

A MouseKeyDo® Training Guide for Providers

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INTRODUCTION

Welcome to the training program for the MouseKeyDo® System — a set of proven techniques for learning to compute without pain. This training guide will introduce you to the methods and techniques of the MouseKeyDo System and provide a complete, standardized framework for teaching them to your patients and clients.

Before beginning your training, please check to be sure you have the following materials:

1. The *Computing Without Pain With the MouseKeyDo® System training manual*. Inside, you'll find the building blocks of the program:
 - 27 illustrated step-by-step lesson plans covering workspace setup, sitting, mousing, keyboarding, keyboard shortcuts, and laptop training
 - practice exercises for each lesson
 - discussion of common computer-related injuries
 - a self-assessment quiz for the patient
 - a training log
 - research references
 - "Doing the MouseKeyDo," a song to help patients remember the exercises
 - instructions and system requirements for the accompanying CD-ROM
2. The *Computing Without Pain With the MouseKeyDo® System CD-ROM*. This 45-minute presentation in VHS-quality video features MouseKeyDo creator Dr. Norman Kahan explaining and demonstrating each of the lessons in the training manual. You'll find it in a pocket bound into the back of the training manual.

Requirements for Training

To train patients or clients in the MouseKeyDo System, you will need the following equipment:

- the MouseKeyDo System training manual and CD-ROM
- a wheeled office chair with adjustable seat height and no arms, or adjustable arms low enough not to get in the way when the patient uses the keyboard and mouse
- a desk, keyboard tray, or other appropriate work surface that adjusts to place they keyboard and mouse at or just below elbow height when the patient is sitting upright with the shoulders and arms relaxed (see Chapter 1, p. 9 for an illustration of the proper posture)
- a desktop computer with monitor, speakers, and a CD-ROM drive (to play the training CD-ROM)
- a keyboard
- a mouse
- a laptop computer

- billing codes for the training equipment and training services, for seeking reimbursement from insurance carriers.
- For physical therapists and occupational therapists:
 1. When billing for the MouseKeyDo system equipment (CD-ROM and training manual), use CPT code A9300, “miscellaneous exercise equipment.”
 2. When billing for MouseKeyDo training services in your clinic, use CPT code 97530, “kinetic activities,” and CPT code 97620, “computer training.”
 3. When billing for MouseKeyDo® training services at the worksite, use CPT code 97680, “job site visit/functional assessment with report.”
 4. When billing for an ergonomic evaluation at the worksite, use CPT code 97680, “job site visit/functional assessment with report.”
 5. When billing for travel time to and from the worksite for MouseKeyDo® training services use CPT code 99030, (please check for travel distance requirements when using this code).
- For physicians and physician assistants:
 1. When billing for the MouseKeyDo system equipment (CD-ROM and training manual), use CPT code A9300, “miscellaneous exercise equipment.”
 2. When billing for MouseKeyDo training services in your clinic, use CPT code 99215, “follow-up extended visit.”

The following **resources** are also available to authorized MouseKeyDo providers:

- "Computing Without Pain Live: Demonstrating a New Technique for the Treatment of Computer-Related Repetitive Stress Injuries (RSI)," a PowerPoint presentation with audio, presented and developed by Dr. Kahan
- "Computing Without Pain With the MouseKeyDo® System: A New Technique for the Treatment and Prevention of Computer-Related Repetitive Stress Injuries (RSI)," a silent version of the same PowerPoint presentation, with a transcript of the audio portion that you can use to guide your own narration
- MouseKeyDo presentation handouts
- the MouseKeyDo Training Station
- MouseKeyDo progress reporting forms
- MouseKeyDo self-assessment quiz (alternate form)
- MouseKeyDo evaluation forms

You will find forms and further information at the end of this training guide. You may also download the presentations, handouts, and forms directly from our web site as needed.

In addition to resources for download, **www.mousekeydo.com** is also where you can find these essentials:

- constantly updated information about our continuing education workshops, speaking engagements, and training materials
- easy-to-follow instructions for purchasing the MouseKeyDo System, both directly and through workers' compensation insurance
- forms to facilitate prescribing and billing
- a Provider Finder to help you network with and refer to other MouseKey Do providers
- hard data about the MouseKeyDo System's effectiveness

- Frequently Asked Questions specific to patients, employers, health and safety personnel, and workers' compensation administrators
- a place to subscribe to our newsletter
- a list of workers' compensation carriers now covering the MouseKeyDo System and training
- a list of employers currently offering the MouseKeyDo System and training to their employees
- testimonials from clinicians and patients

I. USING THE TRAINING MANUAL, CHAPTER BY CHAPTER

Getting Started

Because the MouseKeyDo System was designed to be self-guided, your patients will benefit by familiarizing themselves with the program even before they begin working with you. Please ask them to review the training manual and CD-ROM before your first training session.

