

Video Display Terminal (VDT) Best Practices



Table of Contents

The Maine VDT Law.....	3
Ergonomics	3
Step 1: Evaluate the Work	4
Step 2: Consider Your Options	4
Step 3: Develop a Plan to Address Assessments.....	4
Step 4: Training and Problem Reporting/Solving.....	5
Step 5: Implementing and Monitoring Your Progress	6

The Maine VDT Law

Maine has had a VDT law since 1991. The law basically stipulates that every employer shall establish an education and training program for all VDT operators that operate a VDT for more than four hours daily. Those with five employees or less, training may be in written form only. Those with more than six employees in one location must provide the training both orally and in writing. MMA recommends that all operators receive training.

The program must include, at a minimum:

- Notification of the rights and duties created under the law and posting in a prominent location in the workplace.
- An explanation/description of the proper use of VDT terminals.
- Protective measures an operator may take to avoid symptoms that could result from extended or improper use of video display terminals.
- Instruction related to the importance of maintaining proper posture during terminal operation and a description of methods used to achieve and maintain this posture, including the use of adjustable workstation equipment.

This education and training must be provided within the **first month** of employment and **annually thereafter**.

Ergonomics

Ergonomics is “the” management tool for arriving at the best possible fit between employees and the work they perform. Simply put, it is a method of designing the workstation to fit the worker. **Ergonomic principles, effectively applied can give municipalities the competitive edge they need by:**

- Maximizing efficiency.
- Increasing productivity.
- Enhancing product and service quality.
- Reduced workplace injuries and Workers’ Compensation costs.
- Improves quality of life.
- Reduces turnover.
- Boosts and maintains employee morale.

Effective application of ergonomic principles will lead to a win-win situation for employers and employees alike.

The Five Basic Steps to Make Ergonomics Work for Your Organization

Step 1: Evaluate the Work

- A successful ergonomic program begins with evaluating the work and the workstation.
- Looking at your employee's work injury experience will help you decide whether you need to make changes. Attached to this document you will find a VDT checklist to help you make a quick but thorough appraisal of all your VDT workstations.

Step 2: Consider Your Options

- Prior to making any decisions, explore your options for change.
- The most expensive fix is not necessarily the best. Look for low cost-no cost alternatives.
- Conversely, a quick fix to a workstation or practice will not always work.
- It is critical to involve the employee whose work station you are about to change to get their in-put. They are more familiar with their workstation. Without employee involvement, you are less likely get buy-in and more likely to fail.
- **Example of cost effective improvisation:** In the case of a tall person at a workstation that is low, consider placing blocks of wood under the desk to raise it. Or, if you have a shorter person for a desk that is too high, raise the chair to a higher level and obtain or improvise a footrest rather than purchasing a more costly adjustable workstation.

Adjustable equipment is convenient for workstations used by more than one employee, because the workstation can be modified instantly and easily to suit the needs of each. The disadvantage of adjustable equipment is it is often more expensive than non-adjustable. However, don't forget, adjustability alone will not suffice. **It's the fit that counts, and the fit doesn't happen unless the equipment is actually adjusted.** Keep in mind; you don't always need adjustable equipment to get a good fit. Simply reorganizing a workstation and using equipment you already have can result in many significant improvements.

Step 3: Develop a Plan to Address Assessments

To assist you in defining priorities, answer the following questions:

- Which are your highest volume workstations? Workstations used by employees who spend the most time keystroking should generally be given a high priority for modification.
- How long it will take to implement your changes?

