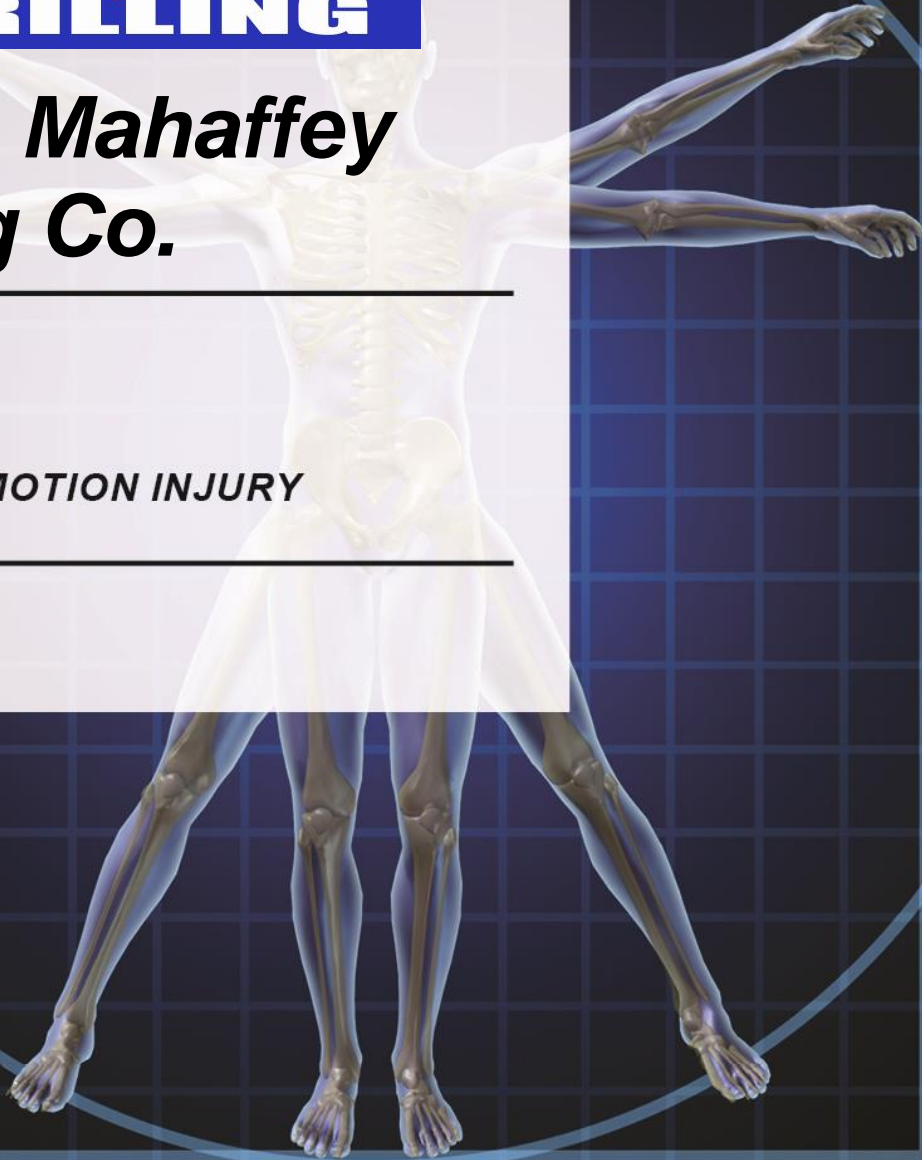




Don H. Mahaffey Drilling Co.

REPETITIVE MOTION INJURY



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1 OBJECTIVE

Don H. Mahaffey Drilling Co. has established and implemented this Repetitive Motion Injury program to minimize repetitive motion injuries. This program will apply to any job, process, or operation where there is cause, or potential cause, for repetitive motion injuries. The content of this program is designed and correlated with the requirements set forth under California Code of Regulations, Title 8, Section 5110 (Repetitive Motion Injuries).

2 PROGRAM ADMINISTRATOR

Don H. Mahaffey Drilling Co. has designated Ashley Mahaffey Tullius for the implementation of the Repetitive Motion Injury program. Ashley Mahaffey Tullius is responsible for:

- a. Evaluating the worksite for repetitive motion injury (RMI) exposure;
- b. Implementing the necessary control to minimize RMI exposure;
- c. Ensuring each affected employee receives training on the contents of the RMI Program;
- d. Maintaining all records pertaining to RMI activity; and
- e. Maintaining, reviewing, and updating the RMI Program when necessary.