Chapter 1, "Creating a Body-Friendly Workspace"

This chapter discusses how to arrange workspace tools for optimal ergonomic effectiveness, focusing strongly on where to place the mouse and keyboard. You will need to determine in this chapter what your patient's needs and work habits require.

Observe how your patient sits and interacts with keyboard, mouse, and laptop. If your patient has not already had an ergonomic worksite evaluation, this is your opportunity to determine whether one is necessary. You should also identify the equipment your patient currently has and pinpoint how his or her problem areas and work habits may be related to the workspace setup. Take your time, as some problems will not be obvious on first glance.

Chapter 2, "When Computers Hurt You"

This chapter begins to define "MouseKeyDon'ts," the five categories of harmful work habits most people fall into while using the computer. Working on this chapter will let you evaluate your patient's actual work habits and body mechanics.

Start by asking your patient to sit in the chair and use the desktop (or laptop) computer as he or she normally would. Watch closely for a minute or two. While you watch, ask the patient where the pain is, and try to correlate it to his or her movements and improper body mechanics. In general, you will be able to spot problems in one or more of the five "MouseKeyDon'ts" categories. Once you have identified them, you might then take a few minutes to show what the patient is doing wrong and how the MouseKeyDo techniques will correct them. Demonstrate the sitting techniques, "drop, beat, roll" on the keyboard, and "drop, drape, and skate" on the mouse. This will help the patient visualize what to expect.

Before completing this section, do the exercise entitled “Becoming Aware of How You Type” on page 13 to help the patient become more aware of his or her actual keyboard habits and how much tension is actually felt in the hands. You will help the patient see just how uncomfortable his or her "normal" habits actually are — possibly the first time your patient has ever actually paid attention to it.

Assure the patient that he or she will learn the MouseKeyDo System step by step and that it will be not just comfortable, but every bit as productive as his or her old habits, and maybe even more so. Tell the patient to plan for three to six hours of initial training and 20 minutes of daily practice, and reassure him or her that it will take just four to eight weeks to start seeing results.

Chapter 3, “Sitting”

This chapter focuses on achieving balance, comfort, and fluid movement above the waist by learning about your base of support (feet and seat), weight-shifting techniques, and the momentum, which you can create from below the waist. As a clinician, this is something you will learn very quickly, as it is presented in a very simple fashion. You may already be familiar with it.

Chapter 4, “Drops”

This chapter launches the most difficult aspect of the retraining process: teaching the patient to shift the workload from fingers and wrists to shoulders and elbows. You will probably need to acknowledge repeatedly that this process of breaking old habits and learning new ones is slow and difficult, but that patience will be rewarded.

In the beginning, have your patient do the exercises in lessons seven through ten using just the longest or middle finger and arm “as one” until the drop feels more natural. The goal is to get the patient to feel the whole arm, hand, and finger moving as a single unit, “as one.” The patient should begin to feel fluid movement for the first time in lesson ten, “forward balance.” This is also a logical place to stop after the first session. Ask the patient to practice these moves at home using the exercises in the training manual.

In the next session, your patient will learn to start using more than one finger in the drop. Begin by teaching the patient to use three fingers together, avoiding the thumb and pinkie to break the “MouseKeyDon’t” habits associated with using them. Focus on helping the patient move from the pelvis, shoulder, elbow hinge, and MCP joint (the big knuckle) in a relaxed and fluid way, with minimal movement at the finger. Remind the patient repeatedly to “let the air out of your fingers” and move the arm, wrist, and fingers as one. Focus on comfort and form, even if it slows the process, and tell the patient not to worry about speed or accuracy at this point in the training.

Chapter 5, “Beats”

In this chapter, patients learn to increase speed and fluidity. Continue reinforcing earlier lessons about sitting techniques and “drops.” Keep asking the patient, “Where do you feel tension? Where do you feel pain?” and focus your efforts on the problematic areas.

As patients learn to visualize their arms keeping the beat like drumsticks, ask them to verbalize the "PA-DUM" beats in the training manual while striking the keys using various beats. The goal here is to pick up speed and get the patient to *experience* the feel of core body movement from inside out and what soft muscles and loose joints feel like, and to *understand* why this eases the pain associated with improper work habits.

Chapter 6, "Rolls"

This chapter introduces the fluidity of the rolling move and shows your patient how to increase speed by striking multiple keys with a single gesture or arm movement. Repeatedly remind the patient that rolls are done side-to-side, diagonally forward, or directly forward, but never backward. In other words, if the patient is the center of a clock, rolls can go toward 9, 10, 11, 12, 1, 2, and 3, but never toward 4, 5, 6, 7, or 8.



Continue to reinforce the use of pelvic tilts, rocks, and shoulder rotation to keep the patient from "chicken-winging" elbows, and offer frequent reminders that the "arms do the walking" to keep the patient from moving the fingers.

As before, emphasize comfort and form instead of accuracy and speed, which will come as the patient masters the techniques. Encourage the patient to sit closer to the keyboard as he or she becomes more comfortable with the technique. This is necessary to keep shoulder angles to the most comfortable minimum and allow the patient's arms, hands, and fingers to drop, beat, and now roll easily onto the keyboard.

