## CONSTRUCTION JOBSITE SAFETY ORIENTATION FACT SHEET

## LENGTH: 18 MINUTES

## **PRODUCTION YEAR: 2025**

#### **PROGRAM SYNOPSIS:**

A construction jobsite is an active and ever-changing environment and one of the main challenges faced by construction workers is staying safe and remaining injury free. While on a construction site, your safety not only depends on your actions and decisions, but also on the actions and decisions of others. To achieve the goal of zero injuries, everyone must work together as a team. This program covers a variety of possible hazards on a construction jobsite and how to avoid injury while on the site.

#### **PROGRAM OBJECTIVES:**

After watching the program, the participant should be able to explain the following:

- How our health and wellbeing contribute to better work;
- How to minimize various hazards such as ergonomic, chemical, electrical and fires;
- The proper way to handle emergencies and evacuations.

## PROGRAM OUTLINE

#### INTRODUCTION

• If you are viewing this program, then you are most likely an employee, contractor, visitor or vendor tasked with performing some type of construction work or activity.

- Perhaps you perform a specialized trade, operate heavy equipment, deliver materials, perform inspections, or supervise others.
- A construction jobsite is an active and ever-changing environment and one of the main challenges faced by construction workers is staying safe and remaining injury free.

• Understand that your safety while on a construction site not only depends on your actions and decisions, but also on the actions and decisions of others.

• To achieve the goal of zero injuries we must work together, as a team: employees, subcontractors, vendors, visitors, and anyone else who works on or enters our shared jobsite. The site owner, general contractor, as well as each sub-contractor, has established certain safety requirements that must be followed at all times.

• Failure to follow required safety rules can result in serious injury to you or other workers. In addition, violating safety rules may also result in you, and/or the contractor you work for, being removed from the jobsite.

#### TRAINING

• Before performing any task, you must be qualified and authorized by your employer to perform the work in question. This often involves equipment specific training with a certification card that must be presented on request.

- Forklifts, aerial lifts, and cranes are just a few examples of equipment with specific training and certification requirements.
- Never operate any tool, equipment or vehicle unless you have been properly trained and authorized by your employer to do so.

• You must also be aware of any potential hazards related to your work and have a plan for controlling those hazards. This is often achieved by participating in a pre-job safety briefing or daily task meeting.

• If you are unsure of the safety precautions or personal protective equipment needed to safely perform your work, stop and find out before proceeding.

#### WORKPLACE HEALTH

• You have a responsibility to report to work "fit for duty". This requires being alert, well rested and free from any effects of drugs or alcohol. The possession of drugs, alcohol or weapons on the jobsite is strictly prohibited.

• It's also a good idea to start each day by warming up with some simple stretches and movements.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

• Due to the nature of construction work, all persons entering a construction jobsite are required to wear appropriate clothing and a minimum level of personal protective equipment, also known as "PPE".

• Typically, this requires long pants, a high visibility shirt or vest, cut-resistant gloves, safety glasses with side shields, a hardhat, and safety toed shoes or boots.

- This required PPE must be worn at all times while on the jobsite, even if there are no obvious hazards around.
- Specialized work such as welding and other hot work, cutting masonry, or using chemicals will require additional specialized PPE.

• Your employer is responsible for providing you with the personal protective equipment necessary to perform your work. PPE is your last line of defense against injury.

#### LOOK FOR HAZARDS

• You may be familiar with the expression "keep your head on a swivel". Well, this old adage is certainly applicable to all personnel on a construction site. It simply means, being aware of your surroundings and taking an extra moment to periodically look around for hazards.

• Before entering any new work area, look overhead for potential hazards. Do not stand or walk under scaffolds, ladders, aerial lifts, or any other elevated work platform where you may be at risk of being struck by dropped tools or falling debris. Also, never place yourself under any raised crane load or other objects being lifted or transported.

• Next, look for any unguarded edges or floor openings that could allow a worker to fall to a lower level. Stay well clear of these types of hazards and report their existence to your supervisor right away.

• And finally, familiarize yourself with the various types of work being performed in the area you plan to enter. Make sure you have the proper PPE to protect yourself and make note of any sparks, flying debris, or vehicle traffic from which you need to keep clear.

