

## What Is Epicondylitis?

**Epicondylitis** refers to inflammation of the tendons that attach the forearm muscles to the elbow. This inflammation leads to tenderness with referred pain in the epicondylar (side) regions of the elbow. This can occur either on the lateral (also known as tennis elbow) or on the medial (golfer's elbow) side of the elbow.

**Lateral epicondylitis** refers to pain on the outside of the elbow (thumb side) where the forearm muscles (extensors) attach to the lateral epicondyle (the bony prominence on the outside of the elbow).

**Medial epicondylitis** refers to pain on the inside of the elbow (little finger side) where the forearm muscles (flexors) attach to the medial epicondyle (the bony prominence on the inside of the elbow).

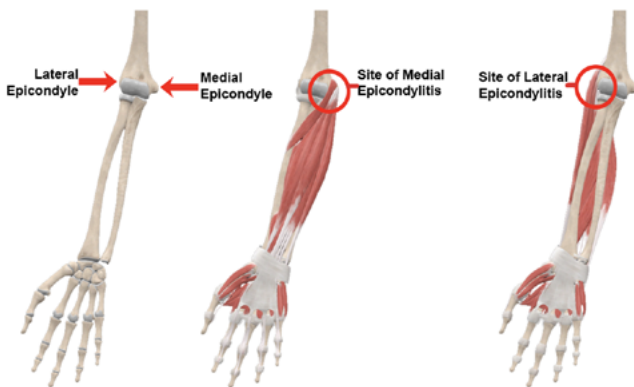


FIGURE 1: Site of lateral and medial Epicondylitis



FIGURE 2: Site of lateral Epicondylitis



FIGURE 3: Site of Medial Epicondylitis

## Ergonomic Risk Factors



### FORCE

- Forceful exertions (e.g. lifting, carrying, gripping, etc.)
- Contact stress
- Mechanical stress



### POSTURE

- Grip type
- Awkward postures (e.g. supination or pronation, wrist/elbow flexion or extension)
- Static postures



### INADEQUATE RECOVERY TIME

- Similar muscle actions performed multiple times in a short period
- Sustained muscle contractions without enough rest
- May lead to fatigue, weakness, and/or altered movement patterns



### VIBRATION

- Extended vibration exposure is linked to abnormal tendon function due to tissue fatigue



### COMBINATION EFFECT

- Many or all of the above risk factors act in synergy to increase the risk of development of Epicondylitis.

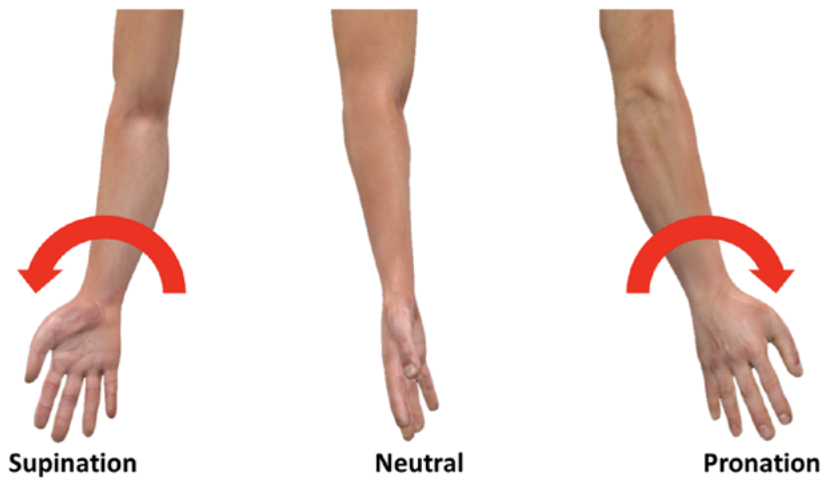


FIGURE 4: Supination, Neutral, Pronation

## Specific Recommendations for Prevention

- Decrease external forces
- Minimize rapid rotation of the forearm
- Take regular breaks
- Maintain neutral hand/wrist postures
- Avoid prolonged exposure to vibration
- [Evaluate handle design options](#)

## Additional Resources and Tools

[OHCOW Ergo Info Sheet: MSDs](#)

[MSD Prevention Guideline for Ontario](#)

[World Health Organization - Musculoskeletal Health](#)