3 REPETITIVE MOTION, AN EXPLANATION OF

3.1 Repetitive Motion Injuries

A repetitive motion injury (RMI), commonly known as repetitive strain injury (RSI), is an injury caused by a repetitive job, process or operation to the human body's musculoskeletal system, which is composed of bones, cartilage, joints, muscles, tendons, ligaments, spinal discs, nerves and blood vessels.

3.2 Repetitive Motion Injury Causes

Repetitive motion injuries develop because of microscopic tears in the tissue. When the body is unable to repair the tears in the tissue as fast as they are being made, inflammation occurs, leading to the sensation of pain. Due to the nature of RMIs, the specific activities are incredibly varied. The following list includes the general types of actions and behaviors that are most likely to induce RMI:

- a. Overuse of a particular muscle or group of muscles;
- b. Vibrating equipment;
- c. Working in cold temperatures;
- d. Poor posture or a non-ergonomically designed workspace;
- e. Forceful activities or exertions;
- f. Vibrations;
- g. Mechanical compression;
- h. Holding the same posture or awkward positions for prolonged periods;
- i. Direct pressure to particular areas; and
- j. Carrying heavy loads.

3.3 Repetitive Motion Injury Symptoms

Symptoms depend on what the repetitive actions are. In most cases the symptoms develop in an arm, wrist or hand, as these parts of the body most commonly do repetitive tasks. In recent years, it is computer operators, typists, musicians and people doing repetitive tasks in factories who most commonly develop RMI. Symptoms in the affected area can include pain, tenderness, tightness, dull ache, throbbing, numbness, loss of sensation, loss of strength, and tingling. The symptoms tend to develop gradually and can range from mild to severe.

3.4 Common Repetitive Motion Injuries

3.4.1 Tendinitis

The most common symptom associated with tendinitis is pain over the site involved. Tendinitis is made worse by active motion of the inflamed tendon. The skin overlying the inflamed tendon may be red and warm to the touch.

3.4.2 Tenosynovitis

The inflammation of the lining of the sheath that surrounds a tendon (the cord that joins muscle to bone). The wrists, hands, and feet are commonly affected, because the tendons are long across those joints, however, the condition may occur with any tendon sheath.

3.4.3 Carpal Tunnel Syndrome

Painful squeezing of the median nerve in the wrist, symptoms include, loss of grip strength, muscle pain, weakness, and numbness in the thumb and first two fingers. If left untreated, surgery may be necessary as treatment.

4 REPETITIVE MOTION INJURY PREVENTION

4.1 Early Identification

All employees, including managers and supervisors, are encouraged to help identify and pay attention to warning signs and symptoms, such as pain, soreness, or discomfort while performing a job operation or task. Once identified, a repetitive motion injury can be prevented and job processes can be improved.

4.2 Exercise and Techniques

Exercise and stretching are effective techniques in preventing and minimizing RMIs. Employees are encouraged to apply any of the stretches and body movements found in Appendix 2 throughout the work day, as they may alleviate/prevent some of the painful symptoms associated with RMIs.

4.3 Exposure Control Plan

In addition to prevention, exposure control methods will be established and implemented by management to minimize RMIs for specific job processes and operations. Each worksite will implement the necessary controls unique to each job process/operation that exposes employees to RMIs. Refer to section 5 for additional information and training.

5 RMI EXPOSURE CONTROL PLAN

As means to minimize RMIs, a worksite evaluation will be performed to identify the job, process or operation that exposes employees to RMIs. Any exposures will, in a timely manner, be corrected or if not capable of being corrected have the exposures minimized to the extent feasible through implementation of one or a combination of engineering controls, work safe practices, personal protective equipment or administrative controls.

The necessary measures will be implemented, unless it is shown that a measure known to be substantially certain to cause a greater reduction in RMIs and that the alternative measure would not impose additional unreasonable costs.

5.1 Worksite Evaluation Analysis

Each job, process, or operation of identical work activity covered by the standard or a representative number of such jobs, processes, or operations of identical work activities will be evaluated for exposures which have caused RMIs. Management will refer to the Worksite Evaluation Analysis in Appendix 1 to document the identified work processes or operations and the control(s) implemented.

5.2 Engineering Controls

Engineering controls, such as work station redesign, adjustable fixtures or tool redesign will be implemented as necessary to reduce and/or prevent repetitive motion injuries. Specifically, ergonomic processes will be highly considered as means to provide optimum comfort and avoid stress or injury in the workplace.

5.3 Work Safe Practices

Efficient processes and procedures will be established for employees, such as, but not limited to:

- a. Using correct lifting procedures or the use of two personnel to lift heavier loads;
- b. Correct use of ergonomically designed work stations, fixtures, or tools;
- c. Proper use and maintenance for mechanical equipment and tools; and
- d. Healthy sitting and standing posture.

