

A PHYSICIAN'S GUIDE TO THE CALIFORNIA ERGONOMICS STANDARD

*HELPING PATIENTS WITH WORK-RELATED
REPETITIVE MOTION INJURIES & OTHER
MUSCULOSKELETAL DISORDERS*



INSIDE...

- ▶ Conditions known to be RMIs
- ▶ Physician's role & responsibilities
- ▶ Algorithm
 - Is the RMI work-related?
 - Does the standard apply?
- ▶ Cal/OSHA Ergonomics Standard
- ▶ Resources & References



HESIS

Hazard Evaluation System and Information Service
Occupational Health Branch
California Department of Health Services

NOVEMBER 2001

Acknowledgements

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Printing	Office of State Printing

We also thank the many others who provided valued review, comments and assistance.

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Grantland Johnson, Secretary
Health and Human Services Agency

Diana M. Bontá, R.N., Dr.P.H.
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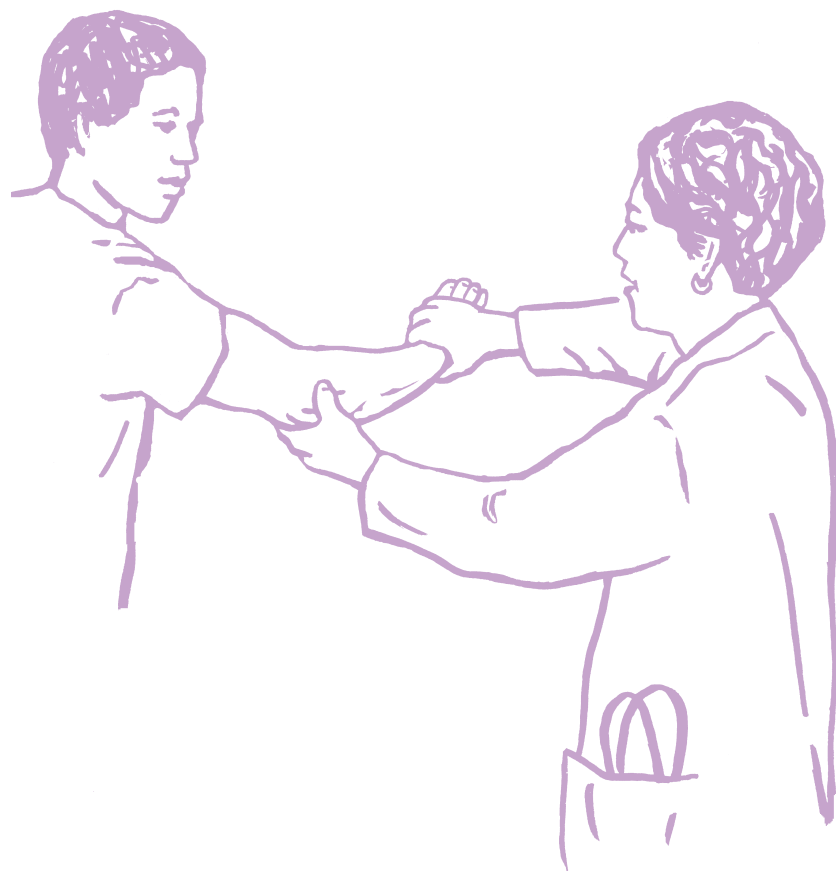
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Introduction

This guide will help you determine if your patients have work-related injuries that are covered under the Cal/OSHA* ergonomics standard. The standard is designed to reduce work-related musculoskeletal injuries caused by repetitive motion (see the standard on page 11). In order for this standard to be invoked, repetitive motion injuries (RMIs) must be objectively diagnosed by a licensed physician. Therefore, careful documentation of the diagnosis of these conditions by physicians is the pivotal step in using this standard to prevent additional occurrences of one of the most common and costly occupational injuries in California. This guide will help you identify and document these conditions in your patients so that you can provide them and their employers with the information needed to act responsibly and make necessary workplace changes. Workplace changes may be needed to avoid sending patients back to the same conditions that caused their injuries in the first place.

