



Proof of Training

Print name: _____ Signature: _____ Date: _____

Fatigue Management Policy (Working Extended or Unusual Shifts)

Purpose

This policy is intended to help manage worker fatigue such that it does not contribute to health, safety, quality or productivity concerns in the workplace. The policy aims to eliminate or otherwise minimize risks associated with fatigue. This policy is aligned with the American National Standards Institute (ANSI) and American Petroleum Institute (API) 755 Best Practice for Maximum Work Hours. Fatigue related impairment is considered a workplace hazard by OSHA.

Scope

This policy will apply to all work performed by Unger Construction employees and subcontractors including, but not limited to, the following activities: construction, installation, demolition, remodeling, relocation, refurbishment, testing, and servicing or maintenance of equipment or machines. ANSI/API 755 was written primarily for petroleum workers however OSHA and other governmental agencies believe the standard applies to all employees working nights, rotating shifts or extended hours.

Objective

The objective of this policy is to ensure identification and management of situations that may be associated with worker fatigue. With the goal of developing a culture that includes fatigue risk as a potential safety, productivity and quality issue.

Responsibilities

Management (Board of Directors and Project Managers)

Management is responsible for ensuring that the materials (e.g., tools, equipment, personal protective equipment) and other resources (i.e., worker training materials) required to fully implement and maintain this program are readily available where and when they are required. Additionally, management will monitor the effectiveness of the program, provide technical assistance as needed, and review the program bi-annually.

Program Manager

Dave Simpson is responsible for the development, documentation, training and administration of the program. This position carries the responsibility of insuring this program is adhered to and that proper reporting is executed.

Supervisors (Superintendents and Foreman)

Supervisors need to understand how fatigue can be managed, recognize fatigue and take appropriate action when a worker is displaying fatigue related impairment. The management of fatigue is considered a shared responsibility between supervision and an employee. Supervisors are responsible for ensuring that a task specific job hazard analysis (JHA), also known as a safe work plan, is developed. The JHA will select, implement and document the appropriate site-specific control measures as defined within this policy. Supervisors will direct the work in a manner that ensures the risk to workers is minimized, adequately controlled and that practices defined by this policy will be followed. Supervisors are responsible for ensuring Unger Construction employees and subcontractors are following expectations. Supervisors will be held accountable for enforcing the requirements of this program. Undesirable behavior will not resolve itself, therefore supervisors must be directly involved with modifying behaviors inconsistent with program expectations. Supervisors will be held accountable for enforcing Unger Construction's disciplinary program.

Workers (Employees and Subcontractors)

The management of fatigue is considered a shared responsibility between supervision and an employee. Unger Construction has high expectations and requires safety excellence for each employee, crew, project and for our entire company. Workers are required to follow the minimum procedures outlined in this program. Workers are responsible for knowing the hazards and the control measures established in the JHA. Workers are responsible for using the assigned PPE in an effective and safe manner. Workers are responsible for stopping unsafe acts and correcting unsafe conditions on the spot as soon as they are discovered. Any deviations from this program must be immediately brought to the attention of your supervisor. Workers that choose to conduct themselves in a manner that is inconsistent with these expectations will be held accountable for those decisions and may incur disciplinary actions.

Training

Training and education to ensure all employees understand the meaning of fatigue and have the knowledge and skills to practice effective fatigue management.

Proof of training is available on the "S" drive. The training data base can be sorted by employee name or by subject. This ensures supervisors and employees are able to confirm they have the necessary training and if they don't which employees do. Employees that need training should contact their project manager or superintendent to make arrangements for them to be trained.

Retraining

The need for retraining will be indicated when: An employee's work habits or knowledge indicate a lack of necessary understanding, motivation or skills required, new equipment is installed that requires new or different procedures, changes in the workplace make previous training obsolete, or upon a supervisor request.

Discussion

Virtually everyone experiences some level of fatigue from time to time. However, excessive fatigue while working impacts worker health, safety, productivity and quality.

Many think fatigue and sleepiness is the same thing, there are not but they are related. Sleepiness is the tendency to fall asleep. Fatigue is the body and minds response to sleep loss, prolonged physical or mental activity.

