



Moving Forward with the Integrated Ergonomics Program (IEP)