Repetitive motion injuries

Work-related RMIs, as defined by the Cal/OSHA ergonomics standard, are musculoskeletal disorders (MSDs) that are caused predominantly (at least 50%) by a repetitive job, process, or operation. This 50% threshold does not apply to workers' compensation. MSDs are a broad class of soft-tissue disorders involving the muscles, tendons, ligaments, peripheral nerves, joints, bones, and/or blood vessels of the neck, back, and upper or lower extremities. Examples of the most common of these conditions are rotator cuff tendonitis, epicondylitis, flexor or extensor wrist tendonitis, carpal tunnel syndrome, and mechanical low back pain. The relationship between these conditions and workplace risk factors is not always easy to establish. However, recent reports by both the National Institute for Occupational Safety and Health (NIOSH) and the National Academy of Sciences confirm the large body of evidence that established a relationship between these conditions and work exposures, especially repetitive motion (see page 15 for references).

Workplace changes may be needed to avoid sending patients back to the same conditions that caused their injuries in the first place.

*Cal/OSHA is the state agency that enforces workplace health and safety regulations.

Repetitive work

Repetitive work means performing similar tasks or a series of exertions again and again. This may include such diverse activities as lifting, twisting, gripping, pushing, pulling, and keying. These types of activities can be found in almost any type of workplace. Therefore, it is always important to ask your patients with musculoskeletal symptoms about repetitive work tasks, even in occupations where you might not expect to find them.

MSDs are common and costly

- ▶ Work-related musculoskeletal disorders (MSDs) are the leading cause of lost-workday injuries and workers' compensation costs in the country.
- ▶ MSDs account for 34% of all lost-workday injuries and illnesses.
- ▶ More than 620,000 lost-workday MSDs are reported each year.
- ▶ MSDs account for \$1 of every \$3 spent for workers' compensation.
- ▶ MSDs each year account for more than \$15-\$20 billion in workers' compensation costs. Total costs add up to as much as \$60 billion.

What the Cal/OSHA ergonomics standard says about RMIs

In workplaces that have all of the following conditions:

- ▶ Two or more workers report RMIs to the employer in a 12-month period; and
- ▶ At least two workers have objective diagnoses of an RMI by licensed physicians.

Employers must implement the following changes:

- ▶ Conduct a work site evaluation;
- ▶ Develop controls to prevent or minimize the exposures to work conditions that caused the RMIs; and
- ▶ Implement worker-training programs that address the causes and controls of RMIs, and include an injury recognition and reporting procedure for symptomatic workers.

See page 11 for the full text of this standard.

A key factor that triggers the Cal/OSHA ergonomics standard is that a licensed physician has objectively identified the diagnosis.

Some conditions known to be RMIs

There are many different specific diagnoses that could fit under the broad category of RMIs. Some of the most common conditions include, but are not limited to:

- ▶ Rotator cuff tendonitis;
- ▶ Epicondylitis;
- ▶ Carpal tunnel syndrome;
- ▶ Tendonitis of the wrist;
- ▶ DeQuervain's disease; and
- ▶ Low back pain. *

A key factor that triggers the Cal/OSHA ergonomics standard is that a licensed physician has objectively identified the diagnosis. This means that the diagnosis is based on measurable and observable signs and symptoms, and not solely based on an employee's description of symptoms.

Determining if your patient does repetitive work

The ideal method for determining whether patients are subjected to repetitive motions is to visit their workplace and observe either the worker or his/her co-workers performing the job. However, if that is not feasible, the worker can provide descriptions, pictures, demonstrations, and sometimes even a video recording that can help you understand the potential work exposures. Ask if a job task or ergonomic analysis is available for the workers' job. In addition to repetitive motions, other risk factors associated with MSDs are awkward postures, forceful exertions, hand-arm and whole-body vibration, static postures, insufficient rest/recovery periods, and heavy lifting. Although the Cal/OSHA ergonomics standard addresses only repetitive motions, it is important that you identify and recommend control of all work activities that pose MSD risks since eliminating repetition alone may not be sufficient to allow full recovery.

