

Job Transfers into High Risk Work Environments

Employee transfer can mean increased risk of injury

R.GAGNE, EET, CFE, NADEP

Copyright © 2010 Fit2WRKSM

ABSTRACT

An employee who permanently transfers from a non-physically demanding job to a physically demanding job title needs to successfully complete the appropriate work simulation exam that properly qualifies the essential and most critical demands of the new job. In an environment of tough economic times there has been a trend towards employees with seniority in middle management positions (where security of work has been in question) moving towards more physical demanding jobs where overtime and extra earning capacity is available. This creates a number of concerns including affects of age of worker, general physical abilities and educational / experience requirements. Both new applicants and transferring applicants into high risk job environments have to be monitored to reduce risk of injury to themselves and co-workers.

One key factor in Job Transfer is the requirement for employees to be able to withstand physical requirements such as high repetition, force, total spine and extremity range of motion, sustained posture or strength. Manual materials handling (MMH) is a component of many jobs and activities undertaken in life. Typically it involves lifting, lowering, pushing, pulling and carrying objects by hand. Loading and unloading trucks, carts, boxes or crates; moving parts or assemblies from one place to another; loading paper to the copier or picking binders from an overhead shelf; lifting patients from a bed or transporting them in a wheelchair are typical MMH activities found in work settings. The one thing all these tasks have in common is the potential to result in some adverse health effect, from simple cuts, bruises and sore muscles to more serious conditions related to low back pain (LBP) and strains and sprains. Based on available statistics, almost half of all low back injuries are related to lifting, about another 10 percent are associated with pushing and pulling activities, and another 6 percent occur while holding, welding, throwing or carrying materials. The introduction to the *Applications Manual for the Revised NIOSH Lifting Equation* says that low back pain and injuries attributed to manual lifting activities are among the leading occupational health and safety issues facing preventative medicine.



Based on available statistics, almost half of all low back injuries are related to lifting, about another 10 percent are associated with pushing and pulling activities, and another 6 percent occur while holding, welding, throwing or carrying materials. The introduction to the *Applications Manual for the Revised NIOSH Lifting Equation* says that low back pain and injuries attributed to manual lifting activities are among the leading occupational health and safety issues facing preventative medicine.

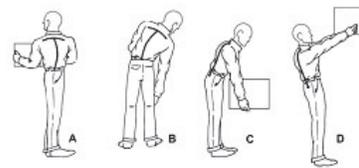
Physical Risk Factors during Transfer

Physical risk factors associated with injuries fall into three main categories: personal risk factors, work methods and job demands. Personal risk factors include specific human characteristics that either increase or decrease the likelihood that an injury will occur. Human characteristics that directly affect physical task demands include age, gender, physical conditioning, anthropometric measures and medical condition (Chaffin & Anderson, 1991; Waters & Putz-Anderson, 1997).

Work methods and job demands are directly related to the physical hazards workers encounter on a daily basis. These physical hazards include non-neutral postures, forceful exertions, whole body and hand-arm vibration, mechanical compression, repetition and the frequency and duration of work tasks.

An example of physical risk would be those activities associated with low back pain:

The workplace risk factors typically associated with low back pain include handling heavy loads, task repetitiveness, extreme postures of the back (twisting, bending, stretching and reaching), static postures, whole body vibration, prolonged sitting, direct trauma to the back (striking or being struck by an object), slips, trips and falls, and work-related stress.



Extreme postures of the back that are of particular concern:

- A. Twisting the back without moving the feet
- B. Lateral bending
- C. Back flexion; associated with picking up objects below knuckle height.
- D. Back extension; associated with reaching above the heart.

