



A job safety analysis can save time and

# prevent injuries

Before any job begins, a worker and supervisor should assess the work they are about to do. That often includes analysing what needs to be done, deciding what materials are needed, and finding out what the site conditions are like. But what is sometimes overlooked at this stage is the safety of those on the worksite. Planning needs to include a job safety analysis (JSA) also known as a job hazard analysis (JHA), a hazard risk assessment (HRA), or a risk assessment control (RAC). Whatever the name, the purpose is the same—to make a work task safe for workers.

## The benefits of a JSA

By addressing safety measures right at the beginning, an employer saves time, effort, and ultimately money. Ideally, Work planning and safety planning should be done at the same time. For example, planning for fall prevention at the same time as planning for a job that involved work from a rooftop would be more efficient since all necessary PPE, ladders, and scaffolding would be ordered and delivered to the site at the start of the job. This would allow the job to begin promptly and proceed without delays.

Another benefit of planning for safety is that it forces you to consider all details of a job. By reviewing each task for possible hazards, you will think about aspects of the work that might otherwise be overlooked and cause delays.

Creating a JSA has other benefits. Increasing worker safety may result in lower WSIB premiums. Also, since workers prefer employers that care about their safety, having a JSA may reduce staff turnover and boost worker morale.

Although creating a JSA may take a bit of time at first, it can be reused time after time for similar work. Having several JSAs available for a variety of jobs can pay off over time. A good JSA can also help guide new supervisors who lack experience and help remind veteran supervisors about aspects of the work they may have forgotten due to complacency.

## Getting started

Large projects are often broken down into smaller segments to simplify scheduling and planning. With smaller jobs, this is often done in your head and not tracked formally. A JSA details the tasks and elements of a task in order to pinpoint where the risks for worker health and safety arise. Once the hazards are identified, precautions are put in place to eliminate or mitigate those hazards. When that information is documented, it can be recorded and shared with other people working on the jobsite.

## Steps for a JSA

### 1. Identify the task

The first step is to identify the task at hand. That task will often be a situation that is repeated on many jobsites. It could be something like going up on a roof or tying rebar.

### 2. Break down the task into steps

The next step is to divide the job into steps. Each step is a segment of the operation that is necessary to advance the work. List the job steps in the order they will be performed.

### 3. Identify the hazards associated with each job step

The hardest part of the JSA is to take each step and list the hazards associated with it. Think about what could go wrong from a health and safety point of view. Think about how people, equipment, materials, processes, and the surrounding environment may contribute to a hazard.

### 4. Decide on controls for each hazard

Each hazard identified in the previous step needs a control. A control is a way of eliminating the hazard or reducing the risk of injury or illness associated with the hazard. When deciding on controls, consider the probability that the hazard might cause injury and consider the possible severity of that injury.

## Sample JSA for Extension Ladders

The following is an example of a JSA for using an extension ladder. Though there are many different ways of documenting that information, this is a useful method of breaking down the task into its various components.

### Company Name

File Number	1234	Date	October 15, 2013
Prepared by	J. Smith	Approved by	J. Doe
Applicable projects	Ladder setup on service calls		
Applicable ladder types	Extension ladder		
Reference material	Site examination; best practices		
Instructions			
<ol style="list-style-type: none"> <li>The JSA is to be prepared by a competent person familiar with the type of work.</li> <li>The JSA must be explained to employees who will be relying on it.</li> <li>Employees relying on this JSA must be told of any changes to it.</li> <li>Using reasonableness as a guide, decide             <ol style="list-style-type: none"> <li>whether a ladder can be used</li> <li>whether the hazards of the ladder work have been assessed</li> <li>whether there are suitable controls in place for the protection of the workers' health and safety.</li> </ol> </li> <li>If associated with a specific checklist, this JSA must have an identifier, such as a file number, and be kept by the employer.</li> </ol>			
Job Steps	Hazards	Barriers or Controls	
<b>Lifting ladder off truck from braces</b>	Strains and sprains	<ul style="list-style-type: none"> <li>Use mechanical leverage to raise ladder from truck bracket, or mount in an easily accessible location.</li> <li>Lift one end at a time.</li> <li>Lift ladder onto shoulder directly from truck's bracket.</li> <li>Get assistance.</li> <li>Ensure there is a clear path of travel before removing ladder from truck bracket.</li> </ul>	
<b>Carrying ladder and setting it up</b>	Strains and sprains	<ul style="list-style-type: none"> <li>Get a good grip before starting to walk.</li> <li>For long ladders, get help from second worker.</li> <li>Carry ladder with its feet in front of you—ready to set up.</li> <li>Bend knees when setting ladder on ground.</li> <li>Set ladder feet on ground and walk towards wall, raising ladder against wall. Practise this step with short ladders.</li> </ul>	
	Falls	<ul style="list-style-type: none"> <li>Adjust ladder footing as required and, if applicable, secure bracing or deploy stabilizers.</li> <li>Ensure ladder is not leaning to the side, is on firm footing, and cannot move.</li> <li>Set up the ladder at a safe angle—one foot out for every three or four feet up, depending on length.</li> </ul>	
	Slipping and tripping	<ul style="list-style-type: none"> <li>Know where obstacles are before starting to walk.</li> <li>Make sure set-down area is clear.</li> </ul>	
	Electrocution	<ul style="list-style-type: none"> <li>Check pathway for overhead wires.</li> </ul>	
<b>Next steps...Climbing, etc.</b>			