*Although low back pain is often caused by a single traumatic event, it may also be precipitated by repeated stressful motions.

Jobs that have the greatest risk potential for MSDs

- ▶ **Manual handling** includes activities such as handling patients; child care; sorting, handling and delivering packages; handling baggage; manually picking up and placing items in a warehouse; handling and delivering beverages and bakery goods; scanning, bagging, and stocking in grocery stores; and collecting garbage.
- ▶ **Manufacturing and assembly** includes inspecting products; operating or loading and unloading machines; cutting and packing meat, poultry and fish; commercial baking; making cabinets; building tires; and manufacturing apparel.
- ▶ **Computer intensive jobs** such as customer service and data entry.
- ▶ **Construction** where workers may lift and carry heavy materials; work with hand tools such as hammers, saws and screw drivers that involve repetitive upper extremity motions; and use vibrating powered tools.
- ▶ **Agriculture** where farm workers use repetitive hand and arm movements in planting, weeding and harvesting tasks and also bend and lift heavy containers of harvested products.

Other causes of MSDs

MSDs are common conditions and have also been shown to be associated with personal factors and non-work-related activities. For example, carpal tunnel syndrome is more common in people with diabetes or thyroid disease and in pregnant women. MSDs are also associated with many recreational activities such as golf and tennis and hobbies such as knitting and carpentry. **Exposure to these non-work-related factors does not preclude an important coexisting role for work exposures. However, the condition must be caused at least 50% by work-related exposures to be covered under the Cal/OSHA standard. There is not such a threshold for workers' compensation.**

...it is important that you identify and recommend control of all work activities that pose MSD risks since eliminating repetition alone may not be sufficient to allow full recovery.

Your role in implementing the standard

In order to trigger the standard to protect your patient, it is important that your medical records clearly document the following:

- ▶ A specific diagnosis of the condition, such as: rotator cuff tendonitis, carpal tunnel syndrome, lateral epicondylitis, etc.;
- ▶ Documentation of the patient's job title and specific work tasks, with a statement that the diagnosed RMI was caused predominantly (at least 50%) by the repetitive work tasks; and
- ▶ An indication of the severity of the injury, including type of treatment and number of days of modified work expected (or lost work, if modified work is unavailable or unsuitable).

This information should be included in the required Doctor's First Report (see page 12). An additional way to capture this documentation for your medical records is to use a simple form for your patients with work-related RMIs. Such a form is particularly useful for documenting information obtained after the First Report is filed. A sample form, that can be copied or adapted, can be found on page 13.

The sooner these conditions are recognized and treated, the more likely the injured worker will return to his or her job.

Physician's other responsibilities

► Intervene and treat early

Early detection and treatment of MSDs is essential. Treatment options can include anti-inflammatory medications, physical therapy (e.g. stretching and exercise programs) and many other forms of medical care. The sooner these conditions are recognized and treated, the more likely the injured worker will return to his or her job. However, unless the cause of the RMI/MSD is addressed the injury may result in chronic problems that are more difficult to treat. It is important to identify the work-related causative factors and recommend that the work be modified or your patient be removed from work to allow recovery. Avoid sending patients back to the same workplace conditions that caused their injuries.

► Provide your patient with the appropriate written information

You should provide your patients with the following written documentation before they leave your office:

- A specific diagnosis (if available);
- An initial treatment plan; and
- A signed return-to-work note to give to their employer that indicates whether they should be provided with modified work, remain in the current job with accommodation (such as using a telephone headset), or be off work. To ensure confidentiality, neither the specific diagnosis nor the treatment plan should be included in this note, but do indicate that the condition is caused and/or made worse by repetitive work.

