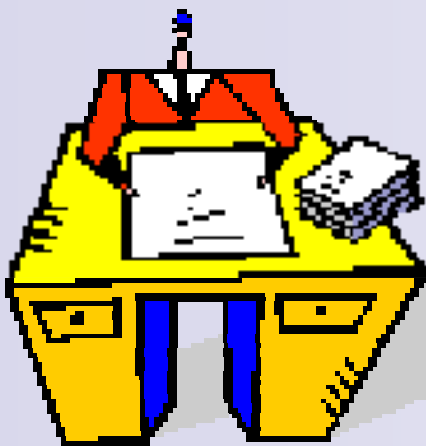




WORK-RELATED INJURIES A NATIONAL EPIDEMIC!





WORK-RELATED INJURIES

- ☞ On-the-job injuries in our highly industrialized society occur with far more frequency than most of us realize.***
- ☞ Let's examine the facts about some of these common mishaps and what can be done to relieve their often painful consequences.***

SOME STATISTICS...

- ☞ Low back pain alone accounts for 16 percent of all workers' compensation claims but 33 percent of all WC costs.***
- ☞ According to recent studies the mean cost per case for low back injuries is \$8,321 (1989). In 1986 the costs were \$6,807 per case (a 123 percent increase in only three years).***

Webster BS, Snook SH. The cost of 1989 workers' compensation low back claims. Spine 19(10):1111-1116, 1994.

SOME STATISTICS...

☞ Total expenditures for back pain in the US are estimated to be in excess of \$50 billion annually. ¹

☞ Industry is confronted with a tremendous problem of workers' compensation costs, lost work time, disability payments, etc. And industry is desperate for help to reduce the back pain problem. So who should they turn to?

- 1. Genant HK. Preface In: Genant HK (ed):Spine Update 1984. Perspective in Radiology, Orthopedic Surgery, and Neurosurgery. Radiological Research and Education Foundation, San Francisco, 1983.***

Did You Know...

- ❏ *• The SACO Defense Corp. went from \$2,000,000 in workers compensation premiums to \$40,000 after incorporating a chiropractic injury prevention program.*
- ❏ *• TORO Corp went from \$200,000 in premiums to \$40,000 by doing the same.*

More Research...

- ☞ • The Oregon Workers' Comp. study showed that chiropractic patients went back to work an average of 2.5 days earlier than those under medical care.***
- ☞ • A Nevada Workers' Comp. study revealed that after a three-year study, the average chiropractic patient cost \$892 where as the medical patient cost \$2,142.***



*The medical treatment for a back injury in this country costs 8 1/2 times more than chiropractic care for the same injury. Each year insurance companies and Workers' Compensation spend about 950 billion dollars treating these injuries medically. This doesn't account for the work loss because of injury. A patient treated chiropractically will return to work in a fraction of the time. **

**U.S. Dept. Of Commerce, Dr. Robert P. Lynch, ANA News Release 4/12/96.*

Stano/Medstat Research



☞ Miron Stano, Ph.D., Oakland University conducted a study comparing the health care costs for chiropractic and medical patients. The study compared 395, 641 patients, of which 42,215 were Michigan patients. After reviewing claims paid over a two-year period, he concluded:

Patients that receive chiropractic care, either solely or in conjunction with medical care, experienced "significantly lower health care costs, on the order of \$1,000 each over the two-year period" than those who received only medical care. Total insurance payments were \$1,138 (30% higher) for those who elected medical care only.

Florida Workers' Compensation Study

- 👉 A 1988 study of 10,652 Florida workers' compensation cases was conducted by Steve Wolk, Ph. D., and reported by the Foundation for Chiropractic Education and Research.*
- 👉 It was concluded that "a claimant with a back-related injury, when initially cared for by a chiropractor versus a medical doctor, is less likely to become temporarily disabled, or if disabled, remains disabled for a shorter period of time; and claimants treated by medical doctors were hospitalized at a much higher rate than claimants cared for by chiropractors."*

LONG-TERM EFFECTS...

- ☞ Injuries which demonstrate severe, long-standing muscular contraction can lead to muscle fatigue and the accumulation of metabolites within the muscle fibers.***
- ☞ This will alter the normal pattern of muscle contraction leading to sudden, violent and uncontrolled muscle contraction. If left untreated, this leads to shortening of some muscle groups of the back and weakening of others.***
- ☞ The result of these long-term changes in muscle is that spinal movement becomes grossly restricted and painful, a restriction that is learned as well as structural from fibrosis.***

IS IT PERMANENT?

