

City of Portland

Video Display Terminal Policy

Introduction

On January 1, 1992 a law came into effect that mandates training for Maine employees who operate a Video Display Terminal (Title 26 MRSA Section 251 & 252). This law was passed in an attempt to protect Maine workers from unnecessary injuries as a result of working at video display terminals. The cornerstone to the law is awareness and training. Under the law employers have been given the responsibility to train employees in the hazards associated with operation of video display terminals

All city departments are included within this program. The written program will be available for review in the department of Human Resources office, Room 113, City Hall, for any interested employee or their designated representative.

This program contains:

- Definitions pertinent to the standard.
 - Responsibilities
 - Proper Posture
 - Proper Workstation Layout
 - Workstation Adjustments
 - Things you can do
 - Resources
 - Title 26 The Maine VDT Law (app. A)
- Appendices B, C, D, E, F, G

Definitions

Employ: To employ or permit to work.

Employee: Any person engaged to work on a steady or regular basis as an operator by an employer located or doing business in the State.

Employer: Any person, partnership, firm, association, or corporation public or private that uses 2 or more terminals at one location within the State. The term "employer" includes, but is not limited to:

- Any person, partnership, firm, association or corporation acting in the interest of any employer. Directly or indirectly; and

· The State, in its capacity as an employer,

Operator: Any employee whose primary task is to operate a terminal for more than 4 consecutive hours, exclusive of breaks, on a daily basis.

Terminal: Any electronic video display screen, data presentation machine, commonly called video display terminals, VDTs, or cathode ray tubes, CRTs. The term does not apply television or oscilloscope, cash registers or money typewriters.

Ergonomics: The science that seeks to adapt work environments and working conditions to fit the worker.

Carpal Tunnel

Syndrome: The swelling of the carpal tunnel due to friction caused by the movement of the flexors and extensors against the carpal ligament. Numbness and tingling in the fingers typically felt at night. **(See appendix B for affected area)**

Responsibilities

Each department is responsible for providing or requesting training for those employees who meet the criteria. New employees must receive the training within the **first month of employment** as operators and annually thereafter. The city safety coordinator and the ergonomic liaisons will be available to provide assistance and annual training.

Proper Posture

Posture plays a very large role in maintaining a healthy body and work environment. The operators posture should not be governed by the workstation and should be monitored to pick up poor posture before it becomes habit. Habits that can effect posture are sitting on your foot/ leg, placing documents flat on the work surface while typing from them, pinching the phone between your neck and shoulder while writing and many others. Poor posture if left unattended or not corrected can lead to larger more painful problems that take longer to correct.

There are four primary areas to consider for proper posture, the ankles, knees, hips and elbows, each of these major joints should be at 90 degrees while seated. Any of these body points closed to less than 90 degree for long periods of time can result in pain and discomfort to the user.

Feet:

The feet should be placed flat on the floor while seated. For a standing workstation it is sometimes more comfortable to place one foot up on a footrest or shelf (no more than 4 inches high). This will allow you to switch feet when one becomes tired. (Remember 90 degrees at the ankles)

Legs:

The legs are easily fatigued if seated for long extended periods of time due to the pressure being placed on them from our body. Ideally the thighs should be parallel to the floor or pointed

slightly downward from the hip to the knees. This will place even pressure on the entire surface of the leg from the back of the buttocks to the knee. There should be approximately 3 inches of between the back of the knee and the front edge of the chair. *(If you have more or less than 3 inches of space, see the section on Workstation Adjustments).*

Hips:

Our hips need as much consideration as the rest of our body. If our hips are positioned at less than 90 degrees it creates a pinch point that can cause discomfort to the user. It also means that our lower back (lumbar region) is supporting our torso, and over time this can cause back discomfort.

Torso:

The torso is from your hips to your shoulders and makes up a large part of our bodies mass. If not properly supported it can cause pain and discomfort, usually in the lower (lumbar) region of the back. The torso needs to be supported vertically as well as laterally. The vertical support comes from the form of the chair back that provides support to the lower back (lumbar) region by causing us to sit up straight. The lateral support comes from the chair back as well and keeps us centered in the chair. *(See the section on Workstation Adjustments)*

Shoulders:

The shoulders can be a point of pain and discomfort if we do not pay attention to their positioning. Our shoulder are designed to hang / rest in a downward sloping posture. Shoulders that are elevated (shrugged) or held away (abducted) from the torso can be a source of pain and discomfort. Shoulders that are shrugged or abducted away from the torso can cause pain in the neck and across the shoulder blade area. The shoulder is an area of high use for a working individual. The shoulders along with the arms are the probably the most used part of our body while working on a computer. Ideally shoulders should remain in the same position as they are while standing with your arms hanging naturally at your sides.