► Fill out a Doctor's First Report of Occupational Injury or Illness form– a mandatory reporting requirement

Under California law all physicians are required to fill out a Doctor's First Report form when they initially attend a new case of an occupational injury or illness. This form should include a specific diagnosis and all other required information. If you, in addition to completing all the fields, also include the percentage of work-related causation for the RMI, then all information needed to implement the ergonomics standard can be retained on this form in the patient's medical records. The completed form should be sent to the employer's workers' compensation carrier or to the self-insured employer. This form can be found on page 12 and on the Internet at www.dir.ca.gov/dlsr/dlsrform5021.pdf.

► **Prevent other workers from getting MSDs**

It is also important for you to inquire about other workers in the same job or workplace. Patients' co-workers who are exposed to similar working conditions may have or may soon develop similar symptoms. You can help to prevent problems in those workers by:

- Recommending early intervention and control of exposures to the employer. Many studies have demonstrated the efficacy of ergonomic intervention programs in preventing MSDs.

If you feel that other workers may be at risk, it is important to recommend that the employer get ergonomic consultation for them, as well as the injured worker under your care.

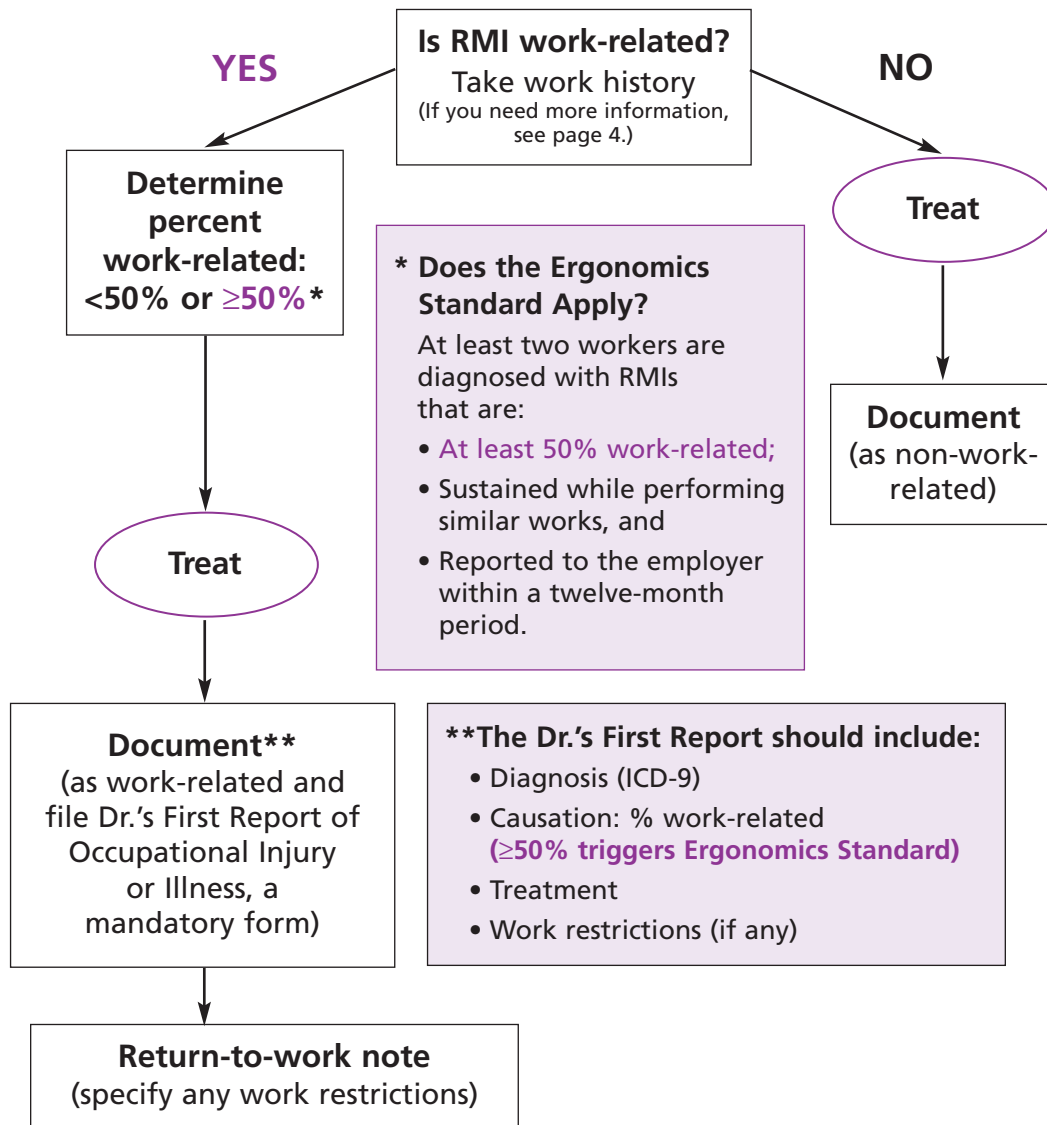
- Cal/OSHA Consultation Service (see page 14), an ergonomist, or other professionals can provide guidance on workplace re-design and reorganization issues to prevent further injuries. Many solutions are simple and inexpensive but can save thousands of dollars in future workers' compensation costs for the company and prevent needless suffering of the workers.

