Course Information Sheet

WHS: Preventing Musculoskeletal Injury at Work

Course Code	R-180808-NZ	Course Series	WHS
Learning Pathway	Fundamental		
Course description	One of the most important ways to maintain your well being is to protect and support your musculoskeletal system. Discover how to minimise day to day risks and look after yourself. This course provides up-to-date guidance on the potential injuries that can occur when working in an aged care facility and how to minimise the risk of these injuries occurring. Filmed entirely at a residential aged care facility, this course features Subject Matter Expert Elissa Coates and is appropriate for all staff.		
Subjects covered	The anatomy and physiology of the musculoskeletal system – Musculoskeletal Disorders (Injuries) – Factors leading to Musculoskeletal Disorders – Force on the body – Assessment (TILEO) – Reducing Risk – How to perform safe manual handling		
Target Audience	All staff		

Learning outcomes

After viewing this course, participants should be able to:

- Explain how the musculoskeletal system works
- Identify the factors that lead to musculoskeletal strain or injury
- Practise good posture and correct manual handling techniques to prevent musculoskeletal injuries

Think about

- How do you prepare yourself for work each day in order to prevent injuries?
- What are some of the tasks you perform on a daily basis that could affect your musculoskeletal health?

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Subject Matter Expert

Elissa Coates is a Patient Handling Specialist committed to partnering with facilities to develop systemic structures that allow for safe and effective resident movement and transfers. Originally a physiotherapist, she combines her ergonomic, human movement and legislative background with a postgraduate study in Safety, Training and Management. Her vast exposure to complex cases, bariatric handling, facility planning, and the completion of specialist training both locally and internationally means she brings a fresh and holistic approach to how we move and handle people.

Key Definitions

Bones	Bones form the skeleton. An adult has 206 bones of varying size, shape and function. They are strong and supportive and often a little flexible.
Cartilage	Cartilage is tough but elastic material which provides a cushion between the bones in a joint. It can line the end of a bone or sit as a separate interactive pad within a joint.
Connective Tissue	The tissue that connects and supports surrounding tissues.
Dynamic Force	Dynamic force occurs when we use our muscles to create external movement such as lifting, pushing or pulling.
Intervertebral Disc	Intervertebral discs are fibrous elastic rings surrounding a soft gel like substance. These discs fit between some vertebrae, providing shock absorption and allowing for some movement.
Joints	Joints are the connections that allow those 206 bones to come together as a functional whole. They allow for movement or stability, dependent on their location in the body.
Ligaments	Ligaments connect one bone to another at a joint, supporting, stabilising and strengthening the joints and protecting them from moving too far in any one direction.
Musculoskeletal System	This system is essential for movement - it's comprised of hard and soft tissues that provide structure, support, protection and form to the body.
MSD	A Musculoskeletal Disorder is an injury or disease of the musculoskeletal system that is largely preventable.

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Nervous System	This is our body's control centre. It transmits information to and from the brain via billions of nerve cells, allowing us to feel and process the environment around us, and determining how and when we need to move. It sends signals to the muscles to create movement. This can happen consciously, such as raising our arm, or unconsciously, like breathing or digestion.
Repetitive Movement	Repetitive Movement is when you use the same part of your body to complete a task over a period of time - generally more than twice in a minute - such as typing, feeding or crushing pills.
Skeletal Muscles	Skeletal muscles are one muscle type consisting of bundles of fibres that contract or relax in order to control our movement or support our posture.
Sudden Force	Sudden force is when a jerky or unexpected movement occurs when handling someone or something, requiring the body to adapt to the changing force.
Sustained Force	Sustained force is when you apply muscular force continually over a sustained period of time, generally more than 30 seconds. This can also be known as static load.
Tendons	Tendons are the tough, flexible bands of collagen that connect bone to muscle, to support movement and provide joint stability.
TILEO	**T**ask **I**ndividual **L**oad **E**nvironment **O**ther Factors
Vertebrae	The bones in the spine that make up a column to provide structure, support, protection and movement. There are: • 7 vertebrae in your cervical spine or neck • 12 in your thoracic spine or mid back • 5 in your lumbar spine or lower back - these are the largest, as they carry the weight of our upper body, the stress of movement and the force of anything we may hold. • 5 fused vertebrae in the sacrum • 4 tiny fused vertebrae in the coccyx

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Resources to support your learning

Spinal Cord Anatomy
https://www.myvmc.com/anatomy/spinal-cord/

Worksafe NZ
https://worksafe.govt.nz/topic-and-industry/health-and-safety-in-healthcare/

Active Learning Hours

This course and the accompanying assessment may require up to three hours of active learning. It is the learner's responsibility to calculate how many hours of active learning have taken place. The course viewed must be relevant to the care worker or nurse's context of practice for it to be considered continuing professional development. Certificates are available from your coordinator.