- If construction employees attend the prime contractor's safety meetings, you do not need to have a separate meeting. You must still meet with your employees to discuss any accidents.

Using a fire extinguisher

Objective: During this lesson, employees will learn how to properly operate a fire extinguisher by using the PASS method.

If the fire can be contained or extinguished, a properly trained person should use the right fire extinguisher on the blaze. When using a typical extinguisher, follow the **PASS** method. Hold the extinguisher upright and:

Pull the pin; stand back eight to 10 feet.

Aim at the base of the fire.

Squeeze the handle.

Sweep at the base of the fire with the extinguishing agent.

Notes

This particular lesson will relate to your auditory, visual, and kinesthetic learners by telling them (auditory) how to use a fire extinguisher, showing them (visual) how to use it, and then letting them try (kinesthetic). It is recommended that you check for understanding and have them **tell you** how to use it **before** they actually try it for themselves.



Employees on the job less than a year account for almost half of all injuries. These employees are unfamiliar with the work environment, not used to the work, and often reluctant to communicate their concerns.

New employee safety orientation

Employee's name: _____ Position: _____

Hire date: _____ Department: _____ Supervisor: _____

Company vision statement

- ☐ We believe all accidents are preventable and embrace a culture of zero accidents
- ☐ We believe in reporting unsafe conditions and acts
- ☐ We believe in reporting accidents and incidents
- ☐ We support the importance of a good return-to-work policy
- ☐ We expect everyone to go home just as they arrived – every day

General work practices

- ☐ Alcohol/drug policies
- ☐ Clothing, hair, and grooming standards
- ☐ Horseplay/running
- ☐ Housekeeping
- ☐ Primary hazards in work area
- ☐ Ladder practices
- ☐ Lifting training – back protection
- ☐ Progressive discipline policy
- ☐ Safety committee
- ☐ Site- and equipment-specific training

OSHA required topics

- ☐ Bloodborne pathogen exposure
- ☐ Chemicals
 - Hazard communication
 - Chemical spills clean-up
 - Asbestos and lead awareness
 - Chemical waste disposal
 - Compressed gas safety
 - Site-specific chemical training
- ☐ Compactors and balers
- ☐ Confined space
- ☐ Crane or hoist operation
- ☐ Emergency response
 - Emergency action plan
 - Alarm systems
 - Fire extinguisher use
 - Procedures for reporting emergencies
- ☐ Fall protection
- ☐ First aid/CPR
- ☐ Forklifts/powered industrial lifts
- ☐ Lockout-Tagout (energy control)
- ☐ Personal protective equipment (PPE)
 - Respirators
 - Noise/hearing protection
 - Eye and face protection
 - Head protection
 - Hand protection
 - Leg and foot protection
- ☐ Powered work platforms
- ☐ Tool Use and Guarding
- ☐ Welding
- ☐ Worksite Warning Signs and Labels

☐ Completed ergonomic review of work area

Employee signature _____

Date _____

Supervisor signature _____

Date _____

Completed form must be returned to Human Resources within five days of hire.

Overview of minimum Oregon OSHA training requirements

This document outlines the minimum training requirements that are required under Oregon OSHA regulations for general industry. This is by no means a comprehensive or complete listing of all the training that may be necessary. Employees engaged in specific industries that are regulated by Oregon OSHA may be subject to additional training requirements. Additionally, employees performing tasks that present unique hazards or risks that are addressed in other Oregon OSHA regulations not referenced here will likely require additional training.

These are minimal requirements, so it is recommended that your safety committee review the specific operations and assignments within your company to determine if additional training is required. Specific examples of situations that may require additional training include, but are not limited to, high employee turnover, frequent reassignment to other tasks, highly mobile employees, inexperienced employees, and workers who demonstrate training retention difficulties.

Topic/category	Standard reference	Periodic retraining required	Written program required
General duty to train	OAR 437-001-0760	If program/hazards change	no
Access to exposure and medical records	29CFR 1910.1020	Notify employees annually of the right to access records	no
Accident prevention signs/warnings	29CFR 1910.145	When signs change	no
Alarm systems	29CFR 1910.165	If plan/equipment changes	no
Asbestos (awareness) Note: extensive training for actual abatement or renovation	29CFR 1910.1001	Annual	yes plan and notification
Bloodborne pathogens	29CFR 1910.1030	Annual	yes
Chemical exposures	29CFR 1910.1000 through 1910.1096 and OAR 437-002-0382	Significant: exposures trigger specific program and training requirements	yes
Compactors and balers	OAR 437-002-0256	On assignment	
Confined space	29CFR 1910.145	Certification required Retain if plan changes—annual for rescue staff	yes
Crane operator	OAR 437-002-0228 1910.179 OAR 437-002-0229	If plan/equipment changes or inadequacies are found	yes
Electrical	29CFR 1910.332	If job duties change	no

