## **Ergonomics Process Workbook**

#### Division of Occupational Safety and Health

Washington State Department of

Labor & Industries

1. Involve Employees

2. Find Hazards

3. Assess Hazards

4. Fix Hazards

5. Check for Success

## Step 3: Assess Hazards

There are times when you might want to evaluate a job more thoroughly, such as when:

- You're not sure if the job poses an injury risk.
- You've found a number of jobs with potential hazards and want to prioritize which jobs to work on first.
- You want to determine if a solution fixed the hazard (See <u>Step 5</u>: Check for Success).

### Assessing and prioritizing jobs

If you found a number of jobs with potential hazards in <u>Step 2</u>, it might help to use the Job Risk Priority Worksheet in the appendix to decide which ones to fix first.

#### When to evaluate a specific task and hazard

You can also evaluate particular tasks (for example, lifting, carrying, pushing or pulling) within jobs using a task-specific evaluation tool.

#### How to assess a hazard

- 1. Identify the job tasks that need a more detailed assessment.
- 2. Select the right assessment tool for the task from the Ergonomics Assessment Tools table in the appendix. The evaluation tools you use will depend on the types of tasks and employee movements.
- 3. When doing a more formal assessment you will need to collect some basic information. Review the assessment tools you want to use. This will help you find out the types of information that will be needed.
- Watch employees doing the work. Get the needed information from the employees and take any necessary measurements.
- 5. Determine the risk of injury using the evaluation tool.
- 6. Keep track of the assessment results so they can be used in Steps 4 and 5.

### Next Step

You are now ready for a very important step in the process. In <u>Step 4</u> supervisors and employees will work together to the fix hazards.

WHEN A FORMAL ASSESSMENT ISN'T NEEDED

Sometimes the hazard is obvious and there are simple solutions you can quickly put in place without evaluation.

Imagine a supervisor sees an employee struggling to move a heavy load with a pallet jack.



The employee says that this task leaves him with a sore back. The supervisor knows that another employee was recently injured doing this work.

Everyone agrees a powered pallet jack will make the job safer and easier.

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Appendix

Job Risk Priority Worksheet

Job:

General description:

| Risk Scoring  | Notes  | Score |
|---|--|-------|
| <ul> <li>Number of employees in this job:</li> <li>1 to 5 = 1 point</li> <li>6 to 10 = 2 points</li> <li>11 or more = 3 points</li> </ul>   | Include employees<br>who do the job or<br>task, even if it's just<br>part of the time.                         |       |
| <ul> <li>Frequency of job or task:</li> <li>Once per month = 1 point</li> <li>1 to 2 times per week = 2 points</li> <li>1 to 2 times per day = 4 points</li> <li>Many times per day = 6 points</li> </ul> | Choose the<br>frequency that best<br>describes how often<br>the job happens.                                   |       |
| <ul> <li>Employee effort rating:</li> <li>Easy = 1 points</li> <li>Somewhat hard = 3 points</li> <li>Hard = 5 points</li> <li>Very hard = 7 points</li> </ul>   | Have employees rate<br>the hardest physical<br>effort that is a<br>regular requirement<br>of the job.          |       |
| <ul> <li>Number of injuries in the past 3 years:</li> <li>None = 0 points</li> <li>1 = 4 points</li> <li>2 or more = 7 points</li> </ul>  | Include only the<br>injuries among<br>employees who do<br>this job.  |       |
| Overall satisfaction with the task the way it's<br>currently done:<br>• Very satisfied = 1 point<br>• Satisfied = 2 points<br>• Very unsatisfied = 3 points   | Think about factors<br>such as workflow,<br>work quality,<br>efficiency, turnover,<br>or employee<br>concerns. |       |
| Overall Risk Score  | Add up all of the scores in the column.  |       |

**Overall Risk Score:** 12 or lower = Low Risk; 13 to 15 = Medium Risk; 16 to 18 = Medium-high Risk; 19 or higher = High Risk



#### **Ergonomics Assessment Tools**

The evaluation tool you use depends on the types of work. Use the table below to pick the right assessment tool for the task.

| Task/Hazard        | What to look for  | Evaluation Tool  |
|--------------------|---|--|
| Heavy Lifting      | Lifting heavy or large objects  | Lifting Calculator App   |
| Frequent Lifting   | Lifting loads of 10 pounds or more,<br>more than once per minute  | Lifting Calculator App   |
| Awkward Lifting    | <ul><li>Lifting while reaching:</li><li>Below the knees</li><li>Above the shoulders</li><li>At arms' length</li></ul>   | Lifting Calculator App   |
| Pushing or pulling | <ul> <li>Moving heavy loads on carts, pallet jacks, hand trucks</li> <li>Sliding or dragging heavy objects</li> </ul>   | Push/Pull/Carry Calculator<br>Push/Pull Guidelines* (Good for<br>pulling with 1 or 2 hands, or<br>pushing with 2 hands)<br>*Need a fish scale, luggage scale or<br>push/pull gauge |
| Carrying           | Carrying objects manually for more than a few feet.   | Push/Pull/Carry Calculator   |
| Awkward Postures   | <ul> <li>Work too low – bending of the neck or back, kneeling, squatting</li> <li>Work too high – reaching with hands above the head or elbows above the shoulders, looking up with the neck bent</li> <li>Work too far away – reaching out, bending forward</li> </ul> | L&I Caution Zone Checklist<br>L&I Hazard Zone Checklist  |