**Hennepin County Library**

**Ergonomics at Hennepin County Library**

**Training Script**

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| PowerPoint Slide Number | TITLE SLIDE |
| **S 1** | Welcome to Ergonomics at Hennepin County Library. Training created in partnership with Hennepin County Libraries, Workplace Safety and ErgoSystems Consulting |
|  | Introduction |
| **S 2** | The First Public Library In 1790, Benjamin Franklin donated a collection of 116 books to a Massachusetts town that had named itself Franklin to honor him. Though the town initially asked Franklin to donate a bell, he determined that "sense" was more important than "sound."  Town residents voted for those donated books be freely available for town members, thereby creating the nation's first public library. |
| **S 3** | In the years following, industrialist and philanthropist Andrew Carnegie envisioned that libraries would, *"bring books and information to all people”.* Between 1883 and 1929, 1689 Carnegie libraries were built in the United States, including Hennepin County Libraries of Franklin, Hosmer & Sumner. |
| **S 4** | Libraries became institutions of public value as librarians transformed their libraries into cultural centers at the heart of their towns.  More and more public libraries were being opened with public funding.  By 2016, in the United States there were 16,766 libraries including branches; there are more public libraries than McDonald’s restaurants! |
|  | Hennepin County Library |
| **S 5** | Fast forward to the present-day, Hennepin County Library is a national leader of library service, innovation and excellence. With 41 libraries, website and outreach offerings, library service is provided to 1.2 million county residents over 611 square miles.  As a member of the Hennepin County Library staff you provide invaluable support to ensure the Library’s stated mission, ***“to nourish minds, transform lives and build community together”*** and to ensure every patron has the opportunity and resources to read, graduate, engage, work and learn. |
|  | Welcome |
| **S 6** | Think for a moment about a child checking out their very first book from the library. What an exciting milestone in their life!  For many of you this is very likely vivid in your memories as well! |
| **S 7** | Consider that one book. Consider all the caring hands that touched that book on its journey to become that milestone.  The book was received into Technical Services to be unpacked from a shipping box, it was processed into the system, placed on a book cart/truck and wheeled to the library shelf where it was placed for easy access and check-out by the young patron.  Once enjoyed by the patron it was returned to the library and dropped into the Book Return where it once again was entered into the system and returned to the shelf to be discovered by another inquiring patron. |
|  | Health and Safety Strategies |
| **S 8** | No doubt about it, for all of the people who touch that one book, one among the 500,000 new items that enter the library system every year, creating a workplace that is a healthy and safe place to work is vital for the Library to fulfill its role in the community.  That’s what this training is all about; specific strategies you can use to promote your health and safety in your role at the library. |
| **S 9** | Hennepin County values staff health and safety and has made a number of ergonomic improvements over the years at several library locations, such as reducing reaching by lowering bookshelf heights at several locations, installing height adjustable work stations, adding automated material handling (AMH) equipment, lifting devices, improved lighting as well as training. |
| **S 10** | Recognizing that there is always room for improvements, we will look at a variety of activities including manual handling of library materials, loading and unloading bins, pushing book carts/trucks, using lift stiks and the AMH system and specific techniques for shelving materials.  We will also discuss topics of personal health and wellness along with physical fitness. You will learn how to safely and effectively perform a basic stretching routine to promote blood flow and joint health.  All of this is in the context of ergonomics – understanding how to “Work Smarter; Not Harder!” |
|  | Ergonomics |
|  | What is Ergonomics? |
| **S 11** | What is ergonomics? In essence, Ergonomics is designing workstations and using tools and work techniques that help us work smarter . . . not harder.  As human beings we have incredible capabilities. We are physically strong, able to handle heavy loads and yet are also capable of very precise physical movements  But how we use our physical capabilities makes a huge difference in how our body responds to the tasks we ask it to do. |
|  | Ergonomics Principles |
| **S 12** | We’ll define a set of ergonomics principles to ensure the work processes we use are the most effective possible.  We’ll focus on four ergonomics principles:   * Neutral Position * Reach Zone * Power Position and * Fatigue Control |