- How do finances affect your options? Can simpler and less costly changes be made in the interim?
- Are there changes you would like to try out on a temporary basis? If so, implement them sooner rather than later, so you will know as soon as possible what works and what doesn't work. Use a common sense approach to implement one change at a time. By doing so, you can determine what works and what doesn't. By implementing several changes at once, it is difficult to determine what worked.
- Are there any quick fixes or inexpensive changes that could make a big difference? If so, get to these quickly.
- Can you rotate your workforce to reduce exposures? Can you spread out your keyboard work throughout the day?
- Do you have a stretching program? Can employees take time out for stretch breaks? By using the same muscles and joints while at workstations, employees generate lactic acid in their joints that can lead to tendonitis or arthritics. The only way to flush out the acid is by stretching.
- Can employees get up and move around as much as possible?
- What are the cost/benefit ratios of the ergonomic improvements? There may be costs related to equipment purchases, training, and work time spent implementing improvements. These should be weighed against potential reductions associated with Workers' Compensation claims, lost work time and lost productivity. ***Improved efficiency can add value to your organization and increase productivity.***
- Are any employees currently having symptoms that appear to be related to their use of a VDT? If so, modifying their work practices or workstations is your top priority. It sends a clear message that that your organization cares about your workforce.

Step 4: Training and Problem Reporting/Solving

- As per the Maine VDT law, synopsised on Page 1, Maine requires training within one month of employment and annually for all operators keyboarding for more than four hours in a day. This training can be done in-house, by a vendor, or online. There are many programs and options available. MMA offers training through our On-Line Training University located on our website.
- Additionally, it is imperative that you tell your employees how things are done in your business – what equipment is used and what work practices are to be followed. This is information only you can provide. It should be emphasized during employee training.
- **As for problem reporting**, employees should be informed when, how and to whom to report problems. The goal being quick response to early warnings.
- Ergonomic injuries tend to be fixable and inexpensive at first, but expensive and difficult to alleviate later on. **Problem reporting is based on the two following principles:**

1. You cannot fix a problem if you do not know about it.
 2. It is better to know too much than too little.
- **Problem solving** consists of:
 1. Assessing, adjusting, and maintaining workstations.
 2. Addressing improper/poor work practices.
 3. Dealing with potential ergonomic injuries.
 - Whenever an employee reports symptoms that could be related to an ergonomic injury, it is in your best interest to get involved. Take a second look at the employee's workstation as soon as possible and determine if there is anything obvious in the workstation or employee work activity that may be causing the problem. If so, take corrective action. The sooner the better.
 - If you can't find an ergonomic solution that reduces or alleviates the employee's symptoms, the best solution is to obtain a healthcare evaluation from a provider who has expertise in treating workplace injuries and is familiar with your workplace.
 - **You're MMA Claims Adjuster or Nurse Case Managers are excellent resources for direction to appropriate providers.**

Step 5: Implementing and Monitoring Your Progress

- The key is to have a plan in place and consistently follow it.
- Remember, employees often have much of the critical information necessary to identify problems and propose solutions. Include them in this process. After a change has been made, survey your employees who have been effected by the ergonomic change for their input in determining if the change was for the better. If not, a re-evaluation may be necessary.
- Questions to consider as you evaluate your program's effectiveness include:
 1. Are ergonomic injuries being reduced in number and/or severity?
 2. Has the scheduling, pace, organization or work activity changed?
 3. Have staffing levels changed?
 4. Have any additional ergonomic problems been created by new job tasks, equipment, or even the program itself?
 5. Is information freely exchanged between employees and their supervisors about updates or changes in the programs?
 6. Is the problem reporting and problem solving procedure you put in place working?
 7. Is additional training needed?

Following these five steps should see you well on your way to:

- Improving how work is done in your organization.
- Developing solutions to the problems that arise.
- Significantly impact your bottom line in a positive way.
- Increase efficiency and productivity.
- Have everyone working smarter, not harder.

If additional resources are needed, Workers Compensation Fund members are eligible to apply for MMA's safety grant to help defer the cost when purchasing equipment for workstation improvements.

This information is intended to assist you in your loss control efforts. "Best Practices" are developed from available current information but may not address every possible cause of loss. We do not assume responsibility for the elimination of all hazards that could possibly cause accidents or losses. Adherence to these recommendations does not guarantee the fulfillment of your obligation under local, state, or federal laws.