• As you travel around the jobsite, constantly scan your path of travel for slip and trip hazards. Step slowly and cautiously as you navigate through the inevitable construction debris that may be in your path.

• Be especially cautious near moving equipment or vehicles. You may be wearing a high visibility vest, but this does not mean the equipment operator can see you.

• Never approach or cross paths with moving equipment unless you make eye contact with the operator and he or she indicates it is safe to do so.

• Also, be aware of the swing radius of cranes, excavators and other pieces of heavy equipment and stay out of this danger zone.

• And finally, do not place yourself between any mobile heavy equipment and a solid object and do not stand or walk directly behind this type of equipment because the operator may not be able to see you.

#### BARRIERS

• To make known hazards easy to identify, many jobsites utilize colored barricade tape as well as physical barriers.

• Yellow barricade tape, also known as caution tape, is used to indicate potential hazards that may cause injury but are not lifethreatening. Stay out of these areas unless you have a legitimate work-related reason to enter.

• Before crossing yellow barricade tape, make sure you identify the potential hazards and take appropriate measures to avoid injury.

• Red barricade tape, also known as danger tape, is used to indicate potential hazards that may cause serious injury or death. Typically, barricade tags are used to provide the contact information of the barricade owner.

• Never cross red barricade tape without first obtaining permission from the barricade owner and being fully briefed on the hazards.

• Another type of visual warning system to be aware of is a roof warning line or flag line that warns of an unguarded roof edge on a low-slope roof.

• Never cross a roof warning line unless you are performing roofing work, have permission to do so and are using appropriate fall protection equipment.

• When possible, physical barriers in the form of guardrails should be used to prevent workers from falling to a lower level. In general, guardrails consisting of a top-rail and a mid-rail must be installed on any edge with a drop of 6 feet or more to a lower level.

- And, when material or tools could fall onto workers below, a toe board must also be used.
- If your work creates a hazard, make sure all required guardrails and/or barricades are properly installed and in place.

## PERSONAL FALL ARREST SYSTEM

• Of course, there are some stages of construction, or certain situations where workers must work near an unprotected or unguarded edge. When this is the case, the use of a personal fall arrest system may be required.

• A personal fall arrest system consists of a full body harness and lanyard, connected to an anchor point that is capable of supporting 5,000 pounds.

• One popular choice of lanyard is a self-retracting lifeline or SRL, sometimes called a "yo-yo". This type of lanyard allows freedom of movement while working but will quickly brake in the event of a fall.

• In addition, a body harness and lanyard are required when using certain types of mobile elevating work platforms such as boom lifts or scissor lifts. When this is the case, always connect the lanyard to the lift manufacturer's approved tie-off point and never connect to the lift's guardrails or to any structure outside of the lift.

#### SCAFFOLDS

• Scaffolds are another common piece of equipment used to perform elevated work. Properly constructed scaffolding provides workers with a safe and sturdy working surface. However, there are many hazards related to scaffolds and all scaffold safety rules must be strictly followed to prevent injury.

• First of all, only trained and authorized persons, working under the supervision of a competent person, may assemble or disassemble scaffolding.

• In addition, a competent person must also inspect the scaffolding prior to each work shift. Typically, a scaffold inspection tag will be used to document the daily inspection and indicate the suitability of a scaffold for use.

• Scaffolding must be level and stable with poles placed on base plates or mud sills. All scaffold sections must be pinned, with cross braces in place.

• The working area of a scaffold must be fully decked with guardrails installed on all open edges. This includes those areas where material is loaded and unloaded. Recall that guard rails must consist of a top rail and a mid-rail. In some cases, the cross braces can also serve as the mid rail or top rail, but not both.

• Toe boards are required when there is a risk of tools or materials falling from the scaffold onto workers below. Be aware that some jobsites require toe boards to be used on scaffolds at all times.

• Never climb onto a scaffold unless you have permission from the scaffold owner, it has passed a daily inspection by a competent person, and the scaffold is fully decked with guard rails in place.

## LADDERS

• In addition to scaffolds and aerial lifts, ladders are often used to access a higher level or perform elevated work.

• Unfortunately, due to the risk of falling, ladders are also a common source of injuries and fatalities. Ladders must only be used with extreme caution.

• All portable ladders must be inspected prior to use. Never use a damaged or defective ladder.

