

Chapter 54: Ergonomics

Industrial Ergonomics Screening Checklist

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ENVIRONMENT, SAFETY & HEALTH DIVISION

Supervisors and workers are to use this checklist to identify risk factors for work activities with ergonomic concerns and risk-reduction solutions (see Ergonomics: Ergonomic Evaluation Procedures [SLAC-I-730-0A21S-059]). Analyze the task and mark the check boxes for any risk factors. List the ergonomic control measures that mitigate the identified risk factors. Contact the ergonomics specialist at ergonomics-slac@slac.stanford.edu for additional assistance. There are no recordkeeping requirements for this checklist.

Task					
Location					
Evaluated by	aluated by				
•					
1. Lifting					
		Risk	Risk Control Measures (e.g., mechanical assists, making load smaller,		
Risk Factor		Factor Observed	additional help, lifting technique, postural awareness, microbreaks, work rotation)		
	Lifting between 50 and 70 lbs.				
	Lifting objects above shoulder level or below the knees				
	Lifting objects with the hands > 12 inches horizontally from the body				
Note: if one or more items	Frequent lifts Low-frequency: < 2 hours/day or > 2 hours/day with < 12 lifts/hour Moderate-frequency: > 2 hours/day and < 30 lifts/hour High-frequency: > 2 hours/day and < 360 lifts/hour are checked, efforts should be made to mining	Dize one or mor	re of the following: load weight, load distance, and lifting		
Note: if one or more items are checked, efforts should be made to minimize one or more of the following: load weight, load distance, and lifting					

frequency. For recommended weight limits, refer to the Oregon Safe Lifting Calculator.

2. Awkward Postures					
			Risk Control Measures (e.g., mechanical assists, adjustable workstations,		
Risk Factor		Check If Observed	tools with alternate handles, stands, larger grips, postural awareness, microbreaks)		
	Overhead work - hands above the head, elbows above the shoulders. Cumulative duration > 2 hours/day.				
	Neck or back is bent > 30°, little ability to vary posture. Cumulative duration > 2 hours/day.				
	Squatting or kneeling. Cumulative duration > 2 hours/day.				
	Bent wrists. Cumulative duration > 2 hours/day.				

			Risk Control Measures
Risk Factor		Check If Observed	(e.g., mechanical assists, tools with alternate handles stands, larger grips, clamps, making load smaller)
	Pinching to hold unsupported objects ≥ 2 lbs/hand (using pinch force equivalent to holding half a ream of paper). Cumulative duration > 2 hours/day.		
	Gripping ≥ 10 lbs/hand to hold unsupported objects (using gripping force equivalent to squeezing car jumper cables). Cumulative duration > 2 hours/day.		

4. Other (Body Movements, Vibration, Slip/Trip/Fall)					
		Risk Control Measures			
Risk Factor	Check If Observed	(e.g., automated processes, gloves/grip handles, barriers, proper tool maintenance, microbreaks, work rotation, proper housekeeping)			
Repeating the same movement with little or no variation (≥ 5 times/min). Cumulative duration > 2 hours/day.					
Work involving sudden movements (e.g., starting a chainsaw)					
Vibration from high-vibration tools (e.g., chain saws, jackhammers, impact wrenches) > 30 minutes/day OR from moderate-vibration tools (e.g., saws, sanders) > 2 hours/day.					
Work around potential slip/trip/fall hazards (e.g., loading docks, stairs, wet/greasy surfaces)					

References

- Based on Stanford University, Office of Environmental Health and Safety. <u>Ergonomics Screening Tool</u> (OHS 14-026)
- American Conference of Governmental Industrial Hygienists. Threshold Limit Values for Lifting, in Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) (<u>ACGIH TLVs and BEIs</u>)
- Washington State Department of Labor and Industries. Caution Zone Checklist and Hazard Zone Checklist (available from <u>Evaluation Tools</u>)
- Oregon Occupational Safety and Health Division. <u>Safe Lifting Calculator</u>