

Job Function Analysis Examples for:

- **Residential Construction (framing)**
- **Retail Lumber (yard)**
- **Landscape Gardening (fish pond contract)**

Residential Construction (framing)

The following calculations provide examples of three different employers who were unsure of their hazard rating.

In this first example of a job function analysis, three framers are given the task of taking a residential construction project to lockup. All workers have similar exposure times to all job functions.

The employer has looked at the Assigned Hazard Rating List and found that construction is designated as a high hazard industry. He thinks this particular project may not be typical of construction in general, and wonders if it could be given a lesser hazard rating.

Following the steps in the flow chart, the employer first identified the types of job functions, and identified each function as either low or high risk. The percentage of time exposed to each activity was then identified.

Next, job functions were analyzed, and it was determined that a downward adjustment should not be made as the worksite had a high risk of injury. The high hazard rating was maintained.

JOB FUNCTION ANALYSIS EXAMPLE – RESIDENTIAL CONSTRUCTION SITE

Workers: 3 Framers (task: take to lockup) - All workers have similar exposure times to all job functions

STEP 1: Identify Job Functions					STEP 2: Analyze Job Functions		STEP 3: Determine Further Adjustment	
Types of Functions	Low Risk	High Risk	# of Workers	% of Time Exposed to Activity	The Assigned Hazard Rating List designates construction as high hazard. Is this project really a high hazard project?			
framing (working at elevation)		X	3/3	60%	Are there low risk job functions or activities? - For what % of workers? - What % of time exposed to low risk?	YES 100% 10%		Are 30% or more of the workers exposed to high risk job functions for more than 75% of the time? OR Are 50% or more of the workers exposed to high risk job functions for more than 50% of the time?
Roofing (working at elevation)		X	3/3	25%	Are there high risk job functions or activities? - For what % of workers? - What % of time exposed to not low risk?	YES 100% 90%		YES
use power tools (e.g. pneumatic nailers)		X	3/3	85%	<i>Although there are some low risk job functions or activities:</i>			
work around concrete trucks		X	3/3	5%	Are 30% or more of the workers exposed to high risk job functions for more than 20% of the time?	YES		
Cleanup	X		3/3	2%	OR			
Reading blueprints	X		3/3	3%	Are 50% or more of the workers exposed to high risk factors more than 10% of the time?	YES		
talking to inspectors	X		3/3	5%	AT THE END OF STEP 2, THE WORKSITE IS UPGRADED TO AT LEAST A MODERATE HAZARD RATING. Is a further adjustment necessary? GO TO STEP 3.			STEP 4: THE WORKSITE IS ASSIGNED A HIGH HAZARD RATING.

Retail Lumber (yard)

The second example is a lumber yard/retail hardware store. The assigned hazard rating for lumber yards in the Guidelines is moderate.

There are nine workers. Three of these workers do the same job. Each spends:

- 5% of the time trimming boards with a chop saw (high risk)
- 10% of the time operating and working around a fork lift (high risk)
- 80% of the time loading stock on dollies (low risk)
- 5% of the time doing cleanup (low risk)

Therefore, each of these three workers has an individual total exposure of 15% to high-risk job functions (obtained by adding 5% and 10%). The result is that 33% of the workforce has individual total exposures of 15%.

The remaining six workers do sales and office work, all spending 100% of their time in low-risk job functions. They have no exposure to high-risk job functions.

Although a lumber yard is listed as moderate in the Assigned Hazard Rating List, this particular lumber yard has lower-than-expected exposures to high-risk job functions. When the adjustment calculation is applied, the moderate hazard rating is adjusted down to a low hazard rating because both of the following conditions apply:

- 70% or more of the workers (in this case, 9 out of 9 workers) have exposures of 20% or less to high-risk job functions, and
- 50% or more of the workers (in this case, 6 out of 9 workers) have exposures of 10% or less to high-risk job functions.

