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| **Body Mechanics and Ergonomics** | | | | | | |
| **Purpose** | To provide information on Body Mechanics and Ergonomics as a way to promote body health and comfort in the work place. | | | | | |
| **Scope** | How you move and use your body determines the health and comfort you feel while doing your job. The key to good body movement is working in neutral positions. Working in neutral means keeping your body in its natural alignment.  Cumulative trauma disorder (CTD) is the wear and tear on tendons, muscles and sensitive nerve tissue caused by continuous use over an extended period of time. The word cumulative emphasizes that this happens gradually over a period of time.  CTD can develop from improper work positioning, repetition or force. | | | | | |
| **Body Mechanics** | To move, lift, reach, lower, or set down an object:   1. Plan the move    1. Consider the weight, size and shape of the object when deciding whether you can do it alone or if you will need assistance.    2. Make sure the route is free of hazards.    3. Look over the object for rough edges, sharp pieces, etc. Some objects should be moved in sections, e.g. remove drawers. 2. Correct lifting, carrying and setting down procedures    1. When lifting a box, stand close to the box with feet apart; one alongside the box and the other behind it. Squat down, bending the knees and keeping your back as straight as possible. Lift one end slightly and get your hand under the box, grasping with your hand (a palm grip won’t slip). Grasp the opposite bottom corner and draw the box toward you. Tuck in your elbows and arms for more power, and come to a standing position.    2. When carrying the object, be sure your vision is not obstructed.    3. Set the object down by using leg muscles and bending your knees. Remember to keep your hands and toes in the clear when the load is put down. 3. Correct reaching and lowering procedures    1. Less weight can be handled in an overhead reach because the arm and back muscles have to do all the work. To prevent overreaching or stretching, use a step ladder or regulation footstool. Push close to the object for high lifts.    2. When reaching from a standing position, stand close to the object, grasp it firmly with the hands and bring arms close to the body as you lower the object to your carrying level. | | | | | |
| **Ergonomics** | 1. Examples of factors that may cause cumulative trauma disorder:    1. Working with a bent or flexed wrist.    2. Repetitive hand, arm and shoulder motions.    3. Long reaches for materials.    4. Long periods of sitting or standing.    5. Working with your neck bent at an angle.    6. Working at nonadjustable workstations/chairs.    7. Working with inadequate lighting.    8. Pinching or grasping – applying pressure. 2. Suggestions for limiting CTD:    1. Keep your arms, elbows, wrists, and shoulders in alignment.       * 1. When sitting, place your feet on a footrest.         2. Adjust work counter height.    2. Avoid repetitive movements. If this cannot be avoided, take stretch breaks often.    3. Muscles used in one position for extended periods of time will fatigue. The following stretching exercises will provide relief for your muscles:       * 1. Move your eyes in all directions.         2. Stretch the lower back – put hands on hips and bend backwards.         3. Stretch the shoulders, arms and ribcage by reaching overhead and hold.         4. Roll your shoulders forward and backward – arms at your sides.         5. Put your palms together and lower them until you feel a pull in your forearms.         6. Make a fist and then spread fingers as far as you can.         7. Turn your head from side to side.    4. Avoid bright lights and reduce glare    5. Focusing solely on one big project until it is completed may not be as efficient as alternating tasks to periodically give your body and mind a needed rest. | | | | | |
| **Morgue – Safe patient handling** | In the morgue slide boards are used to prevent injuries to staff during transfers, lifting, and repositioning. Bariatric patients will need multiple staff members to help with transfers and lifting.  Refer to policy [987.00 Minimal Lift](https://starnet.childrenshc.org/references/policy/900/987.00-minimal-lift.pdf) for more information. | | | | | |
| **Injury Report** | 1. Contact Employee Health Service for musculoskeletal injuries. 2. Complete an Employee Incident/Injury Report form.   <http://khan.childrensmn.org/forms/EmployeeIncident/EmployeeIncident.asp> | | | | | |
| **References** | 1. OSHA. Laboratory Safety Guidance. 2011. 2. OSHA Fact Sheet. Ergonomics for the Prevention of Musculoskeletal Disorders in the Laboratory. 2011. | | | | | |
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| **Historical Record** | **Version** | **Written/Revised by:** | | **Effective Date:** | **Summary of Revisions** | |
| 1 | Carol Cram | |  | Initial Version | |
|  | 2 | Kerstin Halverson | | 07/01/03 |  | |
|  | 3 | Carol Buhl | | 07/24/15 | Reformatted to CMS.  Renumbered from 7.1.  Added References. | |
|  | 4 | Lab Safety Committee & Carol Buhl | | 10/10/18 | Added lift information for the morgue. | |