Arms:

The arms are broken down in to two areas: upper (shoulder to elbow) and lower (elbow to wrist). The upper arm should hang naturally from the shoulder and not be held away (abducted) from the torso. The lower arm should be positioned at an angle no less than 90 degrees to the upper arm. An angle of less than 90 degrees will result in a pinch point at the elbow and can be the source of discomfort. Ideally the lower arm and the thighs should be parallel to each other.

Elbow:

When ever possible the elbow should be rotated when reaching for the mouse, leaving the upper arm hanging naturally by your side. If the elbow is drawn away from the torso (abducted) for long extended periods of time it places a large amount of stress on the shoulder and upper back muscles and can be the source of pain.

Wrist:

The wrist plays a very critical role in proper posture and can be the source of discomfort (i.e. Carpal Tunnel Syndrome). Ideally the wrist should be kept in what is referred to as neutral

posture at all times. Neutral posture for the wrist is a straight line from your elbow to the tips of your fingers. That is, no bends; up, down or side to side.

Head & Neck:

Our head & neck are designed to face forward and remain centered over our shoulders (neutral). Movement which keep our head and neck out of neutral for long periods of time can cause pain and discomfort to the muscles as well as be the cause of tension head aches. If the head & neck are sustained out of neutral for long extended periods of time it is generally due to the poor layout, workstation design or poor work habits. Neck pain is a frequent complaint among computer users, excessive head movement or poor habit is generally the cause of the pain. (*See Workstation Layout for proper positioning of the monitor & copyholder*).

Eyes:

The eyes perform an immeasurable number of functions on a daily basis. It is therefore necessary to provide the eyes with stress breaks and relaxation time whenever possible. Our eyes are susceptible to color changes, light changes, as well as distance and size. The design and layout of our workstation can play a large role in eye comfort. Have your eyes checked on a regular basis and glasses checked at least annually. Be sure to tell your eye doctor that you work on a computer.

(See Appendix C for additional information)

Proper workstation Layout

Lighting:

Natural and incandescent; direct and indirect, both need to be considered and controlled. Too much light and you'll squint; too little and you'll strain your eyes. Ideally, overhead lighting should be located to the sides and not directly overhead. Lighting located directly overhead can cause reflected glare off paper on the desk or the desk surface itself. Conversely, lighting located in front of or behind the user can cause problems as well. Lighting located in front of the user can shine directly into the user's eyes, whereas lighting located behind the user can cause the user to work in their own shadow, either situation places unnecessary stress / strain on the eyes. Overhead lighting that is too bright can be controlled with filters and or diffusers.

The lighting should not cause direct glare or reflected glare on the screen (if you can see yourself or the reflection of something in the room on the screen, you have glare). Natural light should be controlled with blinds or curtains whenever possible. Directing natural light toward a white ceiling will brighten a room significantly versus directing the light toward the floor.

Monitor:

Monitor placement is critical for proper posture. Ideally the monitor should be placed in front of the user at eye level. The top of the screen (glass area) should be at the same height as the bridge of the nose when seated properly. The distance to the monitor depends on the user; a general rule of thumb, is an arm length (while seated in your chair place both arms in front of you, your monitor should be at the tip of your fingers).

If you wear multi prescription glasses the monitor should be positioned at a point where you can view the screen with minimal to no head movement (up and down). Generally speaking this will

mean the monitor will be lower than what was recommended above and it may mean that it will be setting on the desk.

Monitor screen should be kept as close to vertical as possible. Monitors that are angled back act as mirrors and redirect light into the face of the user.

Copy holder:

Documents should not be laid flat on the work surface while typing from them, the ideal position is either hanging from the side of the monitor (for persons who know how to type) or placed on an inclined document holder between the keyboard and the monitor.

Keyboard:

Placement of the keyboard is crucial to preventing carpal tunnel syndrome (CTS). The keyboard must be located in-line with the monitor and at a height that allows the wrist to remain in neutral posture (a straight line from your elbow to the tip of your fingers). Ideally the keyboard should be located on a keyboard tray that allows for height adjustment.