Sustained posture risk

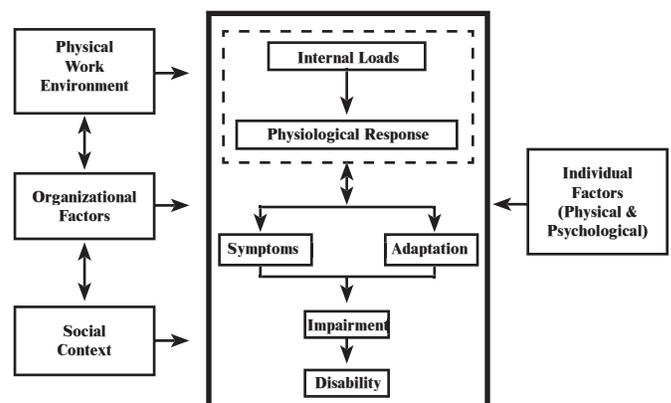
An obstruction at the workstation forces the handler's back into flexion, moves the object away from the spine and increases the load on the spine.



How and why do injuries occur?

Workplace injuries occur as a result of a complex interaction of factors in three primary domains: the physical work environment (including work procedures), organizational factors and the social context of the workplace. Individual physical and psychological factors act as moderators for these factors in symptom development or adaptive response to risk exposures.

Injury Conceptual Model (adapted from National Research Council, 2001)



Although we primarily look at the physical component in our screening process, it is important to note the four main approaches to analyzing the risks associated with a job.

Biomechanical approach: Biomechanics relates the principles of physics to the human body to determine the mechanical stresses that affect it and the resultant muscular forces needed to counteract the stresses. The design goal of biomechanics is to ensure that loads and strength demands are reasonable.

Physiological approach: The physiological approach is concerned with energy consumption and the stresses acting on the cardiovascular system. As we perform a repetitive lifting task, our oxygen consumption increases, our heart beats faster, and muscles become fatigued. This is the physiological cost associated with the activities we perform.

Psychophysical approach: The underlying premise of the psychophysical approach is that when people perform a lifting task, they intuitively combine both biomechanical and physiological stresses in their subjective perception of the demands placed on them. In other words, people adjust their workload to the maximum amount they feel they can sustain without undue strain or discomfort, and without becoming unusually tired, weakened, overheated or out of breath.

Epidemiological approach: Epidemiology studies groups of people and analyzes information and data to determine the root causes of (in the case of manual materials handling) back injuries. A better understanding of what has happened in the past can be used to help prevent injuries in the future.

Age and Seniority

It should be noted that the risk of job transfer into a more physically demanding job is not solely isolated as an issue with the aging workforce. This risk is associated with any candidate moving into



a higher risk environment. A high risk environment is described as one that is considered to have essential duties that require medium or above manual material handling and that have historically displayed a high incidence of injury or illness due to job hazards. However, as age and time on the job increases for an employee so does seniority. This as noted above, is at this moment in our history, creating a trend towards movement of senior employees moving to move physically demanding positions to increase job security and monetary reasons. This creates a new risk as a large percentage of these managers are over 65 years of age.

Our mature employees will probably want to work longer than earlier cohorts, but their continued work requires that employers hire and retain them. Employers value older workers for their maturity, experience and work ethic, but worry about out of date skills and high costs. Slower overall labor supply growth may increase demand for older workers if employers can easily use older workers to do the work once done by younger workers.

Like adults of all ages, older Americans work in a wide variety of occupations.

- **36 percent of workers age 65 or older are employed as managers or professionals**
- 17 percent work in service occupations
- 15 percent work in sales
- 14 percent work in office and administrative support occupations
- 17 percent work in blue collar occupations, including construction, factory, and transportation jobs

Older workers are generally distributed across broad occupational groups in similar proportions as workers of all ages, except that younger adults are more likely to work in blue collar occupations than older adults and older adults are more likely to work in sales. Older workers are also more likely to be managers than younger workers.

Productivity of Older Workers

Older workers may be more productive than younger workers because of their greater experience in the labor market and lower rates of absenteeism (Martocchio 1989), but their education and skills may be outdated and declining health may impair their ability to complete physically demanding tasks. Health concerns may be particularly problematic for workers with limited education, because they are more likely to work in physically demanding jobs and develop more health problems as they begin to age than more educated workers (Johnson, Mermin, and Murphy 2007; Johnson, Mermin, and Resseger 2007).