- ☞ Physical changes involved in spinal injuries are two-fold in nature, those seen in muscles and those seen in joints. Both of these take place as a result of inactivity, leading to lack of movement of joints and decreased contraction of muscles.***
- ☞ In muscle the effect of lack of use leads over weeks and months to progressive weakening and scar tissue. Fortunately, this is in most cases reversible, as the patient learns to contract and use the muscles once again. It may take months of hard work to rebuild muscle and eliminate scar tissue and fat between and within muscles.***
- ☞ Unlike those in muscle, the changes in the facet joints as a result of prolonged immobilization and disuse are, as far as we can tell at present, irreversible.***

SCAR TISSUE...

- ☞ *Connective tissue heals through the formation of scar tissue.*
- ☞ *Scar tissue is less elastic, less resilient, less pliable, and less resistant to shear and tensile forces than is the original tissue.*
- ☞ *Scar tissue can decrease motion and flexibility and, therefore, may play a part in altered biomechanics.*
- ☞ *The lack of motion at one level will be compensated for by increased motion at adjacent levels, which in turn will usually result in degenerative disc disease and osteoarthritis some time in the future.*

INJURY → ARTHRITIS...

- ☞ Trauma may be one of the most common agents in the development of osteoarthritis.*
- ☞ The normal human joint simply will not wear out with normal use and under normal loads. Shear force is almost nonexistent, and the coefficient of friction is roughly equal to that of ice on ice.*
- ☞ In short, this joint is highly efficient and should last at least as long as the rest of the body.*

THE “VICIOUS CIRCLE” OF PAIN...

- ☞ *A concept that is well known to those experienced in working with musculoskeletal disorders is that of the “vicious circle” that often results from an injury to a particular tissue, which then produces muscle spasm in another segmentally related tissue.*
- ☞ *The secondary muscle spasm is another source of pain (sometimes more intense than that of the original injury) and can cause further muscle spasm.*
- ☞ *This condition, if left untreated, ultimately results in chronic, painful muscle disorders. Treatment must be aimed at the original focus of injury if resolution of secondary symptoms is to be permanent.*
- ☞ *As well, treatment is needed to reestablish correct segmental spinal reflex patterns in order to prevent a serious relapse.*

● Foreman, S.M., Croft, A.C.: *Whiplash Injuries. The Cervical Acceleration/Deceleration Syndrome.*

● Williams, & Wilkins, Baltimore, 1988. p. 305-307

NOT JUST BACK PAIN...

- ☞ Back injuries and cumulative trauma disorder (CTD) related costs have risen to \$60 billion/year (Labar, 1994; Khalil, et al., 1993).***
- ☞ The prevalence of CTDs has exploded by a 770 percent increase from 1982 to 1992 with no curtailment in sight (BNA, 1994).***
- ☞ In 1993 over 302,000 cases of CTDs were reported costing over \$20 billion to manage (BNA, 1994; NIOSH, 1995).***
- ☞ Back injuries continue to plague business and industry at epidemic proportions.***
- ☞ The National Safety Council (NSC) reports that 770,000 back injuries were reported in 1994, with an additional 60,000 neck injuries. These two types of injuries represent 26 percent of the 3.2 million disabling worker injuries occurring that year (NSC, 1994). * The economic impact of injury and illness to American businesses is over \$110 billion annually; this equates to an average of \$940 per worker in America (NSC, 1994).***

MORE ON CUMULATIVE TRAUMA...

- ☞ One of the most rapidly growing forms of occupational diseases is the cumulative trauma disorder (CTD).***
- ☞ Recently the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor, reported the incidence of disorders associated with repeated trauma rose from 22,600 cases in 1982 to 185,400 cases in 1990.***
- ☞ There were 281,800 cases in private industry reported in 1992, up more than twelve-fold from a decade ago.***

MORE ON CUMULATIVE TRAUMA...