Wrist rests:

Are intended to assist the user in maintaining a neutral posture at the wrist and forearm. Rests are available in a number of lengths, widths, thickness', as well as shapes and sizes. A wrist rest should do the following: support the wrist, provide a padded surface (the thickness of which should be the same height as the first row of keys), and not contribute to excessive heat and moisture build-up. Rest can be used for keyboards, mice, adding machines and any other area where the wrist needs support.

Mouse:

Whether a mouse or a track ball, positioning is vital to proper posture and user comfort. The mouse or track ball should be located either to the right or left of the keyboard and at the same height. The keyboard tray should be equipped with a mouse surface, which allows for proper placement.

Chair:

A good ergonomic chair will have the following items 5 casters (replaceable), height adjustable with a single hand movement, height adjustable back with lumbar support, an adjustable seat pan depth, breathable fabric and moderate density cushioning with a water fall front edge (rounded). High-density foam cushioned chairs should be considered for multi- user workstations. Seats with low-density foam will break down quicker and require re-foaming or replacement sooner than a moderate to high-density foam cushioning. If arms are desired on a chair they must be adjustable both vertically and horizontally. (See workstation adjustments)
If the chair is used on carpeting a chair mat or static mat should be used.

Work surface:

Whenever possible the work surface should be so situated that the user sits in the corner with available work surface to the left and right. The corner should be at 45 degrees to the sides with the monitor located in the corner. Your desk should be arranged according to frequency of use. High use items with-in short reach, moderate use items with-in arms length, and seldom used

items should be stored elsewhere in the office and not on the desk. This will provide you with a break away from your computer while retrieving the item. All edges should be rounded or padded. *(See Appendix D for a visual)*

The acceptable range for work surface height in a seated position:

- 5 - 10 cm above elbow height for precision work (intricate assembly work)
- At elbow height for most writing task and general office work.
- No more than 5 cm below the elbows for coarse work (manual tasks)

The acceptable range for work surface height in a standing position:

- 10 cm above elbow height for precision work
- At elbow height for light work
- 10 cm below elbow height for heavy work

A work surface, which is too high, will abduct the user's elbows away from their body, thereby placing a static load on the shoulders and upper back muscles. A workstation that is too low will cause the user to hunch over thereby placing static pressures on the lower back.

(See Appendix E for standing workstations)

Workstation Adjustments

Chair Adjustments:

Proper chair adjustment can alleviate a number of common complaints that users frequently reference.

The Height of the chair depends on the type of task being performed. The acceptable range for work surface heights in a seated position:

- Ø 5-10 cm above elbow height for precision work
- Ø At elbow height for most writing tasks and general office work
- Ø No more than 5 cm below the elbow for coarse work

(See Appendix E for standing workstations)

The **seat pan** (the piece you sit on) should support you from your buttocks to with in three (3) inches of the knee. The three inch space remaining between your leg and the front of the seat it there to allow for leg movement, without creating a pinch joint. The space is there so you can roll your chair without bumping your calf into the front edge of the chair. If the seat pan does not fit then an adjustment will need to be made either to the seat pan or the back of the chair depending on the style of chair.

The **lumbar support** (the inward curve on the back of the chair) is designed to assist you in maintaining correct posture. Studies have shown that without lumbar support the user will

slouch, thereby placing large stresses on the lower back. The lumbar support should be positioned so that the inward curve of the seat back fits snugly into the inward curve of your back. If the two curves don't match up you will need to either raise or lower the back of the chair.

Arms on a chair should be adjusted so that when properly seated your elbows just touch the tops of the armrest. Your elbows should not be pulled away (abducted) from your body nor should your shoulders be raised. If they are, an adjustment needs to be made. Arms on a chair must adjust horizontally as well as vertically. The horizontal adjustment will be used to set the width of the arms to fit the width of your body (slightly wider than your torso). The vertical adjustment will be used to set the proper height. The actual arm rest surface should be moderately padded with good cushioning and wide enough to support the elbows & lower arm. Avoid armrests that are narrow, hard, and too far back.

Monitor:

If the monitor is at too low a height, an adjustable monitor arm should be installed. Avoid monitor stands that have pieces that can be lost or misplaced. In the event that the monitor is resting on the work surface and is still too high, look at removing the swivel base, most are removable. The colors used on the screen can be a source of discomfort to the user's eyes. If you are experiencing eye fatigue, blurred vision or other eye problems try adjusting the colors on the screen or adjusting the Contrast or Brightness knobs (Contrast- controls the shading of the screen colors, Brightness- controls the vividness of the colors). Neither of these two adjustments will do anything for glare. If a monitor has glare (reflected or direct), a glare screen (avoid tint screens) can be added, if the glare cannot be controlled by another means (window shades, blinds (vertical or horizontal) or changing the angle of the monitor).