ADA/EOC and Job Transfer

“Employees requesting job transfer to another job may be tested as long as all candidates are similarly tested, the testing is job relational, tests are for qualified essential duties and same testing is performed for new applicants (post-offer pre-employment screening) as well as for standard job transfers.”

The ADA provides the basic framework regarding the rights of individuals with disabilities. The ADA essentially governs the employers' obligations with respect to claims for accommodation of a worker's physical limitations. The ADA generally prohibits employers from “discriminating against a qualified individual with a disability because of the disability of such individual.” To be covered by the ADA, an employee must establish that she is “a qualified individual with a disability,” which is defined as “an individual with a disability who, with or without accommodation, can perform the essential functions of the employment position that such individual holds or desires.” In the context of the ADA, a worker who suffers a physical limitation and is unable to perform the requirements of the job, may either request an exemption from the physical requirements or may request a transfer to a less physically demanding position. This is a “reasonable accommodation” request under the ADA.

Job Accommodation Request and Legal Considerations for the Employer

Under the law, an employer may be required to change certain requirements of the worker's job, but the employer is not required to exempt a disabled worker from performing those duties that are considered the “essential functions of the employment position.” Whether a lifting or mobility requirement is an “essential function” calls for a fact specific analysis.

Health care employers should identify the essential functions of each employee position and should strictly follow the decision. Further, healthcare employers should ensure that their written descriptions of each employee position reflects an accurate description of the essential job functions. These written job descriptions should be updated so they accurately reflect current job duties being performed by the worker. If a healthcare employer decides that an accommodation should be given, it should be made clear that the accommodation is being done on a trial basis or for a specific time period, and that the essential functions of the job have not changed. While these suggestions may not prevent a worker from suing under the ADA, the healthcare employer's practice of preparing accurate written job descriptions, having a consistent approach, and preparing accurate documentation, will all prove to reduce liability exposure when confronted with the “job accommodation” request.

Risk of Injury During Testing

The employer has every right to protect its workers from injury and subsequently may also ask the employee requesting transfer to isolate the employer from risk due to the testing. The Equal Employment Opportunity Commission, on October 10, 1995, stated, "An employer may ask an applicant to assume responsibility and release the employer of liability for injuries incurred in performing a physical agility or fitness test." This being stated, the tests that encompass the protocol need to be job relational and the same tests need to be done on all workers transferring into the job as well as for new hires during post offer pre-employment screening.



Testing Protocol

If you already have an existing post-offer pre-employment screening protocol for the job in question, then, assuming that it has been validated, it can be used as a Job Transfer Testing Protocol. In its most simplistic form the protocol needs to cover tests that are based on the essential and critical demands of

the job. Each test has to be based on peer-reviewed published literature with appropriate documentation justifying the extrapolation to an average eight hour work day. For example a lift task that compares to an Industrial Standard percentage through methods time measurement that can be cross qualified to an average workday. Your Industrial Specialist will be able to effectively document each test and protocol for use. As with post-offers, the test is brief and focused on testing not only job functions, but tasks associated with body parts/functions aligned with your highest rate of injury or illness in the job noted.

Legal Precedence

Case where seniority overruled ADA in Job Transfer



US Airways vs R. Barnett . (Barnett v. U.S. Air, Inc., 157 F.3d 744, 748 (9th Cir.1998))

Barnett had worked for the airline and its predecessors for eight years when, in 1990, he suffered a back injury that his doctor said ruled out heavy lifting and other tasks necessary for moving cargo. USAir transferred Barnett to a more suitable job in the mail room, where he worked for two more years. Then, in 1992, an employee with more years at the company than Barnett asked for that mailroom slot. Barnett faced being bumped back into cargo, an outcome that prompted him to leave the company.