This is a natural point to stop the second session, unless the patient wants to continue. If so, move on to Chapter 7, and ask the patient to practice the exercises in Chapter 7 before the next session.

Chapter 7, "Doing the MouseKeyDo"

Now that you've covered the basic components of keyboarding with the MouseKeyDo System, your patient needs to practice putting them together. This is a fun chapter for both patient and clinician, because your patient will start to relax and notice improvements in speed and accuracy as well as comfort!

First, introduce the MouseKeyDo notations to make the concept of "choreographing" typing easier to grasp. Then ask the patient to choose a few words or two-word phrases, and have him or her practice typing each one 10 to 20 times while you carefully observe sitting form and the positions of shoulders, elbows, wrists, and fingers. Watch for fluidity of movement and proper performance of drops, beats, and rolls. Ask often if the patient is feeling any pain or tension, and suggest adjustments accordingly.

Chapter 8, "Beyond the Basics"

In this chapter, your patient will learn to apply drops, beats, and rolls to numbers and function keys as well as letters. By the end of these lessons, your patient will have mastered any key or combination of keys on both desktop and laptop keyboards. Make sure to congratulate him or her on this milestone!

Chapter 9, “Mousing Around”

This chapter focuses on mousing skills. Start with a pelvic shift and a drop just like the ones your patient has learned to do on the keyboard, then move on to "drape" and "skate" as described in the training manual. Spend some time on the exercise on page 54, which starts with the tripod sit, moves through dropping and draping, and then demonstrates how easy it is to move the mouse with nothing more than pelvic rocks and tilts. (This is an excellent warm-up before any mouse use!)

Try launching a drawing/painting program so your patient can draw circles or figure-eights using the whole arm. After that, use a spreadsheet program that requires both clicking on cells and typing content for practice moving from mouse to keyboard and back. This is a good spot to end your third session.

Chapter 10, “MouseKeyDo Goes With You”

Once your patient completes earlier chapters, it's easy to transfer those skills to the laptop. "Drop, beat, and roll" are the same on the keyboard, while using a trackpad or cursor button is "drop and skate," as there's nowhere to "drape" unless the patient is using an attached mouse.

The big difference for laptop users is the height of the keyboard and screen relative to the elbows. Holding a laptop on your lap isn't actually that comfortable, and placing it on a table often puts the keyboard far higher than the ideal height of at or slightly below elbow level. Your patient may require a stand or an adjustable keyboard tray, depending on his or her clinical problems. Customize the suggestions in the training manual to your patient's specific needs.

Integration and Review

After completing Chapter 10, ask your patient to come to the next session with typical work he or she performs in the workplace. Focus on repeatedly practicing the kind of typing the patient usually does at work. At this stage, you and your patient will work together on economy of motion — making obvious moves more subtle and integrated. Pelvic rocks and tilts become weight shifts. Hands no longer bounce off the keys, but hover over them and drop. Even though movements are still based on drops, beats, and rolls, the movements themselves become smaller and more efficient. Continue observing and correcting foot placement, sitting position, neck and shoulder angles, elbow angles, wrist flexion, tension levels, and moving from the inside out with soft muscles and loose joints. The patient is now learning how to relax through his or her pain patterns by using MouseKeyDo techniques.

Chapters 11 and 12

These chapters, which discuss and illustrate computer-related injuries, aren't part of the training but can serve as a valuable reference before, during, and after training. You may want to review them with your patient to reinforce the importance of breaking bad workplace habits.

“Doing the MouseKeyDo”

This sing-a-long, written by Dr. Kahan to the tune of the “Hokey-Pokey,” is a fun reminder of the key concepts in MouseKeyDo training. Use it as a quick summary and have a good time with it!

Self-Assessment Quiz

Located on page 72 of the training manual, this quiz is a tool to reinforce key concepts in the order of the lesson plans.

Training Log

Page 80 of the training manual is a log your patient can use to track his or her own progress over approximately three months of daily practice. It includes room to record measurements such as the amount of comfortable computer time without a break (interval) and throughout the day (cumulative), the intensity of pain on a given day, and functional progress in terms of words per minute and number of errors. Encourage your patient to fill out the log and share it with you as a way to monitor and review overall progress.

References

The training manual includes a list of more than 150 references used to research and develop the MouseKeyDo® system.

CD-ROM instructions and system requirements are on page 98.

II. USING THE CD-ROM AS A TRAINING TOOL

The *Computing Without Pain With the MouseKeyDo System* CD-ROM is divided into 15 individual video clips keyed to specific sections of the training manual, indicated by a CD icon in the margin. Wherever you see that icon, you or your patient can launch the appropriate clip to see and hear a demonstration of the lesson you're working on.

It's best to work through the CD-ROM in order rather than jumping around through the various techniques, as the CD-ROM, like the training manual itself, presents each lesson by building on previous lessons.

