

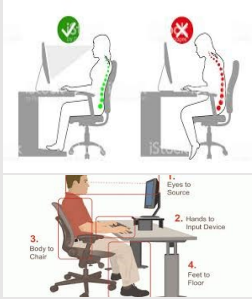


VCU

Safety and Risk
Management

Date: August 2019

Ergonomics



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Musculoskeletal Disorder Symptoms

- Pain
- Weakness
- Stiffness
- Decreased range of motion
- Loss in flexibility
- Burning, swelling, inflamed

Safety and Risk Management

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700 West Grace St.
Suite 3100

MCV Campus
VMI Building
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What is ergonomics?

- The study of people's efficiency in their working environment

Contributing Factors We Can't Control

- Ageing, gender, congenital defects

Contributing Factors We Can Control

- *Awkward Postures*
 - Bending over for prolonged periods of time can increase pressure on the discs in the back, squatting or kneeling can increase pressure behind kneecaps
 - Hands over head and elbow over shoulders for prolonged periods can pinch nerves, affecting circulation
 - Working outside of your power zone, or outside of neutral postures for long periods of time
- *Repetitive Motions*
 - Consistently applying the same stress to muscles, tendons, joints, or nerves
 - Not allowing sufficient time to heal between exertions, sleep is a crucial component
 - Ignoring signs or symptoms that a musculoskeletal disorder is developing

What Can We Do?

- Avoid unnecessary motions, spread work out over time, change hands frequently, rotate tasks with a co-worker
- Use time to stretch before beginning a task, choose a stretching motion that's most applicable to your scenario
- When using vibrating hand tools, keep your hands warm, keep tools well maintained and keep working edges sharp
- Changing height of work display, tilting or rotating to better position
- Occasional shifts in posture, position, or motion can be beneficial

Office Ergonomics

- Use a chair that supports the natural "s" shape of your back
- Keep your knees level with your hip, and 2-3 inches from the edge of the seat
- Keep your hands and wrists straight, do not use a keyboard with propping legs
- Pads or rests should contact heel or palm of hand, not wrist