|  | Neutral Position |
| **S 13** | The first ergonomics principle is Neutral Position.  Although we stand upright on our feet, it's really the spine and pelvis that provides the foundation for our body.  When you hold yourself in the neutral position, your spinal column, when viewed from the side, is actually in an S-shape configuration. An inner curve in the lower back and neck and an outer curve in the mid-back area.  Why S-shape? Think springs! The S-shape allows the spine to act like a spring and increases the spine’s ability to handle stress. |
| **S 14** | What about the other joints of the body? Every joint has a neutral position. We call it, “mid-range of joint position”.  Think about your elbow. From a physical performance standpoint, what position of the elbow is the most functional?  With the elbow straight or bent all the way?  The elbow is most functional at about 90 degrees of bend. This is the position of greatest strength and also protects the joint and surrounding soft tissues like muscles, tendons, ligaments and nerves.  Every joint of the body has a “mid-range of joint position”. |
| **S 15** | Of course, you can’t spend all of your time with your spine and joints in the absolute neutral position. However, the closer you can position your joints to the “mid-range of joint position”, the better.  The next time you find yourself in an out-of-neutral position, identify why you are out of neutral and consider options to improve the situation to allow you to be more in neutral. Even if you can spend 15% more time in neutral, that 15% can make a big difference!  When you adjust the worksurface height at your workstation, you are using the Neutral Position principle to your advantage! |
|  | Reach Zone |
| **S 16** | Reach Zone is the second ergonomics principle; it has to do with how far away from your body you need to reach.  For example, how long can you hold a 10# load at arm’s length?  Well, at arm's length, it gets heavy quite quickly. That’s why, in fact, if you have to hold the load at all, you know you want to hold it as close to your body as you can get it.  Structurally, the body is designed to function within a specific operating range. We call this the Reach Zone.  Determined by your arm’ length, it’s defined by a sphere from hip to shoulder level within arm’s reach to the front and side. |
| **S 17** | Are we saying never reach outside your reach zone? Of course, the answer is NO!  But if you find yourself reaching way outside your reach zone with a heavy load in an awkward position think about ways to decrease the reach distance.  In general***,*** set up as much as possible to work within your Reach Zone. For example, as possible use the top and middle shelves on the book trucks rather than the bottom shelf. |
|  | Power Position |
| **S 18** | So far, we have outlined the ergonomics principle of Neutral Position and Reach Zone.  But what about if you have to lift or move something.  Is the Neutral Position really the best position for this kind of activity?  As it turns out – it’s not.  From the body’s perspective the third ergonomics principle, Power Position is a better way to go. |
| **S 19** | Here’s what the Power Position looks like:   * Feet shoulder width or slightly wider. * Good footing so you don’t slip. * Spine maintained in neutral. * Hips and knees bent slightly. * Head and shoulders upright. |
| **S 20** | In fact, this position is used in just about any sport as a “ready” position.  You can use the Power Position in many ways – lifting materials  and maneuvering a book truck for sure  but also, for using tools and equipment and setting up the work area.  You can even use the power position to get a drink at the water fountain! Rather than just bending over at the waist with your knees straight – stressing your lower back – use the power position. Give it a try! |
|  | Fatigue Control |
| **S 21** | So far, we have gone over the ergonomics principles of Neutral Position, Reach Zone and Power Position. The last principle is Fatigue Control.  You’ll notice we’re using the word “Control” and not “Eliminate” when discussing fatigue. Physical fatigue is a normal occurrence in the routine of our lives. It is not possible to eliminate fatigue.  For overall health and wellness, we need to recover from fatigue through appropriate rest, hydration and nutrition. |
| **S 22** | First, how do you recognize fatigue? Physical fatigue is demonstrated when physical and/or repetitive tasks result in muscle tiredness. We experience a decrease in general physical strength and coordination. We are more prone to making mistakes. We may be more likely to experience injuries. |
