Cumulative Trauma Disorders

Veterinary hospital employees may be exposed to repetitive motion and lifting hazards, which have the potential to cause tissue damage and pain.

These Cumulative Trauma Disorders (CTDs) are a class of musculoskeletal disorders involving damage to muscles, tendons, ligaments, nerves and the circulatory system. Fortunately, steps can be taken to reduce the risk factors that sometimes cause CTDs.

Occupational factors that lead to CTD include repetitive and forceful activities, static muscle load, body posture, mechanical stress, vibration and cold. In veterinary hospitals and clinics this can occur when holding and restraining animals for extended periods of time, holding instruments and medical equipment in a stagnant position, and standing for long periods of time at a table at an incorrect height.

Reducing Injuries
To avoid or reduce the exposure to injuries for employees, consider:

- Adjustable work heights – Being able to adjust work station height can help avoid uncomfortable work positions while performing procedures.

- Job rotation – Throughout the day, shift job tasks such as holding and restraining. When possible, work positions should be changed no less than every 10 minutes.

- Use padded and ergonomically designed tools. Keeping hands and arms in a neutral position can help increase productivity, make jobs more comfortable and improve morale.

- Understand individual differences. Some employees may have more upper body strength; others may have longer reaches; use each employee’s strengths to their best advantage.

- Stretch and exercise the affected body part(s) and take regular breaks from repetitive work.

These are just a few of the many measures that may help reduce injuries in a work place, which will benefit employees, clients and their animals.

Body Components at Risk

CTDs most often occur in the upper body, affecting the fingers, hands, elbows, upper arms, shoulders, neck and back. Muscles may have temporary aches and swelling. Tendons can become inflamed, ligaments can become sprained, and nerves and vessels can be affected by repeated or sustained pressure.

Examples of Hand and Wrist Problems

Tendonitis – An inflammation in a tendon that occurs when a muscle/tendon is repeatedly used or tensed.
Trigger Finger – When the tendon sheath of a finger is swollen, the tendon can become locked in the sheath. Trigger finger is often associated with using hand tools that have sharp edges, or with repetitive bending of fingers with continued forceful gripping of equipment.

Carpal Tunnel Syndrome – Compression of the median nerve in the carpal tunnel of the wrist. Pain, numbness and tingling are usually felt in the first three fingers and the base of the thumb.

Examples of Arm and Elbow Problems

Tennis Elbow – This is caused by forceful twisting motions that create strain on the elbow tendons, causing discomfort or pain from the elbow down the forearm.

Examples of Shoulder and Neck Disorders

Rotator Cuff Tendinitis - An inflammation of the tendons of the shoulder. Rotator cuff injuries are often found with work in which the elbow must be kept in an elevated position for long periods of time.

Thoracic Outlet Syndrome – Compression of the nerves and blood vessels between the neck and shoulder. Numbness and tingling in the fingers and hand can be an indication. Performing overhead tasks for extended periods of time can cause this condition.

The potential for CTDs such as those identified above cannot be totally eliminated from veterinary hospitals, but it is possible to change how work is performed so that work is easier on the body. If implemented, the suggestions in this article can reduce the level of stress on one’s hands, wrists, and arms and may also reduce how often and how long one’s body is subjected to stress. It’s important to remember that CTDs are preventable.