III. ADDITIONAL TRAINING RESOURCES

We provide a variety of further resources to health and safety providers who use the MouseKeyDo System. Each of these is available at www.MouseKeyDo.com. Download them all, or just the ones you need at the moment!

1. **Computing Without Pain Live: Demonstrating a New Technique for the Treatment of Computer-Related Repetitive Stress Injuries**

This PowerPoint presentation includes an audio track of Dr. Kahan discussing the research, development, and clinical efficacy of the MouseKeyDo System. It is appropriate for symptomatic computer users, injured workers, health and safety professionals, employers, and workers' compensation administrators. We encourage you to order a copy of this presentation and use it to develop your own presentation as part of the training services you provide to your clients.

2. **Computing Without Pain With the MouseKeyDo System: A New Technique for the Treatment and Prevention of Computer-Related Repetitive Stress Injuries (RSI)**

A silent version of Dr. Kahan's PowerPoint presentation, this version comes without the audio track of Dr. Kahan's discussion but includes a typed transcript you can read from or use to develop your own narration.

3. **MouseKeyDo Presentation Handouts**

Use these materials at training lectures, demonstrations, and workshops to help introduce and teach the MouseKeyDo System. Available handouts include the following:

- Printed slides of the Computing Without Pain PowerPoint presentation, allowing the audience to follow along.
- The table of contents of the training manual and CD-ROM, for use when the training manual is not available to a group.
- A two-part article on "Outcomes of Mouse and Keyboard Retraining" from *Occupational Medicine*, February 2004.
- A two-part article on "Technique Addresses Computer-Related RSI" from *Occupational Medicine*, March 2002.

4. MouseKeyDo Progress Reporting Form

This form, which is also available for download on the MouseKeyDo web site, is designed to help you assess your patients' progress during a six-week training program. This progress report serves as your log and is kept in the patient's medical chart. You may also submit it to the patient's workers' compensation or other insurance carrier as a standalone progress report or part of a longer report.

As you can see on the sample form, each vertical column represents a training session, while each horizontal row indicates a particular skill. Indicate each skill introduced that day with the number 1, and evaluate progress in previously learned skills with a number from 0 to 5, with 0 indicating lack of progress. Once a patient achieves a rating of 5 on a particular skill, you can stop working on it during training sessions (while still recommending the patient continue regular practice at home).

The evaluation form also has room for you to track the patient's pain scale rating and ability to type in intervals of time, as well as cumulatively over an eight-hour workday. It offers both you and your patient a clear indication of progress over time.

Please note that the training log in the MouseKeyDo training manual on page 81, 82 and 83 is not the same as this system progress reporting form. The training log is to be kept in the training manual for the patient to observe his or her own progress.

SAMPLE FORM:

MouseKeyDo® Progress Report
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Patient Name: Julia Gold Insurance Provider: Liberty Mutual, P O Box M, Palo Alto, CA

Dx: Lateral Epicondylitis/de Quervain's tendonitis Claim Number: 0124-5678X

Treating Physician: MacKenna Kahan, M.D. Employer: Frys Electronics DOI: 1/14/02

| Date: | 1/2/03 | 1/9/03 | 1/14/03 | 1/21/03 | 2/7/03 | 2/14/03 |
|--|----------------|-----------------------|----------------|-----------------------|-------------------|----------------|
| Training Session Number | 1 | 2 | 3 | 4 | 5 | 6 |
| Work Space Organization | 1 | 4 | 5 | | | 5 |
| MouseKeyDon'ts | 1 | 4 | 5 | | | 5 |
| Lesson 1: Tripod Sit | 1 | 4 | 5 | | | 5 |
| Lesson 2: Pelvic Tilt | 1 | 4 | 5 | | | 5 |
| Lesson 3: Pelvic Rock | 1 | 4 | 5 | | | 5 |
| Lesson 4: Pelvic Shift | 1 | 4 | 5 | | | 5 |
| Lesson 5: Breathing Awareness | 1 | 4 | 5 | | | 5 |
| Lesson 6: New Home Row | 1 | 4 | 5 | | | 5 |
| Lesson 7: Vertical Drops | 1 | 0 | 2 | 3 | 4 | 5 |
| Lesson 8: Crossing Rows | | 1 | 5 | | | 5 |
| Lesson 9: Lateral Shifts | | 1 | 5 | | | 5 |
| Lesson 10: Forward Balance | | 1 | 5 | | | 5 |
| Lesson 11: Keys as Coordinates | | 1 | 5 | | | 5 |
| Lesson 12: Bypassing Home Row | | 1 | 5 | | | 5 |
| Lesson 13: Resting the Non Typing Hand | | 1 | 5 | | | 5 |
| Lesson 14: Beats and Rhythm | | 1 | 5 | | | 5 |
| Lesson 15: Rolls | | 1 | 2 | 3 | 4 | 5 |
| Lesson 16: Combination Words | | | 1 | 3 | 4 | 5 |
| Lesson 17: Doing the MouseKeyDo™ Drop, Beat and Roll | | | 1 | 3 | 4 | 5 |
| Lesson 18: Space Bar | | | 1 | 3 | 4 | 5 |
| Lesson 19: Shift Keys | | | 1 | 3 | 4 | 5 |
| Lesson 20: Divide and Conquer | | | 1 | 3 | 4 | 5 |
| Lesson 21: The Number Row | | | 1 | 4 | 4 | 5 |
| Lesson 22: Ten Key | | | 1 | 4 | 4 | 5 |
| Lesson 23: Repeating Keys | | | 1 | 4 | 4 | 5 |
| Lesson 24: Mousing | | | | 1 | 4 | 5 |
| Drop, Drape and Skate | | | | 1 | 4 | 5 |
| Lesson 25: Substituting Keys | | | | 1 | 4 | 5 |
| Lesson 26: Laptops at Your Desk | | | | 1 | 4 | 5 |
| Lesson 27: Laptops on the Go | | | | 1 | 4 | 5 |
| QUIZ: | | | | | | |
| PAIN SCALE: 0 (min) - 10 (max) | 8 | 6 | 4 | 3 | 2 | 0 |
| * COMPUTER TIME: Interval Hours/Minutes: Cumulative Hours/Minutes: | 15 min 1 hr | 20 min 1 hr 20 min | 20 min 2 hr | 30 min 3 hr 30 min | 45 min 4.5 hrs | 45 min 7 hr |
| Plan: | Review | Review | Review | Review | Review | Discharge |
| | Start 8 | Start 16 | Start 24 | Start 7, >15 | Start 7, >15 | |