Topic/category	Standard reference	Periodic retraining required	Written program required
Fall protection		If plan/equipment change or inadequacies are found	yes
Fire prevention	OAR 437-002-0043	If plan changes—update	yes
First aid/CPR	OAR 437-002-0161	1-3 years	no
Fixed fire protection systems	29CFR 1910.16	Annual training required for maintenance personnel	no
Forklift operator-powered industrial trucks	29CFR 1910.178	New equipment Changes to facilities or program As needed (for example, accident or policy violation) Recertification every 3 years	yes
Hazard communication	29CFR 1910.1200	When new chemicals are introduced	yes
Hazardous waste/emergency response to hazardous materials	29CFR 1910.120	Training requirements are detailed and dependant on responsibilities. Annual training required	yes
Industrial vehicles (non-highway use)	OAR 437-002-0223		no
Laboratories	29CFR 1910.1450	If changes occur or problems noted	yes
Lead (awareness) Note: extensive training for actual abatement and renovation		Annual training/posting of all lead work areas	yes
Lockout-tagout (LOTO) (control of hazardous energies)	29CFR 1910.147	Written program must address training needs for affected and authorized workers	yes Annual review required
Mech. power press	29CFR 1910.217	Initial must remain competent	no
Noise	29CFR 1910.95	Annual training, annual audiograms for exposed employees	no
Personal protective equipment (PPE)	29CFR 1910.132	If changes occur or problems are noted	yes
Portable fire extinguishers	OAR 437-002-0187	Annually	no
Powered work platforms	29CFR 1910.66	Initial must remain competent	no
Process safety management	29CFR 1910.119	Certification required, retraining every 3 years Training of contractors required	yes
Reinforced plastics manufacturing	OAR 437-002-0118		no
Respirators	29CFR 1910.134	Annual or if any changes occur or problems noted	yes
Safety committee	OAR 437-001-0765	New members annual	yes
Welding	29CFR 1910.252 through 1910.254	Initial must remain competent	no

Example of training documentation

1. Hazard communication training statement

I have received training on the Hazard Communication OSHA Standard 1910.1200, specifically:

- I am aware of the company-written hazard communication plan and its location, and I know that I may see the written plan by asking my supervisor.
- I am aware of the list of hazardous chemicals used in my workplace and that I may see the list and any safety data sheet (SDS) by asking my supervisor.
- I am aware that _____ is responsible for the overall conduct of the hazard communication program.
- I am aware that I have the right to have any SDS shown and explained to me for all hazardous materials with which I work.
- I understand that I am to report any spill of any hazardous material to my supervisor.
- I understand that I am to report any unlabeled containers to my supervisor.
- I understand that I am to take all proper precautions with chemicals, including proper use of personal protective equipment, storage, transfer, use, and disposal.
- I understand the labeling system used to identify hazardous material.

Find the SDS and identify the proper PPE for the following practice chemical:

Practice chemical: _____ **Identify the proper PPE:** _____

Employee signature

Date

Supervisor signature

Date

2. Safety training follow-up questions

1. To whom and when should I report an accident/incident? _____

2. What are the three primary hazards in my work area? _____

3. Where do I go in the event of an emergency? _____

4. Which PPE is required for my job? _____

5. Where do I go for first-aid treatment? _____

Employee signature

Date

Supervisor signature

Date

California OSHA

www.dir.ca.gov/dosh/puborder.asp

Although we do not use California regulations, the California State OSHA program has useful references. This is a link to the publications available on their web site.

Oregon Institute of Occupational Health Sciences

www.ohsu.edu/oregon-institute-occupational-health-sciences

Great resource for information on many safety and health topics. Check out the Ppogram resources for publications, blogs, and studies.

Federal OSHA

www.osha.gov

The eTools are a great source of information to include in training. Go to A to Z Index, scroll down to "E." Also check out OSHA's Quick Cards and fact sheets for great communication tools.

National Institute for Occupational Safety and Health (NIOSH)

www.cdc.gov/niosh

NIOSH is the research arm of the federal government's occupational safety and health effort, and it has a lot of great information. If you know the topic, use the A-Z Index.

National Safety Council

www.nsc.org

Oregon OSHA

www.osha.gov

The A-Z Topic List is an easy place to start if you are looking for information about a specific topic (for example, foot protection). Specific regulations are found in Rules and Laws. Also, check out Education, where online training and Trainer Resources from Oregon OSHA workshops are located.

SAIF Corporation

saif.com/safety

As your workers' compensation insurance carrier, we provide many guides, articles, and other resources to assist companies and their safety committees identify and eliminate risks.

Work Safe BC

www.worksafebc.com

British Columbia's workers' compensation and occupational safety and health agency is an excellent resource for information. Connect to Safety at Work. They also have great online videos.

More websites with resources for safety talks

JJ Keller

www.jjkeller.com/learn/workplace-safety-ehs

Occupational Hazards

www.ehstoday.com

This links to an electronic magazine with articles about work place safety.

Safety FUNdamentals Training Games

www.safetyfundamentals.com

Safety Toolbox Talks

safetytoolboxtalks.com

The Best of Safety Stuff (BOSS)—Richard Hawk

makesafetyfun.com

For office ergonomics

OSHA

www.osha.gov/SLTC/etools/computerworkstations/index.html

For agriculture

National Ag Safety Database

nasdonline.org

The PESO program at Oregon OSHA's web site

osha.oregon.gov/edu/peso/Pages/default.aspx