| **S 23** | During the work shift what can you do to control fatigue?  Try to mix up job tasks to provide a variety of physical activities. This is called job rotation. Break a larger task into smaller tasks.  Make sure you take appropriate recovery breaks to give your body a chance to replenish energy supplies and fluid intake. In other words, try to not skip breaks and lunch.  Drink plenty of fluid on a periodic basis. If you are thirsty you are on the way to dehydration.  Use stretching to promote blood circulation and joint lubrication through-out the shift. Look at thePhysical Fitness, Health and Wellness and Stretching sectionfor details about using stretching as a part of your overall fatigue control strategy.  Consciously work to identify and control fatigue at work. |
| **S 24** | If you are experiencing extreme or unusual symptoms please access appropriate medical treatment. |
|  | Use Ergonomics Principles |
| **S 25** | So, ergonomics is all about working smarter not harder.  We’ve discussed four ergonomics principles:   * Neutral Position * Reach Zone * Power Position and * Fatigue Control   Use these principles to help guide how to safely and effectively do your work. Check out the Tips and Techniques Section for additional examples. |
|  | Stretching and Warm-up |
| **S 26** | Anyone who plays a sport knows the importance of warming up and stretching for two primary reasons: It minimizes the likelihood of injury and enhances performance.  Your job certainly involves physical activity. What are you doing specifically to warm up and stretch as part of your job?  If the answer is . . . nothing, you are increasing the risk of suffering a musculoskeletal injury/disorder and limiting the level of your job performance. |
| **S 27** | Stretching not only primes the body:   * It also increases blood flow to the working tissues providing more oxygen and nutrition * It helps to loosen the joints to decrease stiffness and * It helps to improve alertness levels through increased levels of oxygen in the blood going to the brain.   Think of it, all of this just from stretching. |
| **S 28** | Guidelines for stretching include: |
| * Follow any specific medical restrictions |
| * Listen to your body - Stop the stretch if you experience any numbness or tingling |
| * Always stretch from the neutral position |
| * Don't hold your breath during the stretch – breathe in with the stretch and out with the relaxation |
| * Use slow controlled movement |
| * Push the stretch only as far as is comfortable for you |
| **S 29** | ***Insert stretches Reference additional resources found on the Workplace Safety Ergonomics Solution Center site*** |
|  | Physical Fitness |
| **S 30** | When we discuss overall personal physical fitness does your job provide all the components of a well-rounded, well-balanced physical fitness program?  Does it provide all the strength, flexibility and heart and lung fitness you need?  More than likely the answer is NO.  Many studies have shown that individuals with balanced personal physical fitness are less likely to sustain an injury  So, physical fitness is a combination of strength, flexibility and aerobic endurance. To better meet your job demands you can perform a variety of exercises at home or a fitness center. |
| **S 31** | \*HERE IS A VERY IMPORTANT POINT: If you have any health concerns about starting a physical fitness program you should always consult with your health care professional before starting.  In this training we aren’t able to provide specific details for you to start a physical fitness program. If you need additional assistance please tap into resources. Hennepin County HealthWorks sponsors fitness center discounts and a number of onsite classes. |
|  | Health and Wellness |
| **S 32** | In addition to physical fitness what about overall personal health and wellness?  It’s up to you: Your personal health and wellness, just like your personal physical fitness, is your personal business.  Here is a list of factors for you to consider:   * Adequate diet and nutrition * Body weight control * Stress management * Smoking cessation * Blood pressure control * Adequate rest from sleep and * Fluid intake to avoid getting dehydrated   These are all factors under our control that can help us be healthy and well. No doubt . . . personal health and wellness is part of the overall strategy for a healthy and safe place to work. |
|  | Power Lift (Body Mechanics and Techniques) |
|  | Safest Lift? |
| **S 33** | Next let’s get into the specifics of using ergonomics principles for manual material handling. Lifting, pushing, pulling, carrying  Here is a question for you . . . “What is the safest lift you can do?”  It’s the one you DON’T do!  As appropriate, make sure you use the equipment available to assist with or accomplish the material handling. The Lift Stik has proven to be a valuable tool. |
|  | Personal Performance Limit |