Provider's Signature: _____

Skill Rating Scale: 5 - Recommend Home Program. 2 - Skill requires training.
 4 - Demonstrates skill independently. 1 - Skill introduced.
 3 - Demonstrates skill with direction. 0 - Difficulty learning skill.

* Length of time you are able to work comfortably at the computer without taking a break (interval), and throughout the whole day (cumulative).

MouseKeyDo® Progress Report

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Patient Name: _____ Insurance Provider: _____

Dx: _____ Claim Number: _____

Treating Physician: _____ Employer: _____ DOI: _____

| Date: | | | | | | |
|--|---|---|---|---|---|---|
| Training Session Number | 1 | 2 | 3 | 4 | 5 | 6 |
| Work Space Organization | | | | | | |
| MouseKeyDon'ts | | | | | | |
| Lesson 1: Tripod Sit | | | | | | |
| Lesson 2: Pelvic Tilt | | | | | | |
| Lesson 3: Pelvic Rock | | | | | | |
| Lesson 4: Pelvic Shift | | | | | | |
| Lesson 5: Breathing Awareness | | | | | | |
| Lesson 6: New Home Row | | | | | | |
| Lesson 7: Vertical Drops | | | | | | |
| Lesson 8: Crossing Rows | | | | | | |
| Lesson 9: Lateral Shifts | | | | | | |
| Lesson 10: Forward Balance | | | | | | |
| Lesson 11: Keys as Coordinates | | | | | | |
| Lesson 12: Bypassing Home Row | | | | | | |
| Lesson 13: Resting the Non Typing Hand | | | | | | |
| Lesson 14: Beats and Rhythm | | | | | | |
| Lesson 15: Rolls | | | | | | |
| Lesson 16: Combination Words | | | | | | |
| Lesson 17: Doing the MouseKeyDo™ Drop, Beat and Roll | | | | | | |
| Lesson 18: Space Bar | | | | | | |
| Lesson 19: Shift Keys | | | | | | |
| Lesson 20: Divide and Conquer | | | | | | |
| Lesson 21: The Number Row | | | | | | |
| Lesson 22: Ten Key | | | | | | |
| Lesson 23: Repeating Keys | | | | | | |
| Lesson 24: Mousing | | | | | | |
| Drop, Drape and Skate | | | | | | |
| Lesson 25: Substituting Keys | | | | | | |
| Lesson 26: Laptops at Your Desk | | | | | | |
| Lesson 27: Laptops on the Go | | | | | | |
| QUIZ: | | | | | | |
| PAIN SCALE: 0 (min) - 10 (max) | | | | | | |
| * COMPUTER TIME: Interval Hours/Minutes: Cumulative Hours/Minutes: | | | | | | |
| Plan: | | | | | | |
| | | | | | | |
| | | | | | | |

Provider's Signature: _____

- Skill Rating Scale:**
- | | |
|--|--------------------------------|
| 5 - Recommend Home Program. | 2 - Skill requires training. |
| 4 - Demonstrates skill independently. | 1 - Skill introduced. |
| 3 - Demonstrates skill with direction. | 0 - Difficulty learning skill. |

* Length of time you are able to work comfortably at the computer without taking a break (interval), and throughout the whole day (cumulative).