• Portable ladders must be erected on a firm level surface. Step ladders, like this one, must be fully opened, with the spreader bars locked in place. And never stand on the top two steps of a step ladder.

• Straight or extension ladders should be set-up with a 4 to 1 slope. For example, the base of a 20-foot ladder should be 5 feet from the wall it leans on.

• Always face the ladder when climbing or descending and maintain three points of contact with the ladder at all times.

• Many people don't fully understand what we mean by three-point contact. Here are some examples (shown in the video).

• This is not three-point contact. Notice how this person only has one hand and one foot in contact with the ladder while climbing. One slip or misstep at the wrong moment will cause this person to fall.

• Three-point contact, like this, requires both hands be securely in place before lifting either foot. And, both feet must be securely in place before releasing either hand.

• Climbing with three points of contact also means that you cannot carry any tools or objects in your hands while climbing or descending a ladder. Use a tool belt, or haul supplies with a line and bucket once you reach the working level.

• While working from a ladder, you may use your waist as the third point of contact and be sure stay beyond the side rails. If your waist cannot contact the ladder while working, then you will need to select a taller ladder.

• When used to access another level, a ladder must extend 3 feet above the level being accessed and securely attached or tied off at the top.

• On some jobsites, the use of fall protection may also be required when climbing or working from a ladder of a certain height. This type of important information should also be communicated during the pre-job safety briefing.

• Make sure you understand and follow all jobsite safety rules related to the use of ladders. For example, many jobsites prohibit aluminum ladders, some require the use of podium ladders, while others mandate color coded tape be used to indicate a current inspection. If you are not sure, ask.

## ELECTRICAL HAZARDS

• Another hazard all workers on a construction site must be aware of is, electricity.

• The most common electrical hazards on a construction site are high-voltage overhead power lines, exposed energized parts in electrical rooms or temporary panels, damaged power cords and the absence of ground fault protection.

• Before performing any work or traveling with any equipment, inspect the area for overhead power lines. Maintain a minimum of 10 feet of clearance between power lines and all conductive objects, tools, and vehicles.

• Be especially mindful of overhead lines when erecting scaffolding or ladders, using scissor or boom lifts, and operating cranes or other heavy equipment such as track hoes or dump trucks.

• Unless you are a qualified electrical worker, stay out of all electrical rooms. Electrical control rooms must display signage indicating "Only Authorized Personnel Allowed" and have a lockable door to limit unauthorized entry.

• All temporary electrical panels and outlets should be properly covered to prevent any possibility of contact with energized parts. If you notice any exposed wiring, or uncovered electrical equipment report it right away.

• And, even with the popularity of battery powered tools, you will still find plenty of extension cords and power tools on any construction jobsite. The insulation on these cords is susceptible to damage from being pulled against sharp edges, closed in doors, run over by vehicles or excessive use over time.

• This is why all extension cords, and the cords of power tools must be inspected prior to each use. And if a cord is designed to have

a ground pin, it must be present and in good condition.

• To further protect against electric shock, the use of a ground fault circuit interrupter or GFCI is required on every power cord or electric tool. A GFCI is designed to detect any current leakage and quickly interrupt the flow of electric current, which protects you from being shocked. The use of a GFCI is especially important in wet or damp environments.

• GFCI's can be small and portable, like this one, part of a larger breakout box or "spider box," or built into circuit breakers and receptacles.

• Before servicing any electrical equipment or machinery, all power sources must be disconnected, locked, and tagged "do not operate". This process is known as "lockout tagout" and protects workers from the unexpected energization or startup of equipment.

## TRENCHES AND EXCAVATIONS

• Next, let's talk about one of the most dangerous places to work on any construction site, and that is inside a trench or excavation.

• Trenches and excavations have the potential to be hazardous due to the risk of cave-in or collapse. This is why all trenches and excavations must be overseen by a competent person. The competent person will identify the type of soil, and its stability, and ensure the trench walls are sloped at an angle sufficient to prevent a collapse.

• Otherwise, the competent person will instruct that shoring or shielding be installed to protect workers from cave-in.

• In addition, a ladder or other means to enter or exit the trench must be placed at least every 25 feet. Never enter any trench or excavation without these safeguards in place.

• In addition, the spoil pile must be placed at least 3 feet from the edge of all excavations and heavy equipment should stay well clear.

