PROTECT YOUR WRISTS & HANDS FROM REPETITIVE
MOTION INJURY

Excess stress without adequate recovery time can lead to repetitive motion injury. Prolonged keyboard use and prolonged manual pipetting are the most likely causes of repetitive motion injury at UCR. The information below is provided for your awareness of hazards and prevention tips available.

Wrist Position

- Pressure within the carpal tunnel depends on wrist position, relatively minimal when the wrist is straight and dramatic with positions of wrist flexion and extension.
- Wrist flexion and extension also cause increased stress to the joints between the carpal bones and increased tension to the tendons crossing the wrist.

Body’s Reaction to Stress

- Stress is needed to maintain tissue strength. When the body is stressed, tissue damage occurs as a natural process.
- If adequate recovery time is allowed, the body tissues rebuild themselves.
- If discomfort or pain is noticed, inform your supervisor as soon as possible.

Types of Injury

- Wrist joint sprain occurs when lifting a heavy binder with one hand (during which the wrist is forced into extension to balance the weight of the book), placing full body weight on the hand with the wrist extended, when stapling, or pushing against an object.
- Tendonitis is inflammation of a tendon. Tenosynovitis is inflammation of a tendon sheath. Both can occur if the tendon is used excessively, especially when the wrist is in an awkward position. Irritation of a tendon occurs over a localized area. If it continues it can spread along the tendon sheaths, resulting in symptoms into the forearm and hand.
- Carpal Tunnel Syndrome is when compression within the carpal tunnel is sufficient to cause damage to the median nerve. Symptoms include pain, tingling and numbness of portions of the wrist and hand. Similar symptoms may occur from inflammation within the carpal tunnel, sufficient to compromise the space in it. Typically, carpal tunnel-type symptoms resulting from injury to the wrist (wrist sprain or tendonitis) resolve with treatment of the injury and do not result in carpal tunnel syndrome.

Methods of Prevention

- Avoid force, flexing, twisting, bending or extending the wrist. Try to keep the wrists straight. Be aware of wrist positions and continuously apply good ergonomic principles.

UCR Program for Reducing Repetitive Motion Injuries

- Ask your supervisor for an ergonomic workstation evaluation (hazards are evaluated and measure are taken to stop the discomfort).

Visit [www.ehs.ucr.edu](http://www.ehs.ucr.edu) for additional information or call EH&S at 827-5528 if you have any questions.