| **S 34** | When you do need to accomplish a manual material handling task, up front planning goes a long way to minimize stress and strain and allows you to get assistance if you need it.  Listen to your body and respect your personal physical performance limit.  If you exceed your limit, you significantly increase your risk of injury. It can literally take only a quarter of a second for a life-changing injury to take place.  Teamwork is critical – If you need help, ask a co-worker for assistance, or if you see that someone could use a hand, offer to assist.  If you know of equipment that may aid in your manual material handling activities, pass that information along to your supervisor. It’s in everyone’s best interest to keep you healthy and performing at your best |
|  | Power Lift Technique |
| **S 35** | So, at this point you have determined the manual material handling task is within your personal performance limit and you are going to handle it.  What is the best technique to use?  Most people recognize that the back bent, straight leg technique is not good. It can put a lot of stress into the low back.  Most people have been taught to, “Lift with your legs - not your back!” They picture this as a deep squat lift. What do you think? Is this the best lifting technique? |
| **S 36** | Well, what we know is that for a variety of reasons a lot of people have a hard time using this technique. It requires a high degree of leg strength and sound knee joints. And for any repeated lifting it very quickly uses up a lot of energy.  In fact, because of these reasons many people tend to use the riskier back bent, straight leg technique with the result being increased stress into the back and body in general. |
| **S 37** | What is a better technique? Let’s turn to the technique commonly used by professional weightlifters. They call it the Power Lift. It makes use of the ergonomics principle of the Power Position. It does not require the troublesome deep squat lift but it is also NOT the back bent, straight leg technique. |
| **S 38** | Here are the step-by-step details of the Power Lift.  Remember you have done your pre-lift planning up-front to decide if you need to use mechanical equipment or get someone to help you. You have thought through where the material you are about to handle is going to end up. You have anticipated any surprises. |
| **S 39** | * All right, first step . . . approach the object with your feet slightly wider than shoulder width. * Make sure you have good footing. * Now bend your hips and knees somewhat and reach your hands to the object. * If you are unsure of the object weight, give it a gentle shovel to test the weight * Figure out the best way to grip the object. This might be at a diagonal. * You can also build a bridge with your elbow on your knee to unload your back as you get your grip. Your goal is to keep the object as close as possible to you. * Tighten up your stomach muscles. * You are now ready to lift! * One last critical step. . . at the moment of the exertion . . . LOOK UP. * Look up as you lift.   Looking up will automatically put you into the Power Position and you will use the large muscles of your legs and thighs - not your back to accomplish the lift.  Your back muscles will work with your stomach muscles to stabilize your spine in the neutral position. |
|  | Look Up! |
| **S 40** | To condense this down to one paramount rule, to use the power position technique properly, LOOK UP when you perform the exertion. Just look up!  If you look down, you’ll round out your back and place a significant strain on your back.  On the other hand, if you look up, automatically your back will stay in neutral and transfer the force of the lift to your hips and legs. Use the power lift technique to your advantage. |
|  | Golfer’s Lift |
| **S 41** | If you have a lighter weight item that you can handle with one hand use the Golfer’s Lift. Lifting one leg back as you bend over at the hip to reach to the item counterbalances the trunk and works well. Practice using the Golfer’s Lift as it makes sense for you. |
|  | Tips and Techniques |
| **S 42** | When you think about the concepts of Neutral Position, Reach Zone, Power Position, Power Lift, Stretching and Fatigue Control, a very good question is . . . “Can you actually apply these concepts to everyday activities at the library?”  In Tips and Techniques let’s take a close look at some common activities in the library like shelving library materials, working with the AMH system, working at the Service Desks, maneuvering book trucks, using Lift Stiks and processing returned library materials. |
|  | Shelving |
| **S 43** | Now, wouldn’t it be nice if all of the library shelves were between waist and shoulder height so you could just walk up to the shelf and maintain a neutral body position as you shelf the materials within your reach zone!  In reality, we recognize to make the best use of the space, some shelves will be at a lower level and some will at a higher level. It is worthwhile to note that with library renovations, many shelves have been reconfigured so the top shelf is a maximum of about 60”. This has helped to reduce the amount of higher than head level lifting of materials. The bottom shelf is about 6 inches off the floor. |