• Never begin digging any trench or excavation until all underground utilities have been located and marked and you have gained permission from the site owner and or general contractor.

#### **CONFINED SPACES**

• Another potentially hazardous work area that requires special precautions is a confined space. A confined space is any space the has restricted means of entry and exit, and has the potential to contain atmospheric hazards, engulfment hazards, or mechanical hazards.

• Some common examples of confined spaces include sewers, tanks, vessels and similar structures. These types of spaces may only be entered by trained and authorized personnel working under a confined space entry permit issued by their employer and/or the general contractor.

• The permit will require that atmospheric testing be performed to ensure the space is safe to enter and that all other hazards are identified and controlled prior to entry.

• Never enter any confined space unless you are a trained and authorized entrant working under a valid entry permit.

## SAFETY HOUSEKEEPING

• And finally, let's talk about jobsite housekeeping, which is often called "safety housekeeping" because maintaining a neat and orderly work worksite is critical to preventing injuries.

• Power cords, hoses, and similar items must not block pathways, doorways, or be run in such a way as to be a trip hazard.

• Remove and dispose of debris as it is being generated rather than letting it pile up all day. Strive to keep all work areas clean and orderly and do not allow flammable or combustible materials to accumulate.

- An approved safety can should be used to hold flammable liquids and returned to a fire-proof cabinet when not in use.
- Smoking is only permitted in designated areas and butts must be properly disposed of in designated containers.

• Most job sites have designated areas for each contractor to store tools, materials and equipment. Only store these items in a preapproved, designated area and never on stairs or in walkways.

- Stored items or materials must never block access to fire extinguishers, emergency equipment, exits or designated fire lanes.
- Be aware that certain types of waste cannot be placed into the regular trash. Make sure you know where to dispose of recyclables, aerosols, oily waste, and construction debris.
- If your work generates hazardous waste, make sure it is placed into an appropriate container and disposed of according to the environmental plan of your employer and/or the general contractor.

• Never pour any oil, hydraulic fluid, or other waste liquids onto the ground or into any drain or storm drain. If you have any questions about proper waste disposal, ask your supervisor or the general contractor.

## CONCLUSION

• A construction jobsite. Powerful equipment. Everchanging environment. And an assortment of people performing a variety of tasks.

• In this program we have explained what it takes to stay safe in an environment like this and pointed out the personal responsibility for safety that each of us must take if we are to remain injury free.

• Put safety first in everything you do. Stop work and ask questions if you are ever unsure how to proceed safely. Correct or report any unsafe condition or action.

• Take the information we have presented in this program, and the job specific training provide by your employer, and put them to work each day building and strengthening your commitment to remaining safe, healthy and injury free.

# CONSTRUCTION JOBSITE SAFETY ORIENTATION

## ANSWERS TO THE REVIEW QUIZ

1. a			
2. a			
3. а			
4. b			
5. a			
б. а			
7. a			
8. b			
9. b			
10. a			

## CONSTRUCTION JOBSITE SAFETY ORIENTATION

## REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.
NameDateDate
1. Never operate any tool, equipment or vehicle unless you have been properly trained and authorized by your employer to do so.
a. True b. False
2. Specialized work such as welding and other hot work, cutting masonry, or using chemicals will require additional specialized PPE.
a. True b. False
3. Never approach or cross paths with moving equipment unless you make eye contact with the operator and he or she indicates it is safe to do so.
a. True b. False
4. Purple barricade tape, also known as danger tape, is used to indicate potential hazards that may cause serious injury or death.
a. True b. False
5. A personal fall arrest system consists of a full body harness and lanyard, connected to an anchor point that is capable of supporting 5,000 pounds.
a. True b. False
6. Only trained and authorized persons, working under the supervision of a competent person, may assemble or disassemble scaffolding.
a. True b. False
7. Always face the ladder when climbing or descending and maintain three points of contact with the ladder at all times a. True
b. False

8. Maintain a minimum of 2 feet of clearance between power lines and all conductive objects, tools, and vehicles.

a. True

b. False

9. A ladder or other means to enter or exit the trench must be placed at least every 100 feet.

a. True

b. False

10. Never pour any oil, hydraulic fluid, or other waste liquids onto the ground or into any drain or storm drain.

a. True

b. False