If you have reason to believe the employer has not taken actions, or taken ineffective actions, to correct workplace conditions that gave rise to your patient's injuries and that may negatively impact recovery, or that may injure other workers, there are two additional things you can do.

- You may inform your patients of their right to make a confidential complaint to Cal/OSHA or, if your patients express fear of making such a complaint, you may do it on their behalf, with their permission (per California Labor Code Section 6309). Cal/OSHA (Enforcement) may have the authority to direct employers to make changes necessary to provide a safe and healthful workplace (see page 14).

Patient's co-workers who are exposed to similar working conditions may have or may soon develop similar symptoms.

Is your patient's RMI work-related? Does the California Ergonomics Standard apply?



The Cal/OSHA Ergonomics Standard

Title 8, California Code of Regulations, Section 5110

(a) Scope and application. This section shall apply to a job, process, operation where a repetitive motion injury (RMI) 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, but not before July 3, 1997.

(b) Program designed to minimize RMIs. Every employer subject to this section shall establish and implement a program designed to minimize RMIs. The program shall include a worksite evaluation, control of exposures which have caused RMIs and training of employees.

- (1) Worksite evaluation. Each job, process, or operation of identical work activity covered by this section or a representative number of such jobs, processes, or operations of identical work activities shall be evaluated for exposures which have caused RMIs.
- (2) Control of exposures which have caused RMIs. Any exposures that have caused RMIs shall, in a timely manner, be corrected or if not capable of being corrected have the exposures minimized to the extent feasible. The employer shall consider engineering controls, such as work station redesign, adjustable fixtures or tool redesign, and administrative controls, such as job rotation, work pacing or work breaks.
- (3) Training. Employees shall be provided training that includes an explanation of:
 - (A) The employer's 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 to the employer; and
 - (E) Methods used by the employer to minimize RMIs.

(c) Satisfaction of an employer's obligation. Measures implemented by an employer under subsection (b)(1), (b)(2), or (b)(3) shall satisfy the employer's obligations under that respective subsection, unless it is shown that a measure known to but not taken by the employer is substantially certain to cause a greater reduction in such injuries and that this alternative measure would not impose additional unreasonable costs.

