

Ergonomic Hazard Assessment App Questions with Mitigation Techniques:

1. Have any workers been previously diagnosed with any of the following cumulative trauma disorder (CTD's): Carpal Tunnel, Tendonitis, Tenosynovitis, De Quervain's Disease, Trigger Finger, White Finger, Hand Arm Segmental Vibration Syndrome, muscle strains or back ailments?

Other: Workers with previous ergonomic related injuries in the past are at increased risk in the future. Additional care should be taken to accommodate individuals that have experienced conditions such as Carpal Tunnel, Tendonitis, Tenosynovitis, De Quervain's Disease, Trigger Finger, White Finger, Hand Arm Segmental Vibration Syndrome, muscle strains, or back pain. Encourage employees to report symptoms early before they develop into a disability.

2. Have there ever been any worker complaints concerning ergonomic issues? Body soreness: back, shoulders, neck, hips, knees, and/or feet.

Administrative Control: Conduct an ergonomic job specific assessment. Observe body movements and their frequency. Look for awkward movements that involve moving materials with bad postures away from neutral. Establish an ergonomics program that can be used to reduce injury by controlling hazards.

3. Do any employees perform highly repetitive tasks? (>100 reps/hour or 2000 per/day)

Engineering Control: Observe job tasks and research ways to reduce frequency of material handling through automation or engineering controls.

Administrative Control: Establish systems to rotate workers between tasks to minimize the effects of continuous exertion, repetitive motion, and/or awkward postures. Job rotations are best when each new task requires a different muscle group. Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards and ways to control them.

4. Do the employee's routine tasks require repeated lifting of weights over 20 lbs. and/or occasional lifting of weights over 50 lbs.?

Engineering Control: Use mechanical aids when lifting and/or repositioning heavy objects. Reduce the weight of load to limit excessive force exertion.

Administrative Control: Provide training in the use of mechanical aids, implement "buddy-lift" requirements and/or other lifting routines.

5. Are employees using tools well suited to the task? (i.e. usage of tool maintains neutral positions/postures)

Engineering Control: Redesign or install tools that promote neutral postures.

Administrative Control: Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards and ways to control them.

6. Do employees perform tasks while assuming awkward postures (e.g. hunching, bending, squatting, etc.) or that require excessive flexion/extension of a joint for extended periods of time? ("Awkward" refers to any positioning of body and/or appendage significantly outside preferred neutral position while tasks are performed.)

Engineering Control: Redesign or install adjustable workstations to reduce awkward joint angles. Encourage workers to change posture through out work shift. Position work in ways that eliminate long/excessive reach, decrease joint flexion/extension requirements, and promote neutral postures. Avoid requiring employees to work below knees and above shoulders. Provide tools that promote neutral joint angles.

Administrative Control: The greater the elbow angle the greater the stress. Train workers to keep elbows closer to body and in neutral posture as they work. Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards.

7. Do employees ever perform tasks requiring excessive force application?

Engineering Control: Use mechanical aids when lifting and/or repositioning heavy objects. Reduce the weight of load to limit excessive force exertion.

Administrative Control: Provide training in the use of mechanical aids, implement "buddy-lift" requirements and/or other lifting routines.

8. Are high impact and/or high vibration tools routinely used? (e.g. riveters, bucking bars, die grinders, sanders, weed eaters, or impact wrenches.)

Engineering Control: Redesign or install tools that promote neutral postures.

Administrative Control: Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards and ways to control them.

9. Is ergonomic job specific training given to workers?

Administrative Control: Job training should include techniques and recommendations on body positioning to reduce stress. Ergonomic training should be specific to the job to make workers aware of ergonomic hazards and ways to control them for each job's specific tasks.

10. Are procedures in place to accommodate fluctuations in staffing levels?

Administrative Control: Reduce mandatory overtime hours to allow for more time for rest and recovery time. Recovery time is essential to reduce the risk of repetitive motion injuries.

11. Are channels in place for employees to communicate ergonomic concerns?''

Administrative Control: Employer should set up an ergonomic committee or a suggestion box that employees can use to share ideas.

12. Do jobs have unnecessary steps? Observe jobs to determine this.

Administrative Control: Unnecessary steps in work sequence unnecessarily increases employee risk for injuries due to extra work stress. Conduct procedural reviews to examine efficiency of task sequence. Establish standard operating procedures that explain the most ergonomically efficient way to do the job.

13. Have workers been observed showing signs of fatigue? Does a worker's production rate decrease near the end of work shift?

Engineering Control: Environmental factors contribute to the onset of fatigue. Insufficient lighting, loud noise, and warm temperatures increase fatigue. Brighten up and quiet down the work space and cool down the temperature.

Administrative Control: Establish systems to rotate workers between tasks to minimize the effects of continuous exertion, repetitive motion, and/or awkward postures. Job rotations are best when each new task requires a different muscle group. Try to rotate from a job with high exertion to a job of lower exertion. Limit shift work to 12 hours.

14. Are workstation work surfaces too high/low? (Material greater than 18 inches from hands at neutral.)

Engineering Control: Adjust work station height to keep work as close to neutral posture as possible.

Administrative Control: Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards and ways to control them.

15. Does the location of materials promote reaching? (Material greater than 18 inches in front of the worker.)

Engineering Control: Adjust material flow closer to worker to minimize reaching.

Administrative Control: Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards.

16. Does angle or orientation of material transfer surfaces promote twisting?

Engineering Control: Line up materials in angles that reduce the twisting when workers are transferring them.

Administrative Control: Increase the frequency of job rotation from jobs with high frequency of twisting to jobs with no twisting. Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards and ways to control them.

17. Are there potential obstacles on floor that can prevent a clear path of travel? (Uneven, slippery, sloping, or trip hazards.)

Engineering Control: Control source of hazards.

Administrative Control: Install a housekeeping plan to monitor and control hazards.

18. Are materials handled above the shoulders or below the knees?

Engineering Control: Adjust workstation to reduce material handling in awkward positions.

Administrative Control: Increase the frequency of job rotation from jobs with high frequency of over head or below knee work to jobs with none. Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards.

19. Does the material handling require placing objects accurately/precisely?

Engineering Control: Install a sorting system that organizes the materials automatically to reduce stress on workers. Lift table can be used to reduce reaching when materials have to be placed.

Administrative Control: Establish ergonomic training that is specific to the job to make workers aware of ergonomic hazards.

20. Is good nutrition practiced?

Engineering Control: Provide healthy snacks for workers.

Administrative Control: Establish a health program that encourages a healthy lifestyle including training on good nutrition.

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