Shift workers are prone to sleep disturbances; this is particularly true for rotating shift schedules. Sleep during the day is often shorter, lighter and less restorative. Insufficient sleep will increase the levels of fatigue with each consecutive shift. The only cure for fatigue is sleep.

Fatigue is more than feeling tired and drowsy. Fatigue is a state of mental and/or physical exhaustion which reduces a person's ability to perform work safely and effectively. Fatigue can occur because of prolonged mental or physical activity, sleep loss and/or disruption of one's internal body clock. Fatigue can be caused by factors which may be work related, non-work related, a combination of both and can accumulate over time.

Individual behavior outside of work can have considerable influence on fatigue. With that said workers are obligated to report to work fit for duty. An individual's outside of work behavior does not reduce the employers' obligation to address fatigue within the principles of risk management.

While tired muscles can recover with inactivity the brain can only recover with sleep. The optimum amount of sleep varies with each person however generally speaking 7 hours is the minimum for adults. When individuals get less sleep than they need they build up a sleep debt, which can accumulate and become fatigue.

Non-traditional shifts can be more stressful physically, mentally and emotionally. They disrupt the body clock and the families schedule leading to increased fatigue, stress and lack of concentration. Workers generally won't acclimate to changes in sleep patterns for 10 days. When sleep patterns are disrupted non-work periods don't provide full recovery resulting in sleep deprivation, reduced alertness and fatigue.

Factors That Contribute to Fatigue

Continual noise exposure, continual vibration, drastic or sudden changes in temperature, working in isolation, tasks that require sustained high levels of concentration, under challenging tasks, long hours, recent illness, personal life style choices and an individual's health.

Risks Associated with Fatigue

Fatigue can significantly affect the ability to work safely. Fatigue impairment can significantly impact efficiency and productivity. Workers that are fatigued are more likely to have errors, injuries and accidents.

Symptoms of Fatigue

Symptoms include weariness, sleepiness, irritability, lack of concentration, reduced memory, lack of motivation, susceptibility to illness, headache, loss of appetite, excessive yawning, falling asleep at work, impaired judgement (decision making), and/or slower than normal reflexes.

Procedures for Reporting Fatigue

Fatigue risk management is a shared responsibility between supervisor and employee. Unger Construction encourages workers to report concerns they may have about work related fatigue to their supervisor if their capacity is impaired by fatigue without fear of adverse repercussions.

Identification of persons who may be affected by fatigue can occur as a result of: self-assessment (voluntary disclosure), direct observation of the affected person by a coworker or the supervisor, a work place incident (near miss, injury, accident or substandard quality)

Workers that are suffering from fatigue should stop working. They should not drive home for fear that they could fall asleep while driving inuring themselves or others. They can make arrangements for someone to come and get them (taxi, family member, friend), coworkers could drive them home (this is typically a 2 vehicle activity. A coworker drives the fatigued workers vehicle home with the fatigued worker as a passenger. A second vehicle follows to bring the driver back to the jobsite). Another option is having the worker take a nap on-site. Naps of 1-2 hours have shown demonstrated improvements in mental acuity, decision making and alertness. After the nap period the employee and the supervisor shall determine if the employee should drive home for further rest or complete their shift.

Controlling the Risks

Supervisor and employees should work together to identify factors that may cause fatigue such as planning work schedules and task rotation.

Minimize work schedules that limit the time workers can physically and mentally recover from work. Minimize the number of early starts and late finishes. Provide sufficient time to rest and recover between shifts, allowing a minimum of 12 hours between shifts.

Design work plans so that the demands are highest towards the middle of the shift and decrease towards the end.

Implement job or task rotation to limit the buildup of mental or physical fatigue spreading the load among multiple workers.

When deciding to work 48 hours per week consider working (4) ten hour shifts and (1) eight hour shift as compared to (6) eight hour shifts. Generally speaking morale, motivation, productivity are enhanced when workers time off (weekends) are not disturbed.

Maximum consecutive shifts and the minimum time off before returning to the shift.

Duration of the shift	Maximum consecutive shifts	Minimum time off before returning
8 hours	19	36 hours
10 hours	14	36 hours
12 hours	14	48 hours

Regardless of the situation the maximum shift duration for Unger Employees or subcontractors is 16 hours.