DOCTOR'S FIRST REPORT OF OCCUPATIONAL INJURY OR ILLNESS

Within 5 days of your initial examination, for every occupational injury or illness, send two copies of this report to the employer's workers' compensation insurance carrier or the insured employer. Failure to file a timely doctor's report may result in assessment of a civil penalty. In the case of diagnosed or suspected pesticide poisoning, send a copy of the report to Division of Labor Statistics and Research, P.O. Box 420603, San Francisco, CA 94142-0603, and notify your local health officer by telephone within 24 hours.			
1. INSURER NAME AND ADDRESS			PLEASE DO NOT USE THIS COLUMN
2. EMPLOYER NAME			Case No.
3. Address	No. and Street	City	Zip
4. Nature of business (e.g., food manufacturing, building construction, retailer of women's clothes.)			Industry
4. Nature of business (e.g., food manufacturing, building construction, retailer of women's clothes.)			County
5. PATIENT NAME (first name, middle initial, last name)		6. Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	7. Date of Birth Mo. Day Yr.
8. Address: No. and Street City Zip		9. Telephone number ()	
10. Occupation (Specific job title)		11. Social Security Number - -	
12. Injured at:	No. and Street	City	County
13. Date and hour of injury or onset of illness	Mo. Day Yr.	Hour _____ a.m. _____ p.m.	14. Date last worked Mo. Day Yr.
15. Date and hour of first examination or treatment	Mo. Day Yr.	Hour _____ a.m. _____ p.m.	16. Have you (or your office) previously treated patient? <input type="checkbox"/> Yes <input type="checkbox"/> No
Patient please complete this portion, if able to do so. Otherwise, doctor please complete immediately, inability or failure of a patient to complete this portion shall not affect his/her rights to workers' compensation under the California Labor Code.			
17. DESCRIBE HOW THE ACCIDENT OR EXPOSURE HAPPENED. (Give specific object, machinery or chemical. Use reverse side if more space is required.)			
18. SUBJECTIVE COMPLAINTS (Describe fully. Use reverse side if more space is required.)			
19. OBJECTIVE FINDINGS (Use reverse side if more space is required.) A. Physical examination			
B. X-ray and laboratory results (State if non or pending.)			
20. DIAGNOSIS (if occupational illness specify etiologic agent and duration of exposure.) Chemical or toxic compounds involved? <input type="checkbox"/> Yes <input type="checkbox"/> No ICD-9 Code ____ - ____			
21. Are your findings and diagnosis consistent with patient's account of injury or onset of illness? <input type="checkbox"/> Yes <input type="checkbox"/> No If "no", please explain.			
22. Is there any other current condition that will impede or delay patient's recovery? <input type="checkbox"/> Yes <input type="checkbox"/> No If "yes", please explain.			
23. TREATMENT RENDERED (Use reverse side if more space is required.)			
24. If further treatment required, specify treatment plan/estimated duration.			
25. If hospitalized as inpatient, give hospital name and location		Date admitted Mo. Day Yr.	Estimated stay
26. WORK STATUS -- Is patient able to perform usual work? <input type="checkbox"/> Yes <input type="checkbox"/> No If "no", date when patient can return to: Regular work ____/____/____ Modified work ____/____/____ Specify restrictions _____			
Doctor's Signature _____		CA License Number _____	
Doctor Name and Degree (please type) _____		IRS Number _____	
Address _____		Telephone Number (____) _____	

Sample form for documenting work-related RMIs in medical records

Mary Chen, M.D.
Occupational Health Associates
123 Medical St.
Anywhere, CA
Tel. 123 456-7890

RMI Patient Data Sheet

Patient Name _____

Employer _____

Date of injury ____/____/____

Specific RMI diagnosis _____

Work-relatedness 50% or greater? Yes No Unsure

Objective medical criteria used to make this diagnosis:

Physical exam: _____

Diagnostic tests: _____

Other: _____

How did you determine this condition was caused by work?

___ Patient description of work

___ Site visit

___ Job description from employer

___ Pictures, videos or drawings

___ Other (specify) _____

Work restrictions:

___ Days off of work

___ Days of modified work. Describe modifications:

By _____

Date ____/____/____

Note: A form like this contains all the specific information Cal/OSHA would need from a patient's medical record to determine if the Ergonomics Standard may be invoked in the patient's place of employment.