5. Alternate Quiz

This quiz is identical to the one in the training manual, but with the answers to each question in a different order. The answer key to this version is not available to patients. This makes it a useful tool both for you and for the patient's manager or human resources supervisor to show the patient has completed MouseKeyDo training.

MouseKeyDo® SELF-ASSESSMENT QUIZ

(Alternate form)

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Test yourself on what you've learned by selecting the best answer

(Answers will follow on a separate page)

I. Creating a body-friendly work place

1. When working at your computer:

- a. Adjust your workstation to fit your body.
- b. Learn how to use your equipment.
- c. None of the above.
- d. Both of the above.

2. When you are sitting correctly in your chair, with your back straight and your arms hanging relaxed from your shoulders, your fingertips on the keyboard should be:

- a. Six inches below elbow height.
- b. Slightly above elbow height.
- c. Six inches above elbow height.
- d. Level with or slightly lower than elbow height.

3. Your mouse should be at about the same height as your keyboard and close enough for your upper arm to hang relaxed from your shoulder. You should not have to extend your entire arm from the shoulder to reach the mouse.

- a. False.
- b. True.

4. In general, you should not use wrist rests while you type.

- a. False.
- b. True.

5. When your monitor is placed correctly, it will be:

- a. Directly in front of you, at eye level or slightly below.
- b. Directly in front of you and above eye level so you can look up and down to exercise your neck.
- c. Far to one side so you can get a good neck stretch while you work.
- d. None of the above.

II. Becoming aware of how you type

6. The best position for your wrists while typing is:

- a. Wrist neutral or slightly extended, and if viewed from above, in a straight line with
- a. your arm and long finger.
- b. On a wrist rest or the keyboard so they can rest.
- c. “Sideways” wrists, angled toward the thumb or little finger.
- d. Hyperextended to avoid hitting the keys.

7. To avoid tensing the thumb while typing:

- a. Use the whole arm, hand and thumb to reach for the space bar.
- b. Use the index or long finger instead of the thumb to hit the space bar.
- c. Avoid hyperextending the wrist.
- d. All of the above.

8. To avoid “sideways” wrists when using the little finger to reach for the side keys like the enter, shift and backspace keys:

- a. Avoid using the little finger altogether.
- b. Move side to side from the shoulder instead of your wrist.
- c. Avoid planting your wrists on the wrist rest as you type.
- d. All of the above.

9. To prevent excessive curling, straightening and “sideways” reaching of the fingers while you type, you should:

- a. Avoid using home row.
- b. Avoid planting your wrists on a wrist rest or a keyboard while you type.
- c. Learn to move up and down from the elbow, forward and back from the shoulder and
- a. elbow, and side to side from the shoulder.
- d. All of the above.

10. When using the mouse while the keyboard is in front of you, you should:

- a. Reach for it from the shoulder so you do not waste time in getting back to the keyboard.
- b. Try not to use the mouse for more than two hours per day.
- c. Grip your mouse tight with your thumb and little finger, but lightly with your index finger.
- d. Bring the mouse to you or move closer to the mouse so your upper arm can hang down instead of reaching for it.

III. Becoming aware of how you sit

11. When you are typing intensely, you should:

- a. Sit as still as possible.
- b. Take breaks every ten minutes.
- c. Adjust your posture continuously for comfort and balance.
- d. Recline backwards in your chair to conserve your energy.

12. Techniques for sitting in comfort while you work include:

- a. The tripod sit, where your weight is distributed among three points: Your seat and your feet.
- b. The pelvic rock and pelvic tilt, which are ways to adjust your sitting balance to relieve muscle tension.
- c. The pelvic shift, which lets your lower body do the work by using your feet and seat to propel your body closer to your work.
- d. All of the above.

13. To keep your neck and shoulders comfortable while you work at the computer, you should use this posture:

- a. Neck straight, chin tucked in, and upper arms hanging down like the pendulum of a clock.
- b. Neck flexed far forward with arms reaching far forward.
- c. Neck straight, chin tucked in, and arms reaching far forward.
- d. Neck flexed far forward with arms hanging like the pendulum of a clock.

IV. Drops

14. In typing, the new home row is created by allowing your hands and fingers to:

- a. Rest on the wrist rest.
- b. Land on the row of keys **a s d f j k l ;**.
- c. Type on a brand new keyboard.
- d. Fall to the keyboard in their natural relaxed state in which the fingertips form an arc.

15. The drop involves:

- a. Transferring the workload from the hands and fingers to the shoulders and elbows.
- b. Moving up and down at the elbow and big knuckles instead of the wrist and fingers.
- c. Moving forward and backward from the shoulder and elbow instead of the fingers and wrists.
- d. All of the above.

16. The drop is important because it teaches you to:

- a. Move side to side at the shoulder and to avoid “sideways” wrists.
- b. Use gravity and the weight of your arm to hit the keys.
- c. Move your arms, wrists, hands, and fingers from the elbow as a unit as you type.
- d. All of the above.