Barnett sued US Airways in federal district court in San Francisco, arguing that by invoking its company seniority policy to require him to return to cargo where he could not perform the physical demands of the job, US Airways had discriminated against him in violation of the ADA. He claimed that permitting him to keep the mailroom job would have been a reasonable accommodation that would have let him remain gainfully employed. The question facing the court is whether US Airways' seniority system automatically trumps the company's obligations under the ADA. In this case seniority overruled ADA obligations. If Barnett would have stayed with the company, US Airways ultimately would have refused the request to transfer to the cargo area due to physical limitations and Barnett would have been out of a job.

A company's responsibility in job transfer is to protect the safety of the employee being transferred and to ensure the safety of the other employees in that environment. The responsibility for accommodation is as follows: "the reasonable accommodation standard is intended to alleviate obstacles to equal employment opportunity, not to guarantee employment."

In Conclusion

In an effort to complete the effectiveness of any Risk Management System, job transfers have to be reviewed and testing needs to be implemented for those jobs that are considered high risk. This will ensure the safety of those transferring and also to those fellow workers already on the job. With adherence to ADA and EEOC criteria and an understanding of testing methodology, a protocol can be easily developed and implemented. Ultimately we fall back on our understanding of the Industrial Athlete Model where the employees have to be "game ready" for their particular job functions – moving from being a baseball player to that of a wrestler not only takes a skill set, it also involves physical training or an injury is bound to occur. This analogy is no different for a desk worker moving to a position as a dockworker.

The information noted above is a summary of one of the components of Fit2WRK by USPh. This integrated model is available through USPh in close to 400 facilities and 44 states nationally. For additional information on how the Fit2WRK Model could help your organization, visit; www.Fit2WRK.com or call 1-877-Fit-2WRK.

References

1. A Guide to Manual Materials Handling, By A. Mital, A.S. Nicholson and M.M. Ayoub, Taylor, London,1993.
2. American National Standard Practice for Industrial Lighting, American National Standards Institute/Illuminating
3. Engineering Society-RP-7-1991, Illuminating Engineering Society of North America, New York, 1991.
4. Applications Manual for the Revised NIOSH Lifting Equation, National Institute for Occupational Safety and Health
5. (NIOSH), By Thomas R. Waters, Vern Putz-Anderson and Arun Garg, DHHS (NIOSH) Publication No. 94-110
6. Ergonomics for Beginners, By J. Dul and B. Weerdmeester, Taylor and Francis, London, 1993.
7. Ergonomic Design for People at Work, Volume 2, By Eastman Kodak Co., Ergonomics Group, Van Nostrand Reinhold,
8. Ergonomics, Work and Health, By Stephen Pheasant, An Aspen Publication, Gaithersburg, Md., 1991.
9. Fitting the Task to the Man, 4th Edition, By Etienne Grandjean, Taylor and Francis, London, 1988.
10. Human Factors in Engineering and Design, 7th Edition, By Mark S. Sanders and Ernest J. McCormack, McGraw-Hill
11. Humanscale 1/2/3, 4/5/6, 7/8/9, By N. Diffrient, A.R. Tilley, J.C. Bardagjy, MIT Press, Cambridge, Mass., 1974.
12. Illuminating Engineering Society Lighting Ready Reference, Edited by J.E. Kaufman and J.F. Christensen, Illuminating
13. Engineering Society of North America, New York, 1989.
14. Manual Materials Handling, By M.M. Ayoub and A. Mital, Taylor and Francis, London, 1989.
15. Occupational Biomechanics, 2nd Edition, By Don B. Chaffin and Gunnar B.J. Andersson, John Wiley and Sons Inc.,
16. Sprains/Strains," Journal of Occupational Medicine, Volume 26, pp. 443-448.
17. Lifting (DHHS (NIOSH) Publication No. 81-122). Washington, D.C.: Superintendent of Documents.Mital, A.