

Occupational Health & Wellness for Manufacturing Workers

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HEALTHY WORKER SERIES 3.0

Although the manufacturing sector comprises a diverse array of industries worldwide, the majority of manufacturing jobs are labor intensive. Workers who are engaged in transforming materials, substances, or components into products are at risk for injury from physical exertion; contact with machinery and equipment; long work hours; changing work shifts; slips, trips, and falls and new methods or organization that may increase job strain. 100,000+ manufacturing workers suffer a job-related injury each year. Many companies have key employees with specialized skills who cannot be easily replaced. A single worker missing a day or more of work due to injury or illness can have a significant operational and financial impact on your manufacturing business. A proactive strategy to prevent on-the-job injuries can help protect against disruptions and high costs associated with the absence or loss of a critical



The manufacturing sector is comprised of establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products.

As of 2020, there was an average of 12,083,479 people employed in the private sector of this industry in 358,272 establishments. In the private manufacturing industry during 2020, there were 373,300 total recordable cases (TRC) of nonfatal injuries and illnesses. Of those, 135,900 had days away from work (DAFW), 108,800 had days of job transfer or restriction (DJTR), and 128,700 had other recordable cases (ORC). The total recordable case incidence rate per 100 full-time equivalent (FTE) workers was 3.1

Nature of injury or illness

- Sprains, strains, tears: 29,620 (30%)
- Soreness, pain: 15,940 (12%)
- Fractures: 12,030 (11%)
- Cuts, lacerations: 11,660 (13%)
- Bruises, contusions: 7,540 (7%)

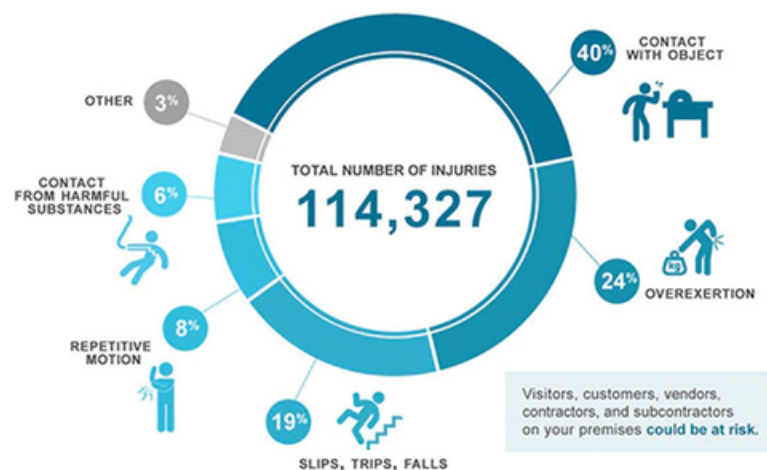
Part of body affected

- Body systems: 31,780
- Hand: 23,600
- Back: 13,560
- Shoulder: 8,380
- Knee: 6,930

Event or exposure leading to injury or illness

- Exposure to harmful substances or environments: 35,800
- Struck by object or equipment: 18,040
- Fall on same level: 12,910
- Caught in or compressed by object or equipment: 11,240
- Overexertion in lifting or lowering: 9,760

INJURIES CAN BE CAUSED BY ENVIRONMENT AND BEHAVIORS



SOURCES: 50% & Key Concern = Travelers IndustryEdge® Survey 2012; 38% = Bureau of Labor Safety Statistics 2011; Injuries = National Safety Council Injury Facts® 2013 Edition.

Challenges

According to Travelers Claim data, the average number of days employees missed due to a workplace injury in the manufacturing industry was 66. Those who had been in their role for less than one year before being injured made up 28% of all manufacturing claims. Experienced workers, who in many cases use more sophisticated machinery, were injured less frequently but had costlier claims. During the five-year period that was analyzed, those with 25+ years of experience and those with 10-14 years represented the smallest percentage of claims (7% and 8%, respectively). However, injuries in each of these segments of workers cost approximately 17% more than the average cost of all other manufacturing claims.

Occupational health in manufacturing plays an integral role in employee well being and employer stability. Health issues in the manufacturing industry will vary depending on what is being manufactured. Whether fridges or foods, car parts or phones, each will have their own hazards and risks.