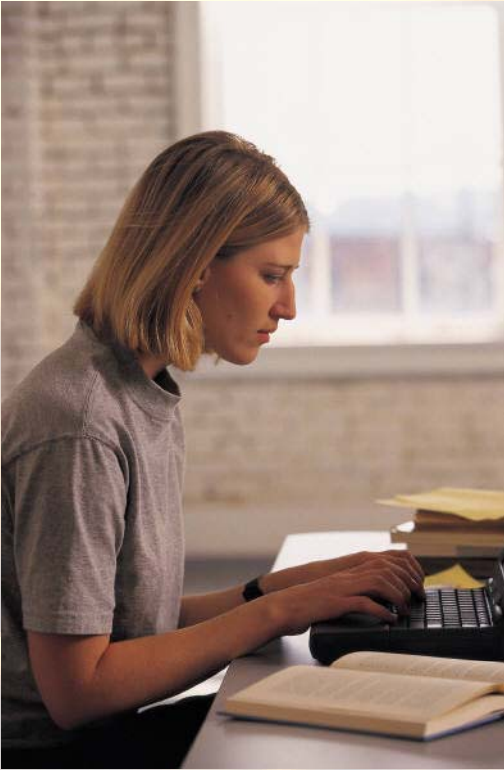
☞ The portion of all occupational diseases represented by CTDs rose from 21 percent in 1982 to 56 percent in 1990. Since 1989, CTDs have been more prevalent than all other occupational diseases combined.¹

☞ The National Institute of Occupational Safety and Health (NIOSH) estimates that the exposed workforce may be as high as 25 percent of all workers.²

1. Bureau of Labor Statistics, U.S. Dept. of Labor, Washington, D.C.

2. U.S. Congress, House Committee on Government Operations, Subcommittee on Employment and Housing, Hearing on Dramatic Rise in Repetitive Motion Injuries and OSHA's Response, June 6, 1989.

WHAT ABOUT COMPUTER WORKERS...



- ☞ The problem of repetitive-motion injuries, linked to such tasks as typing on computers, has been called the industrial disease of the information age.*
- ☞ Repetitive-motion injuries presently afflict 5 million Americans annually, at a cost of \$27 billion in medical treatment and lost income.*
- ☞ The National Institute of Occupational Safety and Health (NIOSH) predicts that more than half of the work force could fall victim to motion injuries in this decade.*
- ☞ Due to the increasing threat of repetitive-motion injuries, especially those related to video display terminal (VDT) operators, a growing number of states and communities are adopting mandatory guidelines to curb VDT-related injuries.*

IS THERE AN ANSWER?

- ☞ While 90-95% of acute spinal patients will resolve their disability within three months of injury, chronic or recurrent back disability may persist for years.¹***
- ☞ Americans pay over \$40 billion annually for the treatment of lower back disabilities.***
- ☞ With over 12 million people suffering from chronic back pain, there have been few safe and effective means of quantifying injury and aggressively rehabilitating these patients.***
- ☞ Considering the costs of back injury to industry (over 50% of dollars paid out by compensation claims for only 5% of injuries), the savings to industry could be very substantial.***

1. Mayer, Gatchel, Kishino, et al. Objective assessment of spine function following industrial injury. *Spine* 1985;10(6):482-493.

