

Chapter 4 - Ergonomic Farming

Musculoskeletal Disorders (MSDs)

What are MSDs?

MSDs are injuries and illnesses that affect muscles, nerves, tendons, ligaments, joints or spinal discs. Your doctor might tell you that you have one of the following common MSDs:

Carpal tunnel syndrome
Trigger finger
Tendonitis
Tension neck syndrome

Rotator cuff syndrome
Sciatica
Raynaud's phenomenon
Low back pain

De Quervain's disease
Epicondylitis
Carpet layers' knee
Hand-arm Vibration Syndrome

What causes MSDs?

Workplace MSDs are caused by exposure to the following risk factors:

Repetition. Doing the same motions over and over again places stress on the muscles and tendons. The severity of risk depends on how often the action is repeated, the speed of the movement, the number of muscles involved and the required force.

Forceful Exertions. Force is the amount of physical effort required to perform a task (such as heavy lifting) or to maintain control of equipment or tools. The amount of force depends on the type of grip, the weight of an object, body posture, the type of activity and the duration of the task.

Awkward Postures. Posture is the position your body is in and affects muscle groups that are involved in physical activity. Awkward postures include repeated or prolonged reaching, twisting, bending, kneeling, squatting, working overhead with your hands or arms, or holding fixed positions.

Contact stress. Pressing the body against a hard or sharp edge can result in placing too much pressure on nerves, tendons and blood vessels. For example, using the palm of your hand as a hammer can increase your risk of suffering an MSD.

Vibration. Operating vibrating tools such as sanders, grinders, chippers, routers, drills and other saws can lead to nerve damage.