OCCUPATIONAL HEALTH ISSUES IN MANUFACTURING CAN INCLUDE:

- **Flour and other food dusts** - Exposure to flour dusts can cause respiratory disease such as occupational asthma and hypersensitivity pneumonitis.
- **Manual Handling & Awkward Postures** - Heavy lifting, poor postures, prolonged static, repetitive or forceful movements can cause musculo-skeletal disorders.
- **Spray paints and coatings** - Exposure to spray paints and coatings can cause skin problems and respiratory disease such as occupational asthma.
- **Noise** - Exposure to noise causing hearing loss and tinnitus.
- **Vibration** - Exposure to vibration can cause neurological or circulatory damage, and musculo-skeletal disorders.
- **Sickness Absence** - Sickness absence can cause disruption to production and additional pressure on colleagues.

MOVEMENT TOWARDS ONSITE HEALTH CARE

The primary purpose of on-site health care programs is to improve the health and safety of the workplace. These programs provide comprehensive medical services and proactive care that can enhance the health and well-being of employees through accident prevention, accident treatment, early detection, and safety training. One of the primary advantages of on-site health care is the prevention of accidents and injuries. Manufacturing is one of the top ten most dangerous industries in the US. The physical nature of this occupation poses many risks to employees. An on-site health care program can promote workplace safety and identify potential hazards. These programs help employers find ways to eliminate or mitigate hazards, creating a safer environment for employees.

In an accident, on-site health care programs can treat minor injuries and help employees recover. Additionally, these programs can contribute to the early detection and treatment of health concerns. These medical professionals conveniently offer employees access to proactive care, thus minimizing the likelihood of more severe health problems. On-site health care programs also offer education and training opportunities to raise awareness about health and safety among manufacturing workers. These programs can include seminars, workshops, and demonstrations regarding specific safety requirements. These training sessions equip employees with the knowledge and tools to maximize their safety and reduce workplace injuries.

COST SAVINGS

On-site health care programs in the manufacturing industry offer substantial cost savings by reducing health care costs and decreasing workers' compensation claims. On-site health care programs give employees access to some medical services on-site, eliminating additional transportation costs and time away from work. Employees may see improved health outcomes and visit an off-site provider less often when employers implement on-site health care services. In turn, this results in a reduction in insurance claims and insurance premiums for employers.

INCREASED EMPLOYEE SATISFACTION & RETENTION

By providing employees with comprehensive benefits and wellness initiatives, on-site health care programs can improve employee satisfaction and retention. Employees who feel valued and supported are more likely to be engaged and motivated in their work. On-site health care initiatives demonstrate that the company prioritizes the health and well-being of its workforce, which fosters a positive and caring organizational culture. When employees feel valued and cared for by their employers, they are less likely to seek job opportunities elsewhere that may offer similar benefits. On-site health care is a valuable perk and may factor into many employees' decisions to stay with a company.

COMPLIANCE WITH REGULATIONS

On-site health care programs in the manufacturing industry play a crucial role in helping companies comply with various regulations and meet their legal obligations. The Occupational Safety and Health Administration (OSHA) regulations seek to protect employees from hazards and create safe working environments. This extensive list of requirements and guidelines can seem daunting, particularly for a manufacturing company. On-site health care programs can help with compliance by focusing on preventative measures and prompt treatment of injuries. Additionally, these programs can help detect hazards and work to mitigate or eliminate the possibility of injury.

OCCUPATIONAL HEALTH & WELLNESS FOR MANUFACTURING WORKERS

LEADING CAUSES OF INJURIES IN THE WORKPLACE

Now let's take a closer look at occupational research from the 2016 Liberty Mutual Workplace Safety Index. Here is how Liberty Mutual ranks workplace injuries, in descending order of occurrence based on health care and worker compensation costs.

1. Overexertion involving outside source
2. Falls on the same level
3. Falls to lower level
4. Struck by object or equipment
5. Other exertions or bodily reactions
6. Roadway incidents involving motorized land vehicle
7. Slip or trip without fall
8. Caught in/compressed by equipment or objects
9. Struck by object or equipment
10. Repetitive motions involving micro-tasks



*The first six items on the list also represent the highest volume of occurrences.

WHICH ARE THE MOST INJURY PRONE MANUFACTURING INDUSTRIES?

The Bureau of Labor Statistics (BLS) keeps track of different rates of manufacturing accidents within 21 different manufacturing sub-categories, ranging from primary metal manufacturing to plastics and rubber products manufacturing. Wood product manufacturing has the highest rate of non-fatal occupational injuries and illnesses. (non-fatal injuries that resulted in employee days off, employee work restrictions or employee job transfer.)

Solutions

INJURY PREVENTION

Once a full job risk analysis has been completed and the contributing factors have been identified, actions can be taken to help ensure the risks are minimized including changes to equipment, workplace protocols, education or those below.

- Pre-Employment Physical Testing
- Drug Screens via Local Urgent Care
- Conduct Regular Risk Assessments
- Provide Comprehensive Training Programs
- Promote Ergonomic Practices
- Incorporate a Material Handling Program
- Implement Crowd Management Strategies
- Collaborate with Suppliers and Vendors
- Regular Floor Maintenance / Clear Signage
- Employee Open Communication & Participation
- Evaluate and Improve Safety Protocols
- Chemical safety and hazard symbols
- Slip, trip and fall prevention
- Personal protective equipment basics

There are many steps that employers can take to proactively protect their workforce from musculoskeletal injuries. These steps can be adapted to match the job requirements and needs of the individual worker. Identify specific movements and positions within each job role that can pose an increased risk for musculoskeletal disorders. These include prolonged standing, heavy lifting, twisting, reaching, pushing, pulling, bending, awkward postures, and repetitive movements.

Examine each aspect of the work environment that could be associated with an increased risk for musculoskeletal disorders. This includes the equipment and machinery that is used for job tasks, workstation set up, and environmental factors such as lighting and temperature.

OPTIMIZE POST INJURY CARE DELIVERY

- **Access to Care** On-Site or Near -Site access to Occ Health is key to reducing overall cost and risk.
- **Prevention and Wellness Services** such as preventive screenings, immunizations.
- **Choose your Occupational Team** wisely building your team with those that are familiar with the worksite and its challenges is integral.
- **Diagnostics & Testing** play a significant role in the determination of the treatment directive for most serious injuries and the time delays in receiving them can negatively affect recovery through prolonged delays, degraded health, and discomfort of the employee.
- **Time to Care Delivery** As with any injury, it is paramount that we expedite care delivery for all injuries to ensure minimal discomfort to employees and to prevent downtime at the employer.
- **Continuum of Care** If an injury does occur, you want a trained medical team that is familiar with the company and the workloads of the employees

With regards to NEW EMPLOYEES, 28% of all Manufacturing Injuries were related to first-year employees and they in turn made up 24% of all Manufacturing compensation costs!

Results

- **90%** of employees with initial injuries return to work for their next scheduled shift.
- **90%** of lower back pain cases do not need X-rays.
- We see significant injuries in the same day. For non-urgent injuries, we see them within three days or less.
- **92%** of urgent care clinics-maintained wait times of 30 minutes or less in 2015. The Urgent Care Association of America's 2016 Benchmarking Report
- **57%** of urgent care patients experience wait times of less than 15 minutes.
- When you're seen for health care concerns more quickly, you're able to receive a diagnosis and start appropriate treatment more quickly too. Not only does this efficiency mean less wasted time for you, but it also means you'll be feeling like yourself again in no time. In comparison, it should be noted that National standards show that the average wait time at an emergency room is four hours.
- Studies show the treatment for the most common injuries and illnesses at an occupational health or urgent care is equal to or better than the care at emergency rooms. Urgent care centers are also known for more personalized care. The walk-in urgent clinic is a medical facility that provides relatively quick treatment for acute illnesses and minor injuries. Urgent care centers are well known for being the first-place people turn to for quick medical assistance. When most people think of urgent care centers, they automatically assume that they only offer treatment for non-life-threatening medical conditions. However, urgent care centers can offer much more to the public as a valuable member of the medical community.

Summary and Overview

Our hope with this article is to provide a better understanding of the hazards that the manufacturing operations have as well as their consequences on health, wellness, and productivity. The use of Urgent Care clinics has proven to save money by reducing unnecessary ER use and reducing hospitalizations, while community access and close proximity reduces downtime. Manufacturing companies that have implemented injury prevention and Post Injury Care efforts focusing on musculoskeletal and ergonomic concerns have reported reduced work-related injuries and associated workers' compensation costs. Fewer injuries improve morale, reduce employee turnover, encourage employees to stay longer and discourage senior employees from retiring.

RESOURCES

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"At Bon Secours Mercy Health, we pride ourselves in assisting the Manufacturing Industry to determine the appropriate solution for their employee health and wellness options. Whether it is an on-site or near-site solution, our staff have the expertise and passion to assist in risk mitigation, reduce claim cost and overall provide an excellent quality of care for the employees."

Anne Dunnington

Vice President, Bon Secours Mercy Health Occupational Health Services

Learn More

To receive more information on how an integrated approach towards occupational health can help your employees, please reach out to us at:

**Bon Secours Mercy Health, 1701 Mercy Health Place,
Cincinnati, OH 45237, (855) 504-0424.**