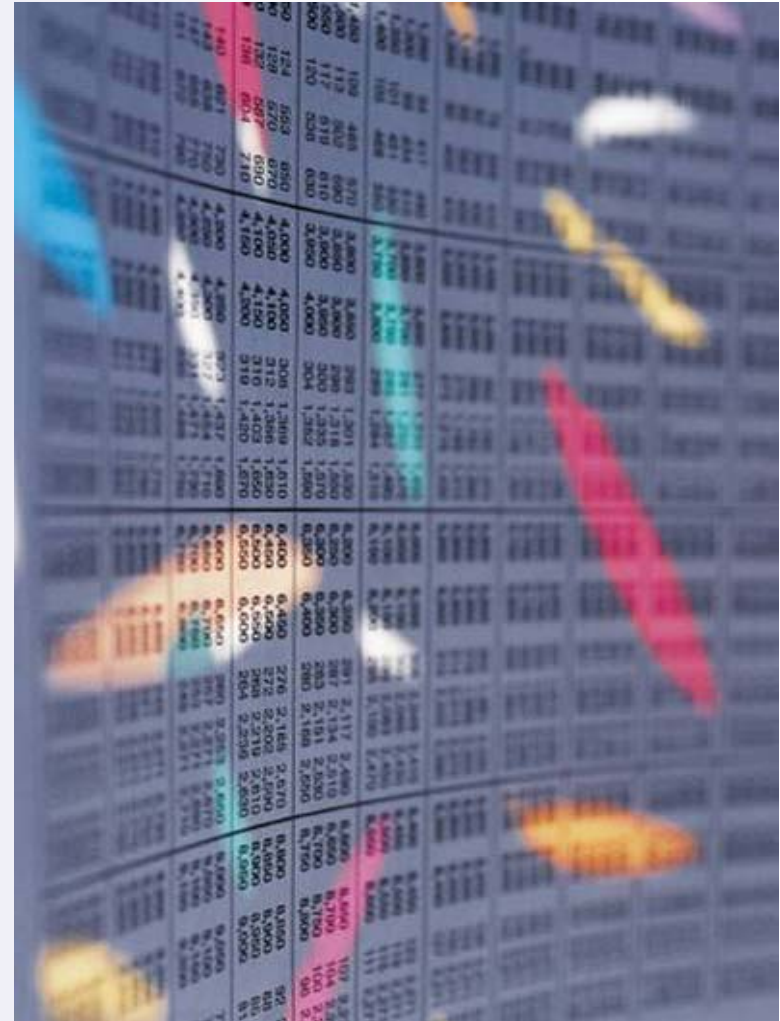
CHIROPRACTIC TREATMENT

☞ The doctor of chiropractic is a specialist in spinal musculoskeletal disorders.

☞ Chiropractors are expertly trained to diagnose and treat the many musculoskeletal injuries that may occur on the job.

THE NUMBERS SPEAK FOR THEMSELVES

- 👉 *Statistics indicate that the amount of suffering, time lost from work and cost of treatment are all significantly reduced when the injured person receives chiropractic care.*
- 👉 *Industrial think-tank experts at the renowned Rand Corporation have confirmed this with independent studies of treatments for back disorders, as has the British Government.*



WHAT THE EXPERTS SAY...

☞ Eighty cents of every Workers' Compensation dollar are spent in the management of neuromusculoskeletal disorders (low back injuries and upper extremity disorders, including carpal tunnel syndrome, tendonitis and shoulder/arm/hand syndrome), according to federal Department of Labor statistics.



WHAT THE EXPERTS SAY...

- 👉 A review of the Florida Division of Workers' Compensation data base – one of the most extensive in the U.S. – revealed the cost of treatment for on-the-job injuries was 84% less costly when chiropractic care was utilized instead of traditional medical care. The duration of disability, when using chiropractic, was 48% less!*
- 👉 A seven state study comparing chiropractic care with medical care in the treatment of on-the-job injuries concluded that hospitalization and medication costs were higher for medical care, as were the costs of compensation.*

THE MANGA REPORT:

- ☞ A study released by the Government of Ontario, Canada, has reported that there is “overwhelming evidence that chiropractic management of lower back pain is more effective and more cost-effective than traditional medical management.”*
- ☞ The 1993 study commissioned and funded by Ontario health services officials was prepared by Pran Manga & Associates of Ottawa, Ontario.*



THE MANGA REPORT (cont'd)...

Among the study's findings:

- ***There would be highly significant cost savings (for the government-run health care program) if more management of lower back pain was transferred from physicians to chiropractors.***
- ***There is no clinical or case-control study that demonstrates or even implies that chiropractic manipulation is unsafe in the treatment of lower back pain.***
- ***Spinal manipulation applied by chiropractors is shown to be more effective than other treatments for lower back pain. Many medical therapies are of questionable value or are clearly inadequate.***
- ***There is good evidence that patients are very satisfied with chiropractic management of lower back pain and considerably less satisfied with physician management.***

THE CHIROPRACTIC DIFFERENCE...



- ☞ The chiropractic profession has helped large numbers of workers by improving the worker's ability to function.***
- ☞ Unlike other more symptom-oriented treatment systems, our efforts have focused on restoring function to the musculoskeletal system.***
- ☞ In addition, we have asked patients to take a more active role in their own health.***
- ☞ Perhaps most important, we have promoted a "wellness behavior" by focusing on the patient's improvement and away from their problems.***

A close-up photograph of a hand holding a bright yellow flower. The hand is positioned in the lower right, with fingers gently gripping the stem. The flower is in full bloom, with several large, vibrant yellow petals. The background is softly blurred, showing hints of other flowers and greenery, creating a warm and gentle atmosphere.

HELP SOMEONE ELSE TODAY...

***Take the time to share this information
with someone you care about who may
not know where to turn for help.***

***It will change their life and they'll have
you to thank for the opportunity.***