Appendix: VDT Checklist

References

http://www.safetyworksmaine.com/training/online_classes/vdt/VDTbooklet.pdf

http://www.safetyworksmaine.com/training/online_classes/vdt/VDT-Main.htm

Appendix A – VDT Checklist

Municipal Member:			
Date:			
Completed By:			
Person and/or Location Surveyed:			
Number of Hours Per Day VDT is Used:			
Criteria	YES	NO	<i>If No, how does the workstation differ from criteria and what controls if any are needed?</i>
VDT UNIT			
1. The top surface of the keyboard space bar (or bottom row of keys) is no higher than 2 ½ inches above the work surface.			
2. The VDT unit is positioned to avoid glare on the screen.			
3. During keyboard use, the operator's upper arm and forearm are kept close to their side with elbows at a 90°-110° angle.			
4. During keyboard use, the operator's wrists are neutral or slightly extended.			
5. The top of the viewing screen is at or slightly below eye level. Is the employees head and neck straight and centered over shoulders?			
6. When the VDT unit is in use, the operator faces the monitor squarely and the operator, monitor and keyboard are in direct alignment.			
7. The monitor screen is 18 to 30 inches from the operator's face, or at about arms reach.			
8. The screen swivels horizontally and it tilts or elevates vertically.			
9. The operator can control brightness and contrasts.			
10. The images on the screen are clean, sharp, and easy to read.			
11. If the operator has to read from a document, an adjustable document holder is located in the same plane as the monitor and keyboard.			
12. The keyboard is detachable.			

CHAIR			
13. The chair height is easily adjustable.			
14. The chair has an easily height and tilt adjustable backrest.			
15. The seat (pan) has an adjustable forward/backward glide.			
16. The backrest supports the inward curve of the operator's spine in the lumbar region.			
17. The seat is padded and has a waterfall front.			
18. You can easily place 2-3 fingers between the front edge of the seat and the back of the operator's calf.			
19. When comfortably seated, the operator's thighs are horizontal and lower legs are vertical.			
20. When comfortably seated, the operator's feet are flat on the floor or on a footrest.			
21. The chair is comfortable to the operator, and the operator is seated correctly in the chair.			

Criteria	YES	NO	<i>If No, how does the workstation differ from criteria and what controls if any are needed?</i>
WORK SURFACE			
22. The operator knows how to properly adjust the chair or its adjustment has been reviewed with the operator.			
23. There is sufficient space under the desk for knees, feet and thighs.			
24. Mouse is parallel to and on the same level as keyboard.			
25. The edge of the work surface in front of the keyboard is rounded or padded.			
26. The keyboard rests on an adjustable height work surface.			
27. There is adequate working space.			
28. Items on the desk/work surface that are frequently used should be within arms' reach.			
29. A Phone headset is in use.			
ENVIRONMENT			
30. The lighting is not so bright as to cause discomfort or reflections.			
31. The lighting is not so dim as to cause the operator to strain to see.			
32. There is no light shining into the operator's eyes.			
33. Task lighting is available for operator use.			
34. The general environment is clean, with comfortable temperature and humidity and there is no excess noise.			
35. External windows have adjustable blinds or curtains to minimize glare.			

Criteria	YES	NO	<i>If No, how does the workstation differ from criteria and what controls if any are needed?</i>
TRAINING AND WORK PRACTICE			
36. Adequate breaks away from the VDT are provided (minimum 15 minutes for every 2 hours of VDT use). VDT work is scheduled that allows the employee to vary VDT tasks with other work activities.			
37. Eye exam within last 2 years			
38. Minimum keystroke pressure is utilized by the operator.			
39. The operator has been trained in hazards associated with VDT use, how to avoid the hazards, proper use and adjustment of workstation components, and how to seek assistance with concerns.			
COMMENTS			
RECOMMENDATIONS			