Things you can do

Training:

Participate in training when it is offered. Get involved and be trained as a trainer, show an interest in your health and well being with a positive attitude and open mind. Training will be offered to City employees on a yearly basis, times and locations will be arranged prior to the sessions.

Assess your workstation:

Use the attached form (*appendix F*) to assess your workstation and make any necessary correction that you are capable of making. Ask your co-workers to let you know when you are using poor posture. Be willing to try, apply a solution for at-least two to three weeks before giving up on it. It will take your body at-least that long to get used to a change.

Breaks:

If you have a large project to do schedule it in small increments, don't sit at your computer without breaks for long extended periods of time. Stretch a different muscle every half-hour, most stretches can be done at your workstation

(*See Appendix G*).

Evaluate your daily work activities for areas of high repetition, excessive force and, poor/ static posture (working with muscles in the same position for long period of time).

Procedures:

Help establish procedures for work flow, apply administrative controls (rest pauses, job rotation, standing as well as seated positions), apply engineering controls (eliminate excessive force, awkward postures, repetitive motions, poor lighting)

Fact:

The more control an employee has over the comfort of the workstation, the better the fit will be. Maine Bureau of Labor

Recognize:

Train yourself to recognize the early warning signs and symptoms report your concerns to the appropriate person.

Resources

OSHA Web page <http://www.osha.gov>

The following resources are free from the Maine Department of Labor

Feeling good in my job:

A Guide to Protect Computer Users from Repetitive Motion Injuries

Video tapes: #351 Video terminal Ergonomics

#354 Safety in the Office

The objective of Ergonomics is to adapt the job and workplace by designing tasks within the workers' capabilities and limitations.

Appendix A (Maine VDT Law)**THE MAINE VIDEO DISPLAY TERMINAL LAW****TITLE 26:****VIDEO DISPLAY TERMINALS****SECTION 251. Definitions**

As used in this subchapter, unless the context otherwise indicates, the following terms have the following meanings:

- 1.) Bureau.** "Bureau" means the Department of Labor, Bureau of Labor Standards.
- 2.) Employ.** "Employ" means to employ or permit to work.

3.) Employee. "Employee" means any person engaged to work on a steady or regular basis as an operator by an employer located or doing business in the State.

4.) Employer. "Employer" means any person, partnership, firm, association or corporation, public or private, that uses 2 or more terminals at one location within the State. The term "employer" includes, but is not limited to:

A.) Any person, partnership, firm, association or corporation acting in the interest of any employer, directly or indirectly; and

B.) The State, in its capacity as an employer.

5.) Operator. "Operator" means any employee whose primary task is to operate a terminal for more than 4 consecutive hours, exclusive of breaks, on a daily basis.

6.) Terminal. "Terminal" will mean any electronic video screen data presentation machine, commonly called video display terminals, VDTs, or cathode-ray tubes, CRTs. The term does not apply to television or oscilloscope, cash registers or money typewriters.

SECTION 252. Education and Training

Every employer shall establish an education and training program for all operators as provided in this section.

1.) Requirements. An employer's education and training program must be provided both orally and in writing, except that an employer that uses fewer than 5 terminals at one location may provide the education and training program in writing only. The program must include, at a minimum:

A.) Notification of the rights and duties created under this subchapter by posting in a prominent location in the workplace a copy of this subchapter and a written notice that explains these rights and duties in plain language;

B.) An explanation or description of the proper use of terminals and the protective measures that the operator may take to avoid or minimize symptoms or conditions that may result from extended or improper use of terminals and

C.) Instruction related to the importance of maintaining proper posture during terminal operation and a description of methods to achieve and maintain this posture, including the use of any adjustable work station equipment used by the operator.

