

## Back Injury Control Program

Back injuries are the most common type of Workers' Compensation claim. Back injuries also are one of the most costly employee work-related injuries. Eliminating and/or minimizing back injuries can result in lower Workers' Compensation costs and promote the well-being of employees. Implementing a back injury control program can help reduce these injuries.

### Loss Analysis

Analyzing prior loss experience will identify whether your company has a back injury trend. Supervisor Accident Reports, OSHA 300 logs, and your insurance carrier loss history reports are great resources for your analysis. Look for accidents that involve the back as the body part injured. Next, identify the injury type. Strains may be a common occurrence. Then, identify what caused the strain, such as lifting, twisting, pushing, pulling, or overexertion. Determine if these accidents are a matter of frequency and/or severity. Severity can be determined by counting the number of lost/restricted work days from the OSHA log 300 and the total incurred dollar cost from the insurance carrier loss history report for back injuries.

Further your analysis by looking for trends that tell what may be causing the back injuries. Do this by identifying the departments having back injuries, as well as the shift time worked, the day of week, and the time of day injuries are occurring. You are now ready to develop your plan to address a back injury trend.

For calendar year assessment of all employee recordable injuries and lost time accidents, use the OSHA incidence rate calculator at <http://data.bls.gov/iirc/calculate.do>. This assessment will tell if you are having more or fewer injuries than similar businesses in your NAICS code.

### Developing Back Injury Controls

The back injury control program should be part of your company's current employee safety program. A member of the management team with safety training experience should be assigned responsibility for implementing the program. It is important for management to support the program for maximum effectiveness. Management support should include:

- Establishing goals and objectives for program implementation and back-injury trend reduction
- Developing a written statement on policy and procedures to be shared with all employees
- Assigning responsibilities from upper management to the frontline workers
- Reviewing progress of goals and objectives during the year, giving direction and program promotion as needed

### Engineering Controls

A key component of a back injury control program is fitting the workstation to the employee as opposed to forcing the employee to fit the workstation. This is the basis of ergonomics. The back injury analysis will guide you to the departments with the greater number of back injuries and more severe back injuries. You may find this is where the employee is forced to adapt to their work and why backs are being injured.

Identify the department's job tasks requiring manual material handling. Apply general population ergonomic principles in evaluating the risk factors causing back injuries. Include the relationship of weight being lifted, height distance of the lift, body position, lifting frequency, object shape, and body motions (e.g., twisting, stepping distance, etc.) in the analysis. Seek input from Western National Insurance Group's Loss Control Department on ergonomic assessment tools.

Eliminate as many of these repetitive risk factors as possible through mechanical means, automation, or adjustments that will fit the workstation's design to the employee's height and reach characteristics. Ergonomically-based changes will often improve employee production, help improve employee attitudes, and reduce back-related injuries.



## Administrative Controls

Administrative controls are changes in work procedures to limit workers' exposures. Employees who are required to perform manual material handling need to be physically capable of performing the work. To identify the physical demands of jobs with a history of back injuries, use a job hazard analysis. Incorporate the physical demands into written job descriptions for use in the employee screening process when hiring new people or during an existing employee job transfer.

If post-job-offer physicals are utilized in the new employee screening process, have the industrial clinic include tests that assess for prior back injuries/abnormalities. Back X-rays have proven to be of little value as a screening device. Only a small percentage of pre-existent injuries are identified with X-rays. This tool can be utilized with a doctor's recommendation if further assessment is required.

Utilizing isometric strength testing, which evaluates the worker's strength relative to job requirements, can be an alternative to the physical examination. Isometric testing can be done by an industrial clinic or in-house with the purchase of strength-testing equipment. A thorough assessment of job lifting requirements to pre-determine employee screening standards is needed.

Consult with your legal counsel to be knowledgeable of the Americans with Disabilities Act reasonable accommodation requirements when using post-job-offer physical exams or strength testing.

## Employee Rotation

Employee rotation is an administrative control that can be an effective part of an overall back injury control program. The purpose is to reduce the repetition and duration of risk factors that can result in back injuries. It is important to assess how long an employee can safely be in a particular job before they need to rotate. Also assess the risk factors of the job into which the employee is rotating. In order for employee rotation to be successful, the job they rotate into would need to have different risk factors than the first job. Otherwise, the employee is just rotating from one lifting-related job to another.

## Employee Training

An effective back injury control program needs to incorporate management and employee understanding of how the back works and the risk factors that can result in a back injury. Training presentations and DVDs on back injury prevention are available from Western National Insurance Group's Loss Control Department and safety websites. You can customize these presentations by beginning with your company's and department's back injury statistics. After reviewing the body structure, include information on specific company rules relating to the use of mechanical lifting equipment, maximum weights to be manually lifted, team lifting requirements, and use of proper lifting techniques. Physical fitness and stretch/exercise programs are also good supplemental topics for any back injury control training program.

Supervisor involvement is critical for the effectiveness of your program. Include supervisors in all employee training sessions, and conduct separate supervisor training on ergonomic risk factor awareness, accident investigation procedures, and the importance of monitoring employee lifting techniques, including how to correct employees when unsafe acts are seen.

## Accident Investigation

All employee injury-related accidents should be investigated. Property-damage-only and near-miss accidents require investigative attention as well. Accident investigation needs to occur promptly with the focus on identifying accident cause(s) and implementing corrective action. Investigation is best done by the immediate supervisor with assistance from the safety director. For lifting-related injuries, focus on the details of the lift, prior history of back injury, and employee training received. Also include witness and injured employee statements. Safety Director or upper management review of the investigation and corrective actions are required. Accident investigation materials are available from Western National Insurance Group's Loss Control Department.

Risk factors to be addressed in back-injury-related accident investigation may include:

- Weight not handled close to the body (object was dirty, wet, or other reasons)
- Twisting while lifting or carrying object



## Accident Investigation (continued)

- Repetitive lifting or sustained awkward position
- Individual lifting too great of a weight for their physical capacity
- Lifting over the shoulder height

Possible corrective actions:

- Use of mechanical lifting equipment
- Weight reduction of object lifted (remove some weight to make item lighter)
- Reduce frequency of the lift
- Store heavier items lower and lighter items higher on racks, frequently handled items at mid-levels
- Adjust workstation height to fit the employee

## Return to Work Program

Severe back injuries will result in lost work time. To reduce these costs, utilize a return to work program with temporary modified job assignments. This program will help coordinate communication with Western National Insurance Group's Claims Department, company management, the injured employee, and the treating physician. All parties should work with the physician towards establishing a date for safely returning the employee to the workforce as quickly as possible. Consult with Western National Insurance Group's Loss Control Department for return to work program information.

## Back Program Conclusion

Your back injury control program should be a combination of engineering and administrative controls. To increase the effectiveness of the program:

- Seek frontline worker input into workstation changes
- Train supervisors and employees on risk factors contributing to back injuries
- Investigate accidents and implement return-to-work duty
- Gain upper management support and monitoring of program goals and objectives

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