

Computer Workstation Ergonomics



As in the human healthcare industry, veterinary professionals use computers in treatment rooms and customer service areas. Most times, discomfort experienced by computer users is minor and reversible. It is important that users know how to sit or stand in a neutral posture and adjust workstation equipment to alleviate minor discomfort before it becomes serious.

"Micro-Pauses"

When using a computer for an extended time, take micro-pauses every 30 minutes to stretch limbs and digits. This can prevent fatigue and stiffness that results from sitting in a static position. In addition to stretching during these short pauses, ease eye strain by focusing eyes on a distant object.

Neutral Posture

When sitting or standing in a neutral posture, joints and body parts are naturally aligned. Using a comfortable, supportive, and easily adjustable chair is the first step to sitting in a neutral posture. A good chair will have these characteristics:

1. **Adjustable Height** – When sitting in a properly adjusted chair, feet should rest flat on the floor or on a stable foot rest. Make sure the floor under the workstation is clear so that feet can move and change positions easily. This gives the lower back and legs support, thereby reducing fatigue.
2. **Appropriate Seat Pan Depth** – The seat pan needs to be deep enough to support the thighs and wide enough to sit comfortably on the cushion.
3. **Backrests** – Backrests need to provide lumbar support and have adjustable heights so they can be appropriately positioned to fit the lower back. Use a small lumbar pillow, if needed.
4. **Various Sitting Positions** – The chair backrest should allow the user to recline about 15 degrees. The backrest should lock in place or be tension adjustable.
5. **Armrests** – Armrests need to be adjustable and should not interfere with moving the chair under desks or getting in or out of it.

Standing improves circulation and digestion. If the office has standing workstations, the important thing to remember is to maintain a 90-degree elbow angle, and proper monitor height and viewing distance.

Keyboard and Pointing Devices

The keyboard should be placed on a stable, level surface, directly in front of the user. With hands resting on the keyboard, the angle between the upper arm and forearm should be between 90 to 120 degrees. Adjustable keyboard trays in the veterinary practice are a good idea if multiple people use the same computer workstation. Wrists should be straight and in-line with the forearms. Padded wrist rests support wrists and help keep them in alignment.

Pointers or mouse devices need to be placed next to keyboards at the same height. Use both hands to operate them and use keyboard shortcuts to reduce extended use.

Monitor, Document Holder, and Desktop Equipment

1. The monitor should be positioned at least 20 inches away from the user. When seated, set the screen height so that the top of the monitor is at or just below eye level. If the user wears bifocals, the screen should be lowered until he or she can comfortably see the monitor through the bifocal portion of their glasses without tilting the head back.
2. Keep frequently used materials within 14 to 18 inches of reach. This is the primary work area.
3. If referencing documents while at the computer, use a document holder that keeps them at the same angle and distance from the eyes as the screen.
4. When using a telephone, avoid resting the telephone receiver between the ear and shoulder. Use a headset if frequently on the telephone.

Lighting

- Position the monitor screen at a right angle to windows to reduce glare.
- Tilt the screen down slightly to avoid overhead light from producing glare.
- Periodically clean the computer monitor screen.
- Consider attaching an anti-glare screen to the monitor.

Cumulative trauma injuries, like carpal tunnel syndrome, can be prevented when proper ergonomics are used. Minor discomfort that can lead to a serious injury may not "go away" on its own as many people think. Taking action to ensure staff are using good ergonomics will help avoid lost time, injuries, and significant claims costs. ■