



## **Medical Management of Musculoskeletal Disorders**

Workers with musculoskeletal disorders (MSDs) or workers who are experiencing the signs and symptoms associated with MSDs need to receive prompt medical management to prevent a more serious condition from developing.

Signs and symptoms of musculoskeletal disorders can include pain, numbness, tingling, or burning sensation in the hand, wrist, elbow, shoulder, arm, neck, back, or leg.

Along with medical management, workers need to be trained to recognize the early symptoms of MSDs and have ergonomic hazards eliminated or reduced in their jobs. A medical management program should include the following elements and objectives:

### **Early Detection**

When MSDs are recognized and treated early, it helps to prevent more serious conditions from occurring. An effective medical management program will try to identify and treat MSDs as early as possible. Workers must be encouraged to come forward and report their MSDs or signs and symptoms of MSDs if early detection is going to be achieved.

### **Medical Assessment**

Medical assessment of workers with MSDs or the signs and symptoms of MSDs should be conducted by health care providers. Health care providers should be made available to workers without delay after they report their symptoms. Based on a screening examination of the workers' symptoms and signs, the health care provider should decide whether to begin conservative treatment or to refer the worker promptly to a physician for further evaluation.

This material has been funded in whole or in part with federal funds from the Occupational Safety and Health Administration, U.S. Department of Labor, under Grant Number 46C0-HT16. These materials do not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organization imply endorsement by the U.S.



## **Conservative Medical Treatment**

Conservative medical treatment of the early signs and symptoms of MSDs includes the use of anti-inflammatory drugs, including ibuprofen and aspirin, and ice, to reduce swelling. Some treatments may use contrasting heat and cold. Splints may be used to immobilize the movement of muscles, tendons and nerves but should not be used during work activities. Treatment may also include time away from the job in order to give the affected part of the worker's body an opportunity to rest.

## **Improper Medical Treatments**

There are several gimmicks and treatments that are not effective in reducing or eliminating MSD symptoms and must not be used. These include:

- *Vitamin B-6.* There is no evidence that taking Vitamin B-6 will help to prevent carpal tunnel syndrome or reduce the swelling of tendons.
- *Hot Wax/Heat Treatment.* There is no evidence that hot wax or heat treatments are effective in treating workers who have early MSD symptoms. Rather than reducing swelling, heat will increase swelling. Heat should only be used for muscle strains where there is no evidence of inflammation.
- *Wrist Splints on The Job.* Wrist splints can be used to help immobilize the movement of muscles, tendons or nerves while a worker is off the job. The splint should not be used when the worker is performing his or her work activities. Splints can weaken the muscles and cause greater stress on the area being splinted if work activities are carried out while the worker is wearing the splint.
- *Take Two Aspirin and Return to Work.* Anti-inflammatory medications like aspirin can be used effectively with workers who are experiencing MSD symptoms. However, workers should not be sent right back to their same jobs. The aspirin will mask the symptoms for a while but the damage will not be prevented if they continue to work on their job. Workers with MSD symptoms should have their jobs evaluated and ergonomic risk factors eliminated or reduced.



- *Exercise Programs.* Exercise programs alone do not prevent MSDs – only eliminating or reducing exposure to workplace ergonomic risk factors can achieve this objective. In fact, workers with symptoms of MSDs can be further injured by certain exercise programs that involve stressful or extreme range of motions or that reduce rest periods.
- *Screening of Job Applicants and/or New Hires.* Some employers have used screening devices (“vibrometers”) to determine if job applicants or new hires have or are likely to have carpal tunnel syndrome. These devices cannot predict a worker’s likelihood of developing carpal tunnel syndrome nor can they detect the early symptoms of carpal tunnel syndrome.

### **Follow-Up Assessment of Workers**

All workers with MSD symptoms who have had a medical assessment by a health care professional should have periodic follow-up assessments. These follow-up visits are performed to see if the symptoms have gone away, the condition improved, or if the condition has remained the same or gotten worse.

### **Surgery**

Occasionally, surgery may be necessary for workers with MSDs. No surgery should be performed unless the worker has obtained a second opinion. The ergonomic hazards on the worker’s job should also be eliminated or reduced before the worker returns to the job.

### **Light/Restricted Duty or Time Off Work**

Workers with MSDs or symptoms of MSDs should be provided with light or restricted duty work: while they are recovering; while their jobs are being analyzed for ergonomic hazards; and while control measures are being instituted to eliminate or reduce those hazards. In extreme cases, workers may have to be given time off work in order to recover. Workers should never have to return to their original job until the hazards are corrected. Other workers doing the same or similar job should also have their jobs analyzed and ergonomic hazards controlled.