Resources

- ▶ **Hazard Evaluation System and Information Service (HESIS)** answers questions about ergonomic hazards and their health effects, and the prevention of other workplace hazards for California workers, employers, and healthcare professionals. For the HESIS help line, call (510) 622-4317 and record your question.
- ▶ **Industrial Medical Council (IMC)**, the medical unit within the State's workers' compensation system, has treatment guidelines for some MSDs at: www.dir.ca.gov/IMC/guidelines.html.
- ▶ **Occupational health clinics for referral or consultation:**
 - UC San Francisco/SFGH Occupational and Environmental Medicine Clinic: (415) 206-4320.
 - UC Davis Occupational and Environmental Health Clinic: (916) 734-2715.
 - UC Irvine Occupational and Environmental Health Clinic: (949) 824-8641.
 - Association of Occupational & Environmental Clinics: www.aoec.org/ClinList.htm
- ▶ **Educational Resource Centers (Occupational Health)**

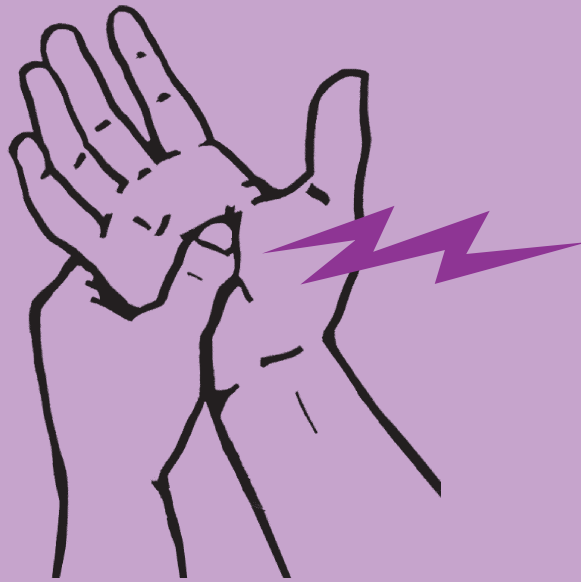
Continuing Education for Health Professionals (including Ergonomics)

 - Northern California – UC Berkeley Center (510) 231-5645
 - Southern California – UC Los Angeles Center (310) 206-2304
- ▶ **Cal/OSHA** is California's workplace health and safety agency. Cal/OSHA develops and enforces rules to protect workers. Confidential complaints can be made to Cal/OSHA by workers, their doctors, or other representatives about unsafe workplace conditions, including those that may be causing MSDs. See the blue government pages in the phone book under "State of California, Industrial Relations, Division of Occupational Safety and Health, Enforcement" or visit their web site at: www.dir.ca.gov/DOSH/dosh1.html.
- ▶ **Cal/OSHA Consultation Service** is a State agency that provides free non-enforcement assistance to California employers to improve safety and health conditions and comply with regulatory requirements. The Consultation Service may be able to provide ergonomic consultation to the employer to help prevent MSDs. They also provide useful publications: ***Easy Ergonomics: A Practical Approach to Improving the Workplace, Fitting the Task to the Person: Ergonomics for Very Small Businesses***; and ***A Back Injury Prevention Guide for Health Care Providers***. Call 1-800-963-9424 to request assistance or order the booklets, or visit their web site at: www.dir.ca.gov/DOSH/dosh1.html.
- ▶ **Commission on Health and Safety and Workers' Compensation (CHSWC)** is a State office that provides a series of free basic factsheets for injured workers about workers' compensation procedures, rights and responsibilities. The factsheets are available at www.dir.ca.gov/CHSWC/chswc.html and all I&A offices (see page 15). A companion video can also be viewed at this website.

- ▶ **Division of Workers' Compensation, Information and Assistance (I&A)** is a free State service for injured workers without an attorney. An I&A officer can help injured workers through the legal process in simple cases. To find the nearest I&A office, call the automated telephone service at 1-800-736-7401 or go to the I&A website: www.dir.ca.gov/dwc/I&A.html. Guides for injured workers and workers' compensation forms are available at all I&A offices and at their website.
- ▶ **Guide to Getting Medical Care for Job-Related Pain that Won't Go Away**, a HESIS publication for workers with MSDs, is available by calling (510) 622-4328 or from the Occupational Health Branch website: www.dhs.ca.gov/ohb/
- ▶ **Injured worker support groups.** A listing of these groups can be found at: www.tifaq.org/information/supportgroups.html.

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