

**SAFE****Women Working in Construction: Risks and Rewards**

*By Linda M. Goldenhar, Laura S. Welch, and Katherine L. Hunting*

Women currently make up almost half of the U.S. work force and increasingly are moving into occupations, such as the construction trades, once held exclusively by men. In 1997, there were 8.1 million construction workers, of which 2% were skilled tradeswomen.



Construction is a dangerous industry: 17% of all fatal on-the-job injuries occur in construction, which also has a high rate of nonfatal injuries. While both men and women working in construction face many of the same risks, there are some unique issues that are of greater concern to women.

The average fatality rate of 1.80 per 100,000 female construction workers was more than twice the all-industry average for women workers. Tradeswomen are more likely than their male counterparts to die in job-related motor vehicle accidents or from job-related homicide and less likely to die from falls. Of women killed by motor vehicles, 30% worked as so-called flaggers.

Women working in construction, as in other industries, are at a disproportionately higher risk for job-related musculoskeletal injuries, suffering 63% of all work-related repetitive motion injuries. To address this issue, tradeswomen have suggested that tools, materials, and equipment be available in sizes and designs appropriate for women.

Female construction workers often cite back injuries as a major concern and have said that safe lifting techniques should be encouraged for those who have less upper-body strength than the average male construction worker. According to the revised National Institute for Occupational Safety and Health lifting equation, if the lifting demands are limited to about 75% of the weight that women can safely lift, then women (and men) should be able to perform the job without significantly increasing their risk of low back pain.

**Quality of Work Life and Health**

Construction site hazards such as radiation, glycol ethers, and lead can affect a woman's reproductive health, including pregnancy outcomes. Tradeswomen need accurate information on the hazards posed by toxic chemicals. During the later stages of pregnancy, strenuous climbing and heavy lifting may also pose some medical risks.

Tradeswomen report that they may receive less on-the-job safety training and mentoring from supervisors and coworkers than do tradesmen. This can create a potentially dangerous situation in which tradeswomen are asked to do jobs for which they are not properly trained, then are injured when they do them or seen as incompetent when they are unable to do them. Employers and unions should make skills training courses available and encourage all workers to take advantage of them. Supervisors need to emphasize safety on the job site.

Construction tradeswomen have reported experiencing job-site isolation as well as harassment and verbal abuse by coworkers severe enough that some women have

left construction and looked for other employment. Working in a hostile workplace can cause a worker to become distracted. Distractions while working can lead to overlooking proper safety precautions resulting in on-the-job injuries. To reduce the incidence of complaints and the potential for litigation, some segments of the industry are implementing training courses and more rigorously enforcing federal laws against harassment.

It is often difficult for tradeswomen to obtain properly fitting personal protective clothing (PPC) or personal protective equipment (PPE). This becomes a safety issue as oversized gloves or coveralls can get caught in machinery, or shoes that are too big can cause one to trip and fall. Employers should make sure that all workers, of all sizes, have well-fitting PPC and PPE for safe and efficient performance. Manufacturers of PPC and PPE should be encouraged by the construction industry to expand the range of sizes offered in both clothing and equipment so that workers of all shapes and sizes are protected.

Finally, most construction workers, both men and women, often encounter work sites with dirty toilets, or worse yet, no toilets at all. Women state that they avoid drinking water during the day since they may have to wait until lunchtime to relieve themselves. It has been shown that holding urine in the bladder for long periods of time leads to a higher incidence of urinary tract infections. Also, adequate hand-washing facilities are virtually nonexistent, and this poses a health risk to workers particularly when they eat their lunch.

The construction industry needs to recognize that the risks involved in construction work are not unchangeable and that taking preventive actions and paying attention to the health and safety of workers are worth the time and effort. Construction management, as well as workers and unions, needs to work together to make the construction site a safe and healthy place to work.

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