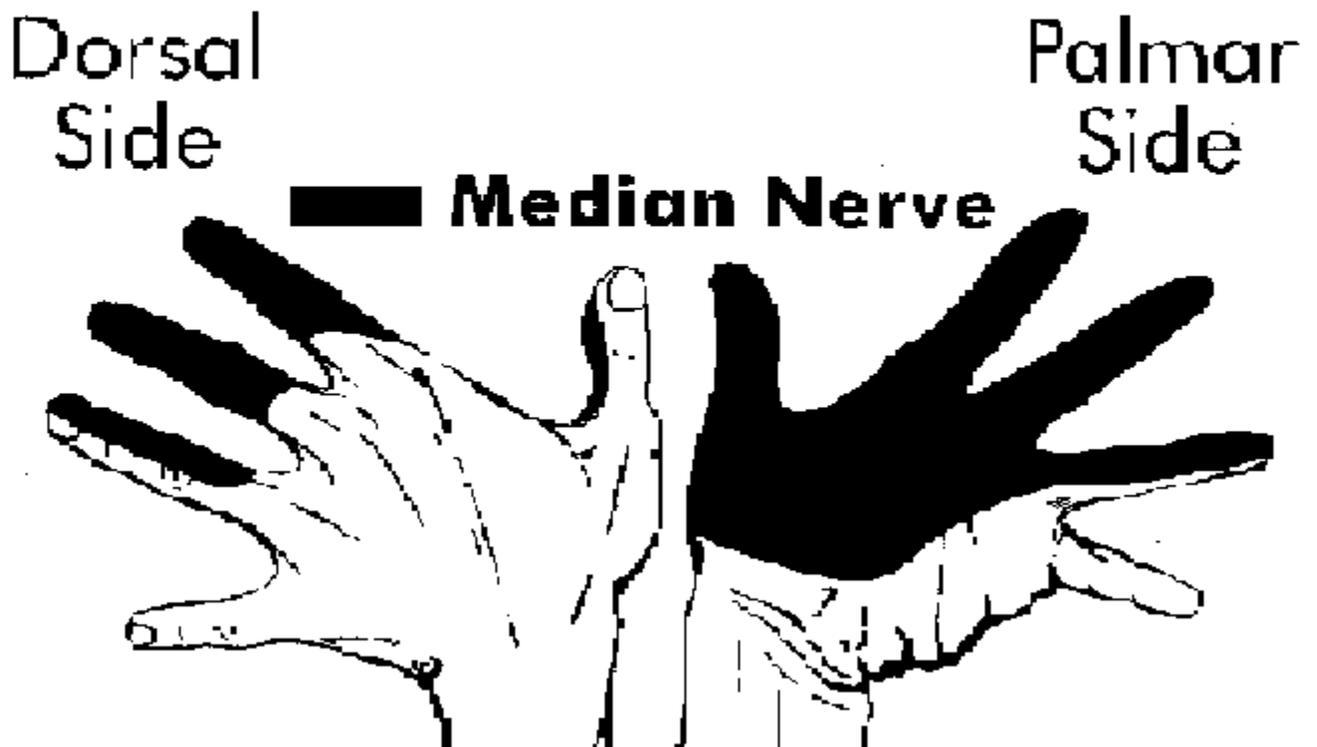
2.) Literature; clearinghouse. The Bureau shall recommend to employers, for the use of education and training programs, occupational safety literature that provides appropriate, current and pertinent data on terminal use. The Bureau shall also serve as a clearinghouse for information regarding workplace safety and health relative to the use of terminals.

3.) Training schedule. Employers shall provide current operators with this education and training program within 6 months after the effective date of this section and annually thereafter. Beginning 6 months after the effective date of this section, employers shall provide all new operators with the education and training program within the first month of employment as operators.

Effective Date: January 1, 1992

For further information contact:
Maine Department of Labor
Bureau of Labor Standards
45 State House Station
Augusta, ME 04333
Tel. (207) 624-6400

