



Ergonomics Guidelines for Veterinary Practice



The AVMA Government Relations Division alerted the Council on Veterinary Service (CoVS) in 2001, that regulations concerning Ergonomics may be developed by government agencies and applied to veterinary medicine. The Executive Board approved an Ergonomics Task Force at its April 2002 meeting, as requested by the CoVS to review Ergonomics in veterinary practice and develop guidelines.

With regards to Ergonomics, "guidelines" are suggestions recommended for use, whereas "standards" or "regulations" are requirements that are imposed. Often times, if "guidelines" are in place, "standards" are not imposed, or the "guidelines" are adopted directly.

Despite the fact that there is no central database of ergonomic injuries pertaining to veterinary medicine, and their effect on veterinary practice, there is a strong belief that injuries adversely affect veterinary medicine professionally and economically. There is scientific evidence across many industries that jobs and tasks with various physical risk factors expose workers to preventable hazards that can cause or aggravate work-related musculoskeletal disorders (WMSDs).

After searching the available literature and programs concerning Ergonomics in October 2002, only 2 states had adopted Ergonomic Standards. Only one of those (Washington) has set specific guidelines based on the current scientific information available to date. The rationale of the Task Force, after reviewing available information, was to adopt guidelines consistent with the consensus of scientific and

regulatory communities. Current standards are built on the well-established occupational safety and health principle of preventing injuries by identifying and reducing worker exposure to hazards. Industry estimates utilized by Washington State indicate that these ergonomics guidelines could prevent 40 percent of WMSD injuries and 50 percent of WMSD costs once all the elements of the guidelines are fully effective. These are average figures, and actual reductions will vary by workplace and by industry. Further, the Ergonomics Task Force and the Council on Veterinary Service believe that these guidelines outline a model which assures, to the extent feasible and on the basis of the best available evidence, that ergonomic injuries will be minimized, even if an employee has regular exposure to the hazards dealt with by these guidelines.

The Council strongly believes that ergonomics is an issue that will eventually impact our profession. The impact should be positive if appropriate guidelines are formulated by veterinarians for use by the veterinary profession. The impact could be negative if factions outside our profession formulate the guidelines and thereby set standards and regulations for our profession.

The risk factors include awkward postures; high hand force; highly repetitive motions; repeated impact; heavy, frequent, or awkward lifting; and moderate to high hand-arm vibration. The existence of one or more of these risk factors in a task constitutes what the Task Force and Council label as a "Caution Zone Task". Employers need to identify the tasks and address the risk factors.

What to do if you identify a "Caution Zone Task"

- ✓ Ask for employee involvement and suggestions.
- ✓ Analyze caution zone tasks for hazards. Identify jobs or tasks that have produced prior ergonomics related injury. History may repeat itself.
- ✓ Find solutions to these hazards. Consider implementing engineering controls to design the hazard out of the workplace. For example: a practice may purchase lift tables to reduce the exposure to injury when lifting larger or heavy pets/animals.
- ✓ Evaluate the success of the solutions. Communicate the success to your staff and ask for their feedback to insure the changes are working.
- ✓ Provide job-specific training on proper use of solutions.
- ✓ Keep in touch with ergonomics efforts through the veterinary profession and through continuing education for the entire staff.

Six key points to remember:

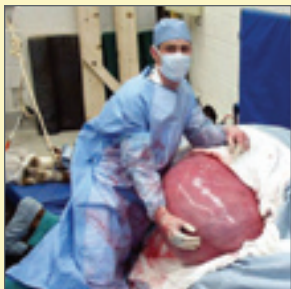
1. Ergonomics can help you in your practice
2. Some states already require employers to implement ergonomics programs
3. Work-related Musculo-Skeletal Disorders (WMSDs) can happen in jobs with risk factors
4. Risk factors can be reduced and WMSDs prevented
5. Reporting symptoms early is important
6. You need to involve all staff members to successfully implement ergonomics changes



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Risk factors that could lead to Musculo-Skeletal Injury and examples* of "Caution Zone" Tasks



Awkward Postures

Working with the hand(s) above the head, or the elbow(s) above the shoulder, for extended time periods that could cause muscle fatigue and injury.

Working with the neck, back or wrist(s) bent more than 30 degrees for extended time periods that could cause muscle fatigue and injury.

Squatting or kneeling for extended time periods that could cause muscle fatigue and injury.

Sustained position for extended time periods that could cause muscle fatigue and injury.



Floating teeth; rectal palpations; dystocias; prolapse repair; stocking shelves

Dystocias; colic surgeries; palpations; floating teeth; venipuncture; grooming; kennel and stall cleaning; data entry

Bleeding swine; surgeries performed while kneeling

Surgery; dentistry; driving a vehicle; tasks that require a static posture



High Hand Force

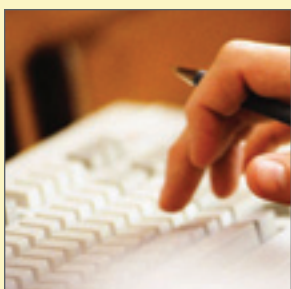
Pinching an object and applying more than 2 pounds of force per hand for extended time periods that could cause muscle fatigue and injury



Large animal abdominal surgeries

Gripping an object and applying more than 10 pounds of force per hand for extended time periods that could cause muscle fatigue and injury.

Ear tagging; restraint



Highly Repetitive Motion

Repeating the same motion with the neck, shoulders, elbows, wrists, or hands (except for keying) with little or no variation every few seconds for extended time periods that could cause muscle fatigue and injury.



Palpation; administration of injections; dental work; grooming/trimming; surgical procedures; venipuncture and blood collection

Performing intensive keying for extended time periods that could cause muscle fatigue and injury.

Data entry

Moderate to High Vibration

Using motorized equipment, percussive tools (scalars) or other hand tools that typically have moderate to high vibration for extended time periods which could cause muscle fatigue and injury.



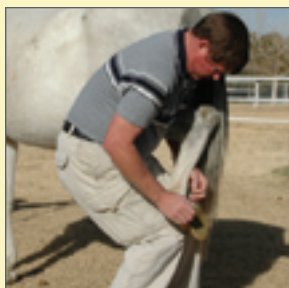
Equine dentistry (using motorized equipment); power grinding hooves

Repeated Impact

Impacting with the hand or knee repetitively for extended time periods that could cause muscle fatigue and injury.



Unlikely to occur in a veterinary care environment, but acknowledged as a risk factor



Heavy, Awkward Lifting

Repeatedly lifting heavy objects until muscle fatigue occurs which could lead to musculo-skeletal injuries.



Patient lifting, restraining, and positioning; carrying equipment; large animal foot and leg work; carrying feed and other products; dystocias

Infrequently lifting heavy objects until muscle fatigue occurs which could lead to musculo-skeletal injuries.

Muscle fatigue is a variable that can occur at different levels depending on individual body physique and conditioning.

*Not intended to be an all-inclusive list.

For more information, please contact M&FS, Council on Veterinary Service. Or, for more safety posters, call the PLIT at 800-228-7548.