| **S 44** | When we talk about shelving, here is an important question.  How many books or other materials should you have in your hands at one time when you are shelving?  The answer is . . . It depends!  It depends on how large and heavy the books are and your ability to safely handle them. In some cases, this may be one and in other cases it may be several. These are decisions you need to make  Whatever the number, work to handle the materials from the bottom, not from the top. Use your hands like a scoop not like a crane. We are stronger with the under-hand grip rather than the overhand. |
|  | Lower Shelf Levels |
| **S 45** | Alright let’s examine lower level shelves. Library staff use a variety of techniques to reach down closer to the floor to shelve materials.  Some individuals squat down . . .  some go down to a knee . . .  and some bend straight over at the waist keeping their knees straight.  Is one technique better than another? Should only one technique be used by everyone?  As it turns out we all have different levels of physical capabilities and we need to take that into account.  Let’s apply the ergonomics principles to see what we come up with. |
|  | Deep Squat |
| **S 46** | How about squatting down? We call this a deep squat the knees are fully bent. Some people are able to effectively use this technique and if that is the case it is an acceptable technique to use.  However, honestly for a lot of people the deep squat will not work; it simply takes more strength, joint stability and balance than they may have.  So, if a deep squat doesn’t work many people resort to the back bent/straight leg technique. We recognize this may put stress into the lower back and for most people do not recommend this technique.  Where does that leave us? |
|  | Power Lift |
| **S 47** | One option is to use the Power Lift based on the Power Position Ergonomics Principle.  Recall the Power Lift is not a deep squat lift but still allows you to reach down to a lower level. |
| **S 48** | Here is an example of how the Power Lift works for shelving at lower levels.  With materials in hand approach the shelf. Depending on the situation it may make sense to stage the materials on an open space on a higher shelf and then access them once you are in position.  To use the Power Lift with a wide base of foot support, build a bridge with an elbow on your knee or your hand on a shelf to lower down to the shelf.  Make sure you have enough room for the materials on the shelf. Open up some space if needed.  Next place the materials on the shelf and adjust their position if needed.  Remember to pay attention to your head position. Concentrate on looking forward as much as possible.  Then return to an upright position by pushing up on your knee or the shelf. |
|  | Down on Knee |
| **S 49** | Another option is to go down to a knee to get to the lower level. If you are comfortable kneeling this can be effective.  To make this work for you, two very important components need to be integrated:  a kneeling pad to cushion the knee  and using the “build a bridge” concept to make it easier to get down and particularly to get back up |
| **S 50** | Let’s examine how the Down on Knee technique works for shelving.  With materials in hand approach the shelf. Depending on the situation it may It may sense to stage the materials on an open space on a higher shelf and then access them once you are in the lower position.  Next build a bridge with an elbow on your knee or your hand on a shelf to position the kneeling pad on the floor and then lower down to one knee.  Make sure you have enough room for the materials on the shelf. Open up some space if needed.  Next place the materials on the shelf and adjust their position if needed.  Then return to an upright position by pushing up on your knee or the shelf. Remember to pay attention to your head position. Concentrate on looking forward as much as possible.  Some individuals use the book truck to build the bridge. Rather than leave the book truck at the end of a stack they maneuver it into the stack and then use it for support |
|  | Sit on Stool or Chair |
| **S 51** | Making use of a stool or chair when shelving materials at a lower level is another option. This allows you to work at a lower level without having to squat, kneel or bend straight over at the waist. Just make sure if the stool or chair is on wheels you have it securely positioned as you use it. You don’t want it to roll away from you. |
|  | Back Bent/Straight Leg |
| **S 52** | One last comment about going to the lower shelf levels. There may be a few individuals for whom none of the techniques we have discussed will work.  For whatever reason they can’t deep squat, use the power lift or down on one knee techniques.  They use the back bent/straight leg technique. What we understand is the most stress is placed in the lower back to get into and then out of the back bent/straight leg position. The actual position itself is less of an issue.  If this is the case, you can actually use the Power Position concept to your advantage. |
|  | Here is precisely how this technique works for shelving. |
