



Safety Information Sheet

Ergonomics - Neck & Upper Limb Care



WHAT HAPPENS IN NECK AND UPPER LIMB DISORDERS?

Muscles and soft tissues contain a large number of pain receptors and can register pain either as a result of direct injury or in indirect response to an increased burden somewhere else.

Direct injuries are usually muscle strains caused by overloading. Direct injuries can also cause muscle spasm in an attempt to protect and keep the injured area still to allow for recovery but the spasm increases local pain. In addition the injured muscles release nerve-irritating chemicals that further aggravate the pain felt at the site of the strain injury.

Indirect injuries occur when muscles become fatigued. When this happens, muscular support and control decrease and the stress load on surrounding soft tissues increases. If the load is too high for these soft tissues, stress injury will occur.

HOW COMMON ARE OCCUPATIONAL NECK AND UPPER LIMB DISORDERS?

Work-related neck and upper limb disorders are amongst the world's most common occupational ailments and are occurring with increasing frequency. They affect women more frequently and more severely than men because of the nature of the work women undertake and their biological limits, and workers in the following occupations more than others:

- ➔ Agriculturalists, foresters, fishermen (male and female) and miners
- ➔ Manufacturers, machine operators, craft workers and tailors
- ➔ Construction workers
- ➔ Wholesale and retail workers
- ➔ Hoteliers, restaurateurs and caterers
- ➔ Secretaries and typists
- ➔ Loaders and un-loaders.

WHAT ARE THE RISK FACTORS FOR OCCUPATIONAL NECK AND UPPER LIMB DISORDERS?

- ➔ Work adopting poor posture
- ➔ Work requiring highly repetitive movements
- ➔ Work tasks requiring the application of manual force
- ➔ Work involving hand-arm vibration
- ➔ Work that involves direct mechanical pressure on body tissues
- ➔ Work in cold environments
- ➔ Poor or stressful work organization

The presence of more than one risk factor magnifies the risk of neck and/or upper limb damage.

HOW CAN UPPER LIMB AND NECK DAMAGE BE PREVENTED?

- ➔ Assess and control ergonomic risk factors for each occupational group in the workplace
- ➔ Consider workers with multiple or extreme risk factor status priorities for risk control
- ➔ Risk control planning should take the whole work situation into account (surroundings, equipment, work methods, work organization) and aim to reduce biomechanical load on the body
- ➔ Conduct ongoing checks of workers' musculoskeletal stress levels
- ➔ Optimize work organization to minimize worker fatigue
- ➔ Inform and train personnel towards understanding and working with ergonomic safety.

Reference

Work-related neck and upper limb musculoskeletal disorder: Summary of Agency Report. *European Agency for Safety and Health at Work*, October 2000