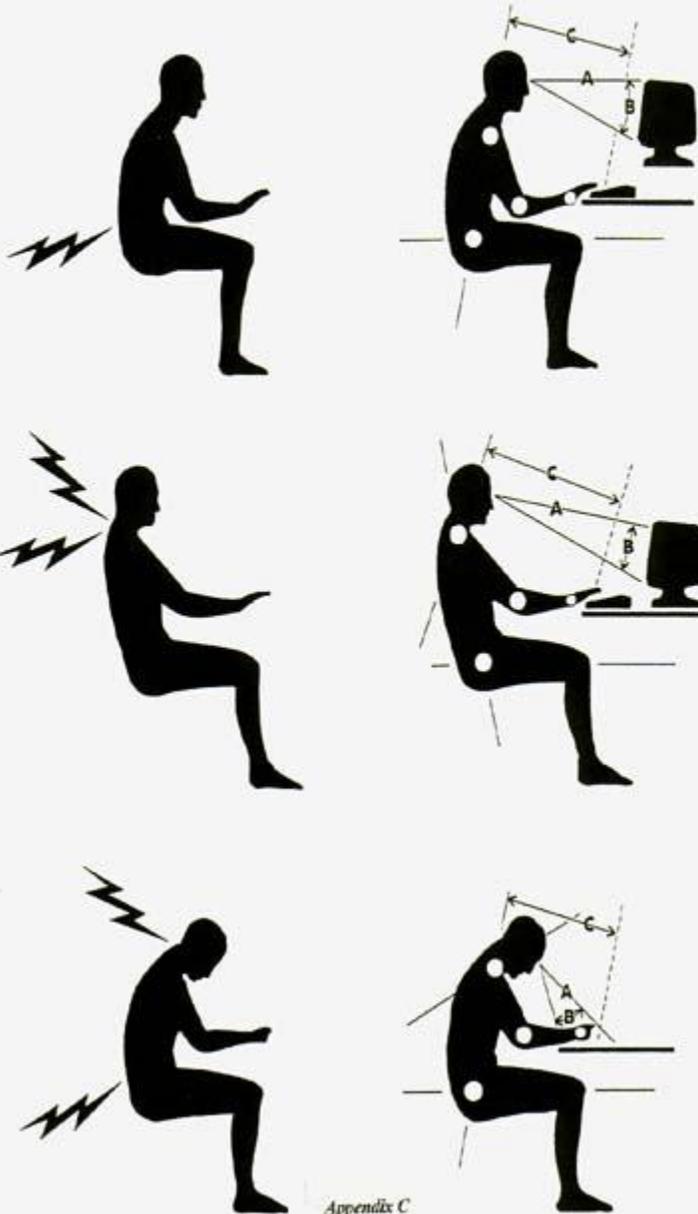
Appendix B (median nerve)



Appendix C (posture factors)

Factors Which Affect Our Posture

A. Focal Distance B. Axis Of Vision C. Reach





Prolonged Overbending

- Strains ligaments and muscles in back
- Compresses abdominal organs impeding normal function

Symptoms

- Lower back pain
- Fatigue



Prolonged Extension of Arms

- Strains muscles in neck and shoulders

Symptoms

- Neck and shoulder pain
- Headaches



Prolonged Stooping of Head

- Strains muscles in neck and shoulders

Symptoms

- Stiffness and pain in neck and shoulders

Correcting



Dynamic Posture

- Permits free movement

Open Angle (+90°)

- Avoids compression of organs
- Avoids back strain

Arms At Side

- Avoids neck and shoulder strain

Head Erect

- Avoids neck and shoulder strain

Positioning



Height, Angle and Distance

- Source material
- Equipment

Appendix D (work surface edges)