| **S 53** | To lower yourself down, bend at the hips, not the lower back. The goal is to maintain the lower back with the inward curve and not let it round out.  To get out of the position, bend the knees, look up to assume the Power Position and then push up with legs to return to an upright position. You can also push up with a hand on a knee, shelf or book truck. |
|  | Higher Shelf Levels – Two Stage Lift |
| **S 54** | Let’s move onto shelf levels at or above shoulder level. Some individuals have adequate upper body strength to safely and comfortably lift materials to the higher shelves and that works well for them  However, for heavier materials or for someone not quite as strong, you can use the Two-Stage lift. |
| **S 55** | Essentially you stage at the materials on an open shelf area at about mid-chest level. Then using the Power Position, you lower your body so the materials are about shoulder or head level. Grip the materials and then come to a full standing position.  The materials will now be at a level closer to the higher shelf levels to be placed on the shelves. Legs are stronger than arms, so essentially you use leg muscles to get the materials to the higher levels. |
|  | Repositioning Materials on Shelves |
| **S 56** | A very common activity is repositioning materials on shelves. This involves opening up space on the shelves for additional books or closing up space as needed.  Some individuals do this by standing directly in front of the shelf and pushing materials from the side. |
| **S 57** | Another technique is to position yourself to the side of the materials and then use momentum and body weight to actually slide the materials sideways. This technique requires less muscle strength and reduces strain on the shoulders compared with the other technique. Give it a try. |
|  | Book Trucks |
| **S 58** | Book trucks are routinely used to stage and transport library materials.  Here are some tips:  When loading book trucks, as possible, use only the top and middle shelves. You will be able to avoid awkward body and arm positions when the book truck is being loaded and also make it easier for the person who unloads the book truck.  If you do use the lowest shelf, try to put lighter, easier to handle materials on the bottom shelf. |
| **S 59** | Always be on the look-out for any book trucks that need service; wheels that are wobbly or hard to roll or any structural problems. Flag book trucks that have issues and pull them out of service. |
| **S 60** | When maneuvering book trucks use the momentum of the truck to your advantage. Look at these two examples; which one looks easier to handle?  Example A on the left is being “muscled” around the corner.  Example B on the right, see how it is “spinning” on its wheels to get around the corner.  Use as little force as you can to maneuver the book truck. |
|  | AMH Systems |
| **S 61** | AMH Systems have revolutionized materials handling in the library. Let the AMH do its job as much as possible.  We recognize materials do occasional jam up on the conveyor. As a result, there may be a tendency to “feed” the conveyor from the IA Bin. Repetitive reaching over the side of the conveyor is an awkward position.  For materials that are jammed use the reacher/gripper tool to free them up. |
| **S 62** | If you do you need to reach in, use the available foot platform to minimize the reach. |
| **S 63** | To unload materials from the IA bins always raise the bottom of the bin to position the materials in your reach zone and promote your neutral body position. |
|  | Book Drop/Return |
| **S 64** | Some Book Returns drop materials directly onto the AMH conveyor.  For other Book Returns there is a bin under the slot. To process the materials in the bin it needs to be moved into position or to the Work Room.  Always be on the look-out for any bins that need service; for example, wheels that are wobbly or hard to roll or any structural problems. Tag bins that have issues and pull them out of service, |
| **S 65** | When maneuvering bins, use the momentum of the bin to your advantage. This is a chance to use the Power Position to push and pull the bin. |
| **S 66** | Some bins may have floors that are spring loaded to raise the level of the bin bottom for better access to the materials. The Neutral Position principle in action!  If you do reach to the bottom of the bin, use the “build a bridge” technique to support your body weight with a hand on the side of the bin as you reach into the bin. |
|  | Lift Stik Equipment Use |
| **S 67** | Lift Stiks have been embraced by library staff because they have proven to be a great benefit. Lift Stiks really have several purposes.  Transporting blue bins from area to area with Lift Stiks eliminates a lot of manual handling.  Second, Lift Stiks are work height positioners. When removing materials from the blue bin you can adjust the height of the bin stack to put it in your reach zone.  Third, Lift Stiks allow you to restack blue bins. For example, you can build up a stack of five blue bins to be handled by the contractor. |