V. Beats

17. The beat is:

- a. Using your fingers as drum sticks to hit the keys.
- b. Hitting the keyboard to get your frustrations out.
- c. A way to pick up speed and rhythm as you type.
- d. All of the above.

VI. The Roll

18. The roll:

- a. Is a way to type multiple keys in succession with a single rotational movement of the arm, shoulder, and torso.
- b. Helps you type faster and more comfortably.
- c. May make you “chicken wing” your elbow until you learn to rotate your shoulder and torso with your arm as your fingers roll over the keys.
- d. All of the above.

19. Do not roll over the keys in this direction:

- a. Backward.
- b. Diagonally forward.
- c. Forward.
- d. Side to side.

VII. Beyond the basics

20. When pressing the space bar with your thumb causes pain in your thumb or wrist, try the drop, beat or roll onto the space bar with your:

- a. Thumbs.
- b. Index finger.
- c. Middle (long) finger.
- d. Any of the above.

21. To use the shift key without twisting your hand,

- a. Type only in lowercase letters.
- b. Move your forearm like a windshield wiper to bring your entire hand to the side of the keyboard.
- c. Ask a friend to hit the shift key for you.
- d. None of the above.

22. “Divide and conquer” means:

- a. Hiring another person to type and do half of your workload.
- b. Alternating keyboard time with mouse time.
- c. Learning to use two hands to get the job done.
- d. None of the above.

VIII. Doing the MouseKeyDo®

23. What are the symbols in the MouseKeyDo™ notation used for?

- a. They tell the typist when to use a drop, beat, or roll.
- b. They allow the typist to “choreograph” any word, sentence, or paragraph.
- c. They can be used for all keyboard functions.
- d. All of the above.

IX. Mousing Around

24. Avoid using these motions with the mouse:

- a. Reaching from the shoulder and extending the arm.
- b. Pivoting from the wrist or using a wrist rest.
- c. Gripping the mouse.
- d. All of the above.

25. When using the mouse, your elbows should be:

- a. Held closely to your side.
- b. Held out away from your side.
- c. Hanging loosely and freely from your shoulder.
- d. Held behind your body.

26. Which techniques can you use to control the mouse and to avoid tension in the arm?

- a. Drop - dropping the whole arm and hand from the elbow onto the mouse, allowing the upper arm to hang freely from the shoulder.
- b. Drape - draping the palm and fingers over the mouse so the fingers can pivot on the mouse pad.
- c. Skate - moving your arm, hand, and mouse as one.
- d. All of the above.

X. Laptops

27. What problems can laptop computers cause?

- a. It is hard to sit comfortably with the laptop in your lap.
- b. Laptops are heavy and difficult to carry.
- c. Laptops can get uncomfortably warm in your lap.
- d. All of the above.

28. When using a laptop:

- a. Maintain the same sitting posture, shoulder, elbow and hand positions as with a desktop keyboard.
- b. Drop, beat and roll at the keyboard.
- c. Drop and skate at the mouse button or touchpad.
- d. All of the above.

XI. Safe Computing

29. How far forward (flexing) can you bend your neck safely while typing?

- a. 25-35 degrees forward.
- b. 15-25 degrees forward.
- c. 0-15 degrees forward.
- d. None of the above.

30. When moving your upper arm from the shoulder, how far can you reach forward or to the side without causing shoulder and neck pain?

- a. Forward reach 10-30 degrees, sideways reach 10-30 degrees.
- b. Forward reach 0-25 degrees, sideways reach 0-20 degrees.
- c. Forward reach 25-40 degrees, sideways reach 25-40 degrees.
- d. None of the above.

Match the following:

Name of disorder Area of discomfort associated with disorder

- | | |
|--|---|
| 31. __ Cubital tunnel syndrome | a. Neck and shoulder pain |
| 32. __ Carpal tunnel syndrome | b. Pain at the base of the thumb and wrist |
| 33. __ De Quervain's tendinitis | c. Pain - sore outer elbow, top forearm, wrist |
| 34. __ Lateral epicondylitis | d. Numbness in the ring and pinky |
| 35. __ Myofascial neck pain | e. Numbness, tingling in the thumb, index, long and ring finger on the palm side |

ANSWERS TO SELF ASSESSMENT QUIZ: (alternate form)

| | | | |
|-----|---|-----|---|
| 1. | d | 20. | d |
| 2. | d | 21. | b |
| 3. | b | 22. | c |
| 4. | b | 23. | d |
| 5. | a | 24. | d |
| 6. | a | 25. | c |
| 7. | d | 26. | d |
| 8. | d | 27. | d |
| 9. | d | 28. | d |
| 10. | d | 29. | c |
| 11. | c | 30. | b |
| 12. | d | 31. | d |
| 13. | a | 32. | e |
| 14. | d | 33. | b |
| 15. | d | 34. | c |
| 16. | d | 35. | a |
| 17. | c | | |
| 18. | d | | |
| 19. | a | | |

6. **MouseKeyDo Evaluation Form**

This form allows you and us to determine how well MouseKeyDo training methods worked for individuals or a group. In addition to measuring the results of training, this evaluation data also allows us to develop strategies to improve the MouseKeyDo System and conduct research into its long-term effectiveness.