BAD



Sharp edge of
work surface

GOOD

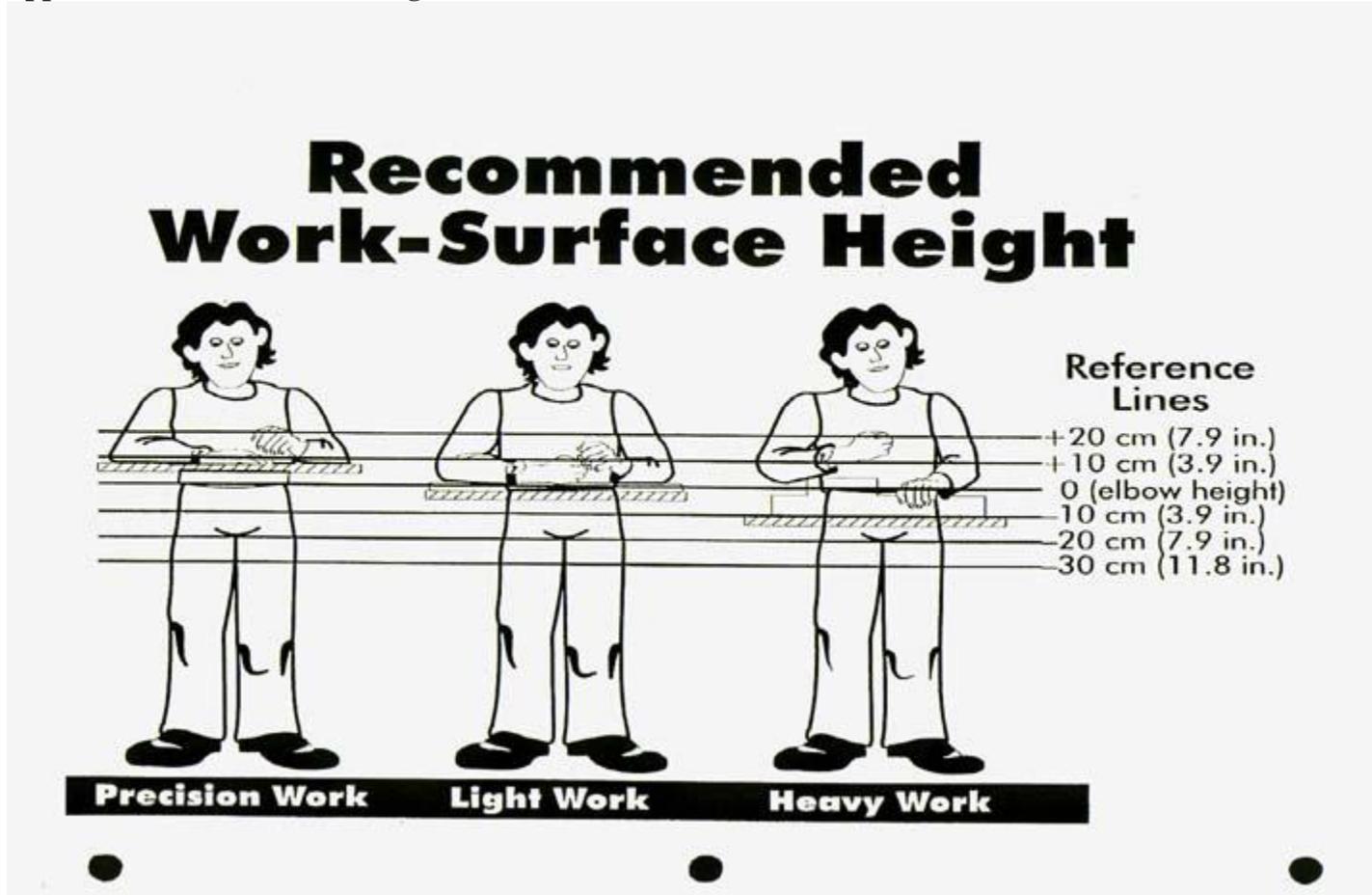


Padded edges

**Radius edges of fixtures that
contact with the workers arms**



Appendix E (works surface heights)



Appendix F (workstation survey)

VDT Workstation Survey

Person: _____ Date of Survey: ____ / ____ / ____

Work Style (check one)

- Over 50% of time spent on a computer
- Simultaneously uses computer, writes, and answers phone
- Uses a computer, reads, and writes but not simultaneously

All answers should be "yes". If "no" the situation may need correcting

VDT Unit

1. Does the operator share this unit routinely with other employees
2. When the VDT unit is in use the operator faces the unit squarely and the monitor and keyboard are in line
3. The top surface of the keyboard space bar is no higher than 2 ½ inches from the work surface.

4. The keyboard is detachable
5. During keyboard use, the operators upper arm and forearm form a right angle
6. During keyboard use the operators wrists are neutral or slightly extended
7. The mouse/ track ball is at the same height and same plane as the keyboard
8. The top of the monitor screen is at or slightly below eye level
9. The top of the monitor screen is 18 - 30 inches from the operators eyes
10. The screen swivels horizontally and tilts or elevates vertically
11. The operator can control brightness and contrast
12. The images on the screen are clear sharp and easy to read
13. There is a document holder available
14. The document holder is located in approximately the same plane as the monitor screen
15. If a document holder is not used, the documents are placed between the keyboard and the monitor and are angled / elevated to minimize neck twisting and flexion

Work Surface

1. There is sufficient space under the desk for knees, feet, and thighs
2. The edge of the work surface in front of the keyboard is rounded or padded
3. The keyboard rests on an adjustable height work surface
4. If the operator multi-tasks, the phone has a head set or shoulder rest
5. If the operator multi-tasks, all work is done on the same level
6. There is adequate work space
7. Work space is organized to minimize extended reaches
8. Work space is organized logically for work done

Environment

1. There is no glare or reflection on the screen
2. The light is not so bright as to cause discomfort or reflections
3. The light is not so dim as to cause the operator to strain to see
4. There is no light shining in the operator's eyes
5. The general environment is clean, with comfortable temperature and humidity and is without excessive noise