JOB FUNCTION ANALYSIS EXAMPLE – RETAIL LUMBER (YARD)

Workers: 3 Stock Room Laborers, 3 Sales Counter/Customer Relations, 1 Clerical, 1 Salesperson, 1 Manager

STEP 1: Identify Job Functions					STEP 2: Analyze Job Functions	STEP 3: Determine Further Adjustment	
Types of Functions	Low Risk	High Risk	# of Workers	% of Time Exposed to Activity			
<i>Stockroom Laborers</i>					What is the assigned hazard rating for lumber yards in the Guideline list?	Moderate	THE WORKSITE IS ASSIGNED A LOW HAZARD RATING.
					I don't think my workplace is a typical lumber yard. Can I adjust from moderate to low?		
					Are there <i>high risk</i> job functions or activities?	Yes	
Trimming boards with chop saw		X	3/9	5%	- for what % of workers?	33%	
Operating and working around fork lift		X	3/9	10%	- What % of time exposed to high risk? (5% + 10%)	15%	
loading stock on dollies	X		3/9	80%	<i>Although there are some high risk job functions or activities:</i>		
cleanup	X		3/9	5%	Are 70% or more of the workers exposed to high risk job functions for 20% or less of the time?		
<i>Sales Counter/Customer Relations</i>					(100% of the workers have exposure to high risk job functions for 20% or less of the time.)	YES	
Sales counter	X		3/9	60%	AND		
Customer relations on sales floor	X		3/9	40%	Are 50% or more of the workers exposed to high risk job functions 10% or less of the time?	YES	
<i>Clerical/Salesperson/Manager</i>					(67% of the workers have exposure to high risk job functions for 10% or less of the time).		
Management, office work (sales, clerical, bookkeeping)	X		3/9	100%			

Landscape Gardening (fish pond contract)

In a third example, the supervisor of a landscape gardening business obtains a contract to create a fish pond. Landscape gardening is assigned a moderate hazard rating in the Guidelines list. He is concerned that this job is not a typical landscape gardening job.

Four out of the five workers are exposed to high risk activities. Although a landscape gardening business is listed as moderate in the Assigned Hazard Rating List, this particular project involves higher-than-expected exposures to high-risk job functions. The adjustment calculation would move the hazard rating up to high risk, because the following conditions apply:

- 30% or more of the workers (in this case, 2 out of 5 workers) are exposed to high risk more than 75% of the time OR
- 50% or more of the workers (in this case, 3 out of 5 workers) are exposed to high risk more than 50% of the time.

JOB FUNCTION ANALYSIS EXAMPLE – LANDSCAPE GARDENING (FISH POND CONTRACT)

Workers: 1 Supervisor, 1 Casual Laborer, 1 Backhoe Operator, 1 Pipelayer, 1 Faller for Selected Trees

STEP 1: Identify Job Functions					STEP 2: Analyze Job Functions		STEP 3: Determine Further Adjustment	
Types of Functions	Low Risk	High Risk	# of Workers	% of Time Exposed to Activity	<p>What is the assigned hazard rating for landscape gardener in the Guideline list? Moderate</p> <p>I am concerned that this job is not a typical landscape job.</p>		<p>Are 30% or more of the workers exposed to high risk job functions for more than 75% of the time? (2/5 workers = 40% - backhoe operator, pipelayer)</p>	YES
Supervisor: Layout and control of site, and administrative tasks	X		1/5	85% (15% high risk)	<p>Are there <i>high risk</i> job functions or activities? - How many workers are exposed to high risk activities? Yes 4/5</p>		OR	
Casual Laborer: Using hand tools – shovel, pickaxe	X		1/5	100%	<p>Are 30% or more of the workers exposed to high risk job functions for more than 20% of the time? (3/5 workers= 60% – backhoe operator, pipelayer, faller) YES</p>		<p>Are 50% or more of the workers exposed to high risk job functions for more than 50% of the time? (3/5 workers = 60% - backhoe operator, pipelayer, faller)</p>	YES
Backhoe Operator: Control of and working around backhoe		X	1/5	80% (20% low risk)	<p>OR</p> <p>Are 50% or more of the workers exposed to high risk job functions for more than 10% of the time? (4/5 workers= 80% – supervisor, backhoe operator, pipelayer, faller) YES</p>		<p>If the answer to either of the above question is yes -</p>	
Laborer (excavation): Working in excavation 6' deep		X	1/5	90% (10% low risk)	<p>If the answer to either of the above questions is yes – AT THE END OF STEP 2, THE WORKSITE IS AT LEAST A MODERATE HAZARD RATING.</p>		<p>THE WORKSITE IS ASSIGNED A HIGH HAZARD RATING</p>	
Faller: Falling/bucking selected trees, including danger tree; brushing		X	1/5	55% (45% low risk)	<p>Is a further adjustment necessary? GO TO STEP 3</p>			