MouseKeyDo® EVALUATION FORM

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This survey is being conducted to evaluate the effectiveness of MouseKeyDo® training program that you participated in to prevent and relieve upper extremity discomfort associated with mouse and keyboard work. Your name will be kept confidential. The information is intended for educational purposes, as we are interested in continuing to develop strategies for improving our training methods. Please return the survey to your MouseKeyDo® provider.

Name: _____

Job Title: _____ Right Hand/Left Hand (circle)

MouseKeyDo® Provider: _____ Date: _____

1. On the average how many hours do you work using the computer keyboard and mouse each day? Please indicate both work _____ hours/day and home use _____ hours/day.
2. With regard to your pain associated with keyboard and/or mouse work only, would you say that your pain is the same, more or less (circle) then before taking the training program?
3. Pain intensity and frequency: Using the following scale indicate intensity of pain and frequency of pain before (B) and after (A) training for each body part in questions 3a and 3b.

| <u>Intensity of pain: Scale</u> | <u>Frequency of pain:</u> | <u>Scale</u> |
|---------------------------------|---------------------------|------------------|
| 0-2 Minimum | | 0% Never |
| 3-4 Slight | | 25% Occasionally |
| 5-7 Moderate | | 50% Intermittent |
| 8-10 Severe | | 75% Frequent |
| | | 100% Constant |

- 3a. Please rate the intensity of pain/symptoms during a typical workday at the computer keyboard, mouse and laptop. Use the numerical scale 0-10 with: 0 = no discomfort and 10 = unbearable discomfort.

| Intensity: 0-10 | Neck | Shoulder | Elbow | Forearm | Wrist | Thumb | Finger(s) |
|-----------------|------|----------|-------|---------|-------|-------|-----------|
| Before | | | | | | | |
| After | | | | | | | |

MKD Form 9 (09/2005)

3b. Please rate the frequency of pain/symptoms during a typical workday at the computer keyboard, mouse, laptop for each body part. [before (B) and after (A)]

| Frequency: | Neck | Shoulder | Elbow | Forearm | Wrist | Thumb | Finger(s) |
|------------|------|----------|-------|---------|-------|-------|-----------|
| 0% | | | | | | | |
| 25% | | | | | | | |
| 50% | | | | | | | |
| 75% | | | | | | | |
| 100% | | | | | | | |

4. Please rate how effective each aspect of the MouseKeyDo® training program was in helping you to (A) understand your discomfort and (B) change to more comfortable work habits associated with keyboard and/or mouse use. (1 = poor, 5 = excellent, NA = not applicable)

| | (A) understand your discomfort (circle) | (B) change to more comfortable work habits (circle) |
|--------------------------------------|--|--|
| 1) Group training with provider | 1 2 3 4 5 NA | 1 2 3 4 5 NA |
| 2) Individual training with provider | 1 2 3 4 5 NA | 1 2 3 4 5 NA |
| 3) MouseKeyDo® training manual | 1 2 3 4 5 NA | 1 2 3 4 5 NA |
| 4) MouseKeyDo® CD-ROM | 1 2 3 4 5 NA | 1 2 3 4 5 NA |

5. To what extent do you agree with the statements below?

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|-------------------|----------|---------|-------|----------------|
| The provider was knowledgeable about the topic: | | | | | |
| The provider was clear and easy to understand: | | | | | |
| The provider encouraged employee views: | | | | | |
| The provider used relevant examples: | | | | | |
| The training manual was clear and useful: | | | | | |
| The training is valuable for my job: | | | | | |
| The training is valuable for my general well being: | | | | | |
| The provider's follow up was important: | | | | | |

6. Please list the most valuable aspects of the MouseKeyDo® training program:

7. Please list any aspects of the MouseKeyDo® training program that you liked the least.

8. Are there any additional topics you would like to have seen covered? We appreciate your honest criticism and recommendations on how to make this program more effective.

9. Please rate your satisfaction with the overall program: (check)

_____ Satisfied without reservation.
_____ Satisfied with reservation.
_____ Not satisfied.

10. Should this MouseKeyDo® training program be required, recommended, optional or not taken (circle) by other employees to prevent or treat computer keyboard and/or mouse related injuries?

Comments: _____

11. Function/Productivity (Please indicate increased, decreased or same compared to prior keyboarding)

_____ Speed, compared to prior keyboarding (per cent)
_____ Accuracy, number of mistakes (per cent)
_____ Endurance (length of time to work on a computer (hours, minutes)
_____ Enjoyment, enjoy mousing and keyboarding (yes or no)
_____ Practice, each day, occasionally or not at all

12. If you feel this would be a valuable program at your worksite, please leave us a contact name and phone number.

Name: _____ Phone: _____

Thank you, we appreciate your assistance.