Chair

1. The operator knows how to adjust the chair
2. The chair swivels
3. The chair has adjustable or removable armrests
4. Chair arm rests allow the shoulders to be relaxed, elbows to be kept close to the body and at right angles
5. Arm rests do not interfere with the work surface
6. Chair height is easily adjusted from a seated position
7. The chair has an easily adjusted back rest
8. The backrest provides lower back support (lumbar region)
9. The back rest locks into position
10. The seat is padded, has a non-slip surface, and has a rounded front
11. The front edge of the seat is 3 fingers to 3 inches from the operator's calf
12. When comfortably seated the operator's thighs are horizontal and the legs vertical

13. When comfortably seated, the operator's feet are flat on the floor or a foot rest
14. The chair has 5 legs for stability
15. The chair rolls easily but not too easily
16. The chair is comfortable to the operator

Training and Work Practice

1. Adequate breaks away from the VDT are provided (minimum 15 minutes for every 2 hours of VDT use)
2. There is no incentive pay systems
3. The operator can pace the stroke rate
4. The operator takes stretch breaks
5. The stretches are appropriate
6. The stretches are done every 2 to 4 hours
7. The operator has had initial periodic vision exams
8. The operator's eye doctor is aware the operator uses a computer
9. The operator has been provided with training per Maine state law
10. The operator knows who to report injuries to
11. The Maine VDT law is posted where employees can see it

Appendix G

EXERCISES for COMPUTER USERS

DEEP BREATHING - A GOOD WAY TO BEGIN

Inhale through your nose and exhale through your mouth.

STRETCH HIGH- TO HELP STIFF MUSCLES

Bring your arms over your head, as high as you can.
Then lower arms and rest

FOR THE EYES

Blink full blinks, pausing when closed.

Cover your eyes with your hands for one minute.

Look away from your computer and try and focus on a distant object.

Roll your eyes around in the sockets in one direction then the other.
(Do not perform this stretch while speaking with your boss)

THE EGYPTIAN - FOR THE NECK COMFORT

Move your head back as far as it will go, keeping your head and ears level. Now move your head forward as far as it will go.

NECK STRETCH

#1 Gently try to touch your ear to your shoulder. Hold for a count of ten. Return your head to neutral and repeat the process on the other side.

#2 Gently turn your head and try to touch your chin to your shoulder. Hold this for a count of ten. Return your head to neutral and repeat the process on the other side.

UPPER BACK STRETCH FOR SHOULDER AND BACK TENSION

Raise your hands so your shoulder. Using your arms push your shoulders back. Keep your elbows down.
Hold for a count of ten.

LOWER BACK STRETCH

Lower your head slowly and roll your body as far as you can toward your knees. Hold for a count of ten.

FINGER TAPS - FOR HANDS

Tap your index finger against your thumb then move to your middle finger and so on now reverse the sequence. Try this five times and switch to the other hand.

PRAYING

Place the palms of the your hands together and gently bring your elbows up to the point were you feel gentle pulling but, not pain. Hold this position for a count of ten.

Now place the backs of your hands together and gently try to press your elbows down.
Hold this position for a count of ten.

FINGER STRETCH - FOR THE HANDS

Spread your fingers wide apart- then make a fist- then release. Repeat with the other hand.

WRIST FLEX- FOR THE HANDS

Gently bend your hand back toward your forearm. Do this in both directions. Then switch hands.
Hold for a count of ten.

SIDE STRETCH

Lift your arms over your head and interlock your fingers. Gently lean to the side and hold for a count of ten. Now do the same for the other side.

Repeat the stretch two to three time on each side.

ARM CIRCLES- FOR THE SHOULDERS

Slowly rotate your arms in small circles forward then backwards.

SHOULDER ROLLS

Gently roll your shoulder forward at a relatively easy pace.

Try this ten times, then switch directions, then switch shoulders.

SHOULDER SHRUGS

Gently bring your shoulders up to your ears then back down.

Try this ten times

HUG YOURSELF

Gently wrap your arms around your shoulders and hold this for a count of ten. You should feel a gentle pulling in the upper back.

CHEST STRETCH

Place your hands behind your head and slowly bring your elbows back as far as is comfortable. Hold this for a count of ten.

All stretching should be done slowly; a feeling of a gentle pull in the muscle should be felt. Never go beyond a gentle pull. If the stretch causes you pain, stop and find out why.

Stretching Can

Increase blood flow, reduces fatigue, increase comfort, prevent injury, improve flexibility, reduce joint deterioration, increase range of motion, improve muscle force, reduce muscle pain and reduce post exercise soreness.

A healthy well-conditioned muscle will stretch instead of tear.

Remember --Breath normally while stretching.