| **S 68** | Remember the Lift Stik blue bin maximum capacity is four bins. Make sure you understand and follow all the guidelines for safe and effective Lift Stik operation. |
|  | Foot Wear |
| **S 69** | Library staff are commonly on their feet throughout the day. Appropriate foot wear can add to the level of foot comfort. What is appropriate footwear?  Shoes that fit properly and that provide adequate support and cushioning are a necessary component to safe and healthy work environment. Rather than use standing mats, consider shoes insoles. |
|  | Work Room |
| **S 70** | Workstations in the work room are where you process library materials. A significant part of the equipment is the user-controlled, powered height-adjustable worksurface that allows you the flexibility to either sit or stand when processing the materials. Always take a few seconds to make sure you set-up the workstation for yourself.  Here is a step-by-step approach. |
|  | Standing Workstation |
| **S 71** | First for a standing work height, stand at the worksurface with a comfortable upright neutral body position.  Anticipate where you will place your hands to perform the tasks at hand and adjust the worksurface height to match your hand position.  Next make sure all your equipment (keyboard, mouse, RFID pad, scanner and so on) is within your reach zone.  Make sure the monitor is positioned so you can maintain a neutral head position.  Position the other equipment like book trucks and blue bins within a reasonable reach zone to control excessive reaching.  Use the Power Position principle as you maneuver in the workstation.  Don’t hesitate to fine-tune the workstation set-up as needed. You can always adjust the worksurface height and equipment place to optimize it for you.  On a regular basis perform some of the stretches to help you control fatigue. |
|  | Seated Workstation |
| **S 72** | Remember you can also sit at the workstation some of the time for a variety of position. Make sure you understand how to adjust the chair seat and back to provide adequate body position and support.  Once the chair is set-up, adjust the worksurface height to match your hand position and then position all the other equipment as needed.  Remember some of the stretches can also be performed from a seated position.  Overall your goal is to set-up the workstation to meet your needs with good body position and support and then on a regular basis move into the next good position with support. |
|  | Service Desk |
| **S 73** | Service desks are where the critical interaction between the library staff and the library patrons takes place.  Most Service Desks provide an opportunity to sit or stand periodically. It may be a user-controlled, powered height-adjustable worksurface or it may one worksurface at a seated height and another at a standing height.  Always take a few seconds to make sure the workstation is set-up for you uniquely.  Here is a step-by-step approach. |
|  | Standing Workstation |
| **S 74** | First for a user-controlled, adjustable standing worksurface, stand at the worksurface with a comfortable upright neutral body position.  Anticipate where you will place your hands to perform the tasks at hand and adjust the worksurface height to match your hand position.  Next make sure all your equipment (keyboard, mouse, RFID pad, scanner and so on) is within your reach zone.  Make sure the monitor is positioned so you can maintain a neutral head position.  Don’t hesitate to fine-tune the workstation set-up as needed. You can always adjust the worksurface height and equipment place to optimize it for you.  On a regular basis perform some of the stretches to help you control fatigue. |
|  | Seated Workstation |
| **S 75** | Recall you can also sit at the workstation some of the time for a variety of position. Make sure you understand how to adjust the chair seat and back to provide adequate body position and support.  Once the chair is set-up, for a powered height adjustable worksurface adjust the worksurface height to match your hand position and then position all the other equipment as needed.  If the worksurface is a fixed height seated version, adjust the chair seat height to match your hand position based on the tasks performed.  If your feet are no longer supported comfortably on the floor you will need a foot rest. Never let your legs and feet dangle more than just a short time.  Remember some of the stretches can also be performed from a seated position.  Overall your goal is to set-up the workstation to meet your needs with good body position and support and then on a regular basis move into the next good position with support. |
|  | Close |
| **S 76** | As a member of the Hennepin County Library staff you provide invaluable support to every library patron.  We hope you can use the information in the training to work safely and effectively. |
| **S 77** | Thank you for your time and attention |