



# THE MOST COMMON SAFETY HAZARDS PART 2



The **NEXT** three (3) most common Safety Hazards at work are we're exploring three more common workplace accidents with a particularly high potential for injury or fatality.

## Transportation And Vehicle-Related Accidents

Where there is equipment, vehicles and large trucks, there's the potential for vehicle-related accidents. These accidents include being struck or run over by a moving vehicle, falling from a vehicle, being struck by objects falling from a vehicle and getting crushed by or stuck under an overturned vehicle. Vehicle-related accidents are the most common cause of fatal injuries in the agriculture industry but they can be equally catastrophic in industrial or manufacturing environments as well.

There are two distinct kinds of vehicle-related accidents.

- *On The Road* -- Workers can be injured or killed after being struck by a vehicle while repairing roads or other work in traffic zones.
- *In The Workplace* -- Operators of vehicles and equipment can be injured or cause injury to pedestrians.

Avoiding workplace transportation accidents begins with assessing who is at risk, as well as where and when they most commonly occur. Only then are prevention measures -- such as vehicle/worker orientation and safe systems of work -- more easily established. Focus should be placed on workplace design: layout routes should always segregate pedestrians and vehicles and

any obstructions should be clearly visible. Directions, speed limit and priority signs are also helpful.



## Fire And Explosions

Unexpected explosions and fires in the workplace are frequently caused by risk factors such as faulty gas lines, poor pipefitting, improperly stored combustible materials or open flames. The resulting injuries incurred include damage to the respiratory system, varying degrees of burns and potential disfigurement. Explosions and fires account for 3% of workplace injuries and have the highest casualty rate of all probable workplace accidents.

There are four types of injuries commonly associated with fires and explosions:

- *Primary Blast Injuries* -- Occurs due to the effects of pressure on body tissues, affecting ears, lungs and the GI tract.
- *Secondary Blast Injuries* -- Occurs when flying objects strike nearby workers.
- *Tertiary Blast Injuries* -- High-energy explosions can lift someone off the ground and cause them to fly into surrounding objects.
- *Quaternary Blast Injuries* -- Everything else that happens as a result of an explosion: crush injuries, burns and inhalation of toxic substances.

OSHA recommends following its [hazard communication standards](#) to help workers avoid fire and explosion injuries. In addition, safety data sheets (SDS) for chemicals should be kept on hand and employees should wear personal protective equipment at all times. Also, every workplace should have a clearly communicated evacuation plan and an effective alert system in place to quickly inform everyone of hazards and emergency situations.



For the final installment in common workplace accidents we'd like to turn your focus to a set of workplace injuries that have recently become prevalent for all types of businesses. These injuries occur over time but are equally as treacherous as the first four types of workplace accidents outlined in this week's posts.

## Overexertion And Repetitive Stress Injuries

Although more subtle than a catastrophic explosion, musculoskeletal disorders are the most costly workplace injuries. Complaints of back pain alone cost employers an estimated \$7.4 billion



annually and lead to 100 million lost workdays annually. These kinds of injuries contribute to loss of productivity and millions in direct costs. They also result in millions in annual health benefit payout costs.

The financial impact on the employer is one thing, but the long-term effects on workers are often severe and potentially debilitating.

Overexertion injuries are related to pulling, lifting, pushing, holding, carrying and throwing. They account for close to 30% of occupational injuries. Oddly, they are common amongst the youngest workers.

Similarly, RSIs (Repetitive Stress Injuries) are the fastest growing category of workplace injury and comprise more than 100 different types of job-induced injuries from wear and tear on the body. Both overexertion and RSIs are severe enough to inhibit simple activities with crippling and debilitating pain, not to mention severe impairment of movement. They may even eventually permanently impair a worker's ability to perform his or her job.

Causes of overexertion and RSIs, include:

- *Improper Lifting* -- Bending at the waist instead of at the knees when carrying or moving heavy objects.
- *Manually Lifting Heavy Objects* -- Especially objects weighing over 50 pounds, without the assistance of a co-worker or lifting device (manual or mechanical).
- *No Breaks* -- With repetitive work, short breaks should be required, or the work may eventually result in too much wear and tear on the body.
- *Speeding Up The Line* -- Automation has created work conditions that are faster and often reduced to limited, repetitive tasks.
- *Intensive Keying* -- Constant typing and clicking strains muscles and tendons.

What should you do about overexertion and RSIs in your workplace?

Ergonomics -- the science of adjusting the job to fit the body's needs -- provides injury prevention solutions that are simple and relatively inexpensive. Workers assigned to tasks that overexert or require repetitive motion should be required to take frequent short breaks to rest and stretch. Manual or mechanical lifting equipment should be provided, especially in cases where the items lifted are over 50 pounds. Varying workers tasks to break up the repetitiveness is also beneficial.