5.4 Personal Protective Equipment

Personal protective equipment will be used as necessary for protection against RMIs, such as the use of padding to reduce direct contact with hard, sharp, or vibrating surfaces; or the use of proper fitting thermal gloves to maintain grip in cold conditions.

5.5 Administrative Controls

Administrative controls, such as job rotation, work pacing or work breaks will be implemented as necessary to reduce the duration, frequency, and severity of exposures to RMIs. A feedback system may also be used as means for employees to notify supervisors of work conditions/processes that may cause, or potentially cause, RMIs.

6 REPORTING REPETITIVE MOTION INJURIES

RMIs may be hard to detect in its developing stages; however, it is important for employees to pay attention to the warning signs and symptoms. All employees are instructed to report any RMI sign or symptoms to their supervisors immediately.

7 TRAINING

Employees will be provided training that include an explanation of:

- a. The Repetitive Motion Injury program;
- b. The exposures which have been associated with RMIs;
- c. The symptoms and consequences of injuries caused by repetitive motion;
- d. The importance of reporting symptoms and injuries; and
- e. Methods used to minimize RMIs.

APPENDIX 1 – REPETITIVE MOTION INJURY WORKSITE EVALUATION ANALYSIS

*This section will apply to a job, process or operation where a repetitive motion injury has occurred to **more than one** employee under the following conditions:*

- 1. Work related causation. The repetitive motion injuries (RMIs) were predominantly caused (i.e. 50% or more) by a repetitive job, process, or operation;*
- 2. Relationship between RMIs at the workplace. The employees incurring the RMIs were performing a job process, or operation of identical work activity. Identical work activity means that the employees were performing the same repetitive motion task, such as but not limited to word processing, assembly or, loading;*
- 3. Medical requirements. The RMIs were musculoskeletal injuries that a licensed physician objectively identified and diagnosed; and*
- 4. Time requirements. The RMIs were reported by the employees to the employer in the last 12 months.*

Company Name: _____ **Address:** _____

Job Location: _____ **Analyst:** _____ **Date:** ____/____/____

Task Description: <i>(i.e. computer work, repeated use of vibrating hand tools, painting, carpentry, etc.)</i>	Exposed RMI(s): <i>(i.e. tennis elbow, carpal tunnel syndrome, patellofemoral syndrome, etc.)</i>	Controls Implemented: <i>(i.e. Scheduled breaks, work station redesigned, PPE use, etc.)</i>

APPENDIX 2 – PREVENTATIVE BODY MOVEMENT TECHNIQUES

The following list contains a few body movements, stretching, and general health techniques that could help prevent and minimize repetitive motion injuries.

Preventing General RMIs

- **Breaks:** Take regular breaks from any repetitive task, however, make sure to abide company policies on break intervals and durations.
- **Stand up:** Remember to stand up and stretch frequently; extend your back, arms and fingers (below are stretching techniques).
- **Eye break:** Occasionally give your eyes a moment's respite by staring at objects in the distance or at computer screens; this allows the eye muscles to rest;
- **Posture:** Try to maintain a healthy standing or sitting posture; do not slouch, ears and back should form a straight line with the pelvis.

Stretching and Body Movement Techniques

- **Body stretch:** Stand up, extend arms and reach up.
- **Body shake:** While standing, or sitting, drop your arms to your sides. Gently shake out your arms and hands for a few seconds. Relax and repeat 3 times.
- **Side bends:** While sitting, or standing, extend arms, clamp hands above head, and slowly lean to the left and right.
- **Upper body twist:** With hands on hips, twist to the right and then to the left. Repeat 4-6 times.
- **Shoulder shrugs:** Inhale and bring shoulders to ears. Exhale and allow shoulders to drop.
- **Finger stretch:** Spread your fingers wide. Hold for 5 seconds, relax. Repeat 3-5 times, alternate hands.
- **Wrist Stretch:** With the opposite hand, gently pull your fingers back allowing wrist to bend. Hold for 3 seconds, switch hands. Repeat 3-5 times.
- **Thumb Stretch:** Extend one hand and with the other hand, gently pull back on your thumb for 3 seconds. Relax. Repeat 3-5 times on each hand.
- **Finger Squeezes:** Make a fist around a firm yet soft ball, and then squeeze towards your palm 5-10 times. Following this exercise, repeat finger stretch.

Additional Tips

- Stretching every few hours relieves physical tension and body aches.
- Change the pattern of your work to reduce repetitive motion.
- Lift by using your legs instead of your back. Bend knees and keep head, back, and hips in a straight line. Resist bending over to pick items up without first bending your knees. Avoid twisting your torso while lifting.
- Work with your wrists straight.
- Report any signs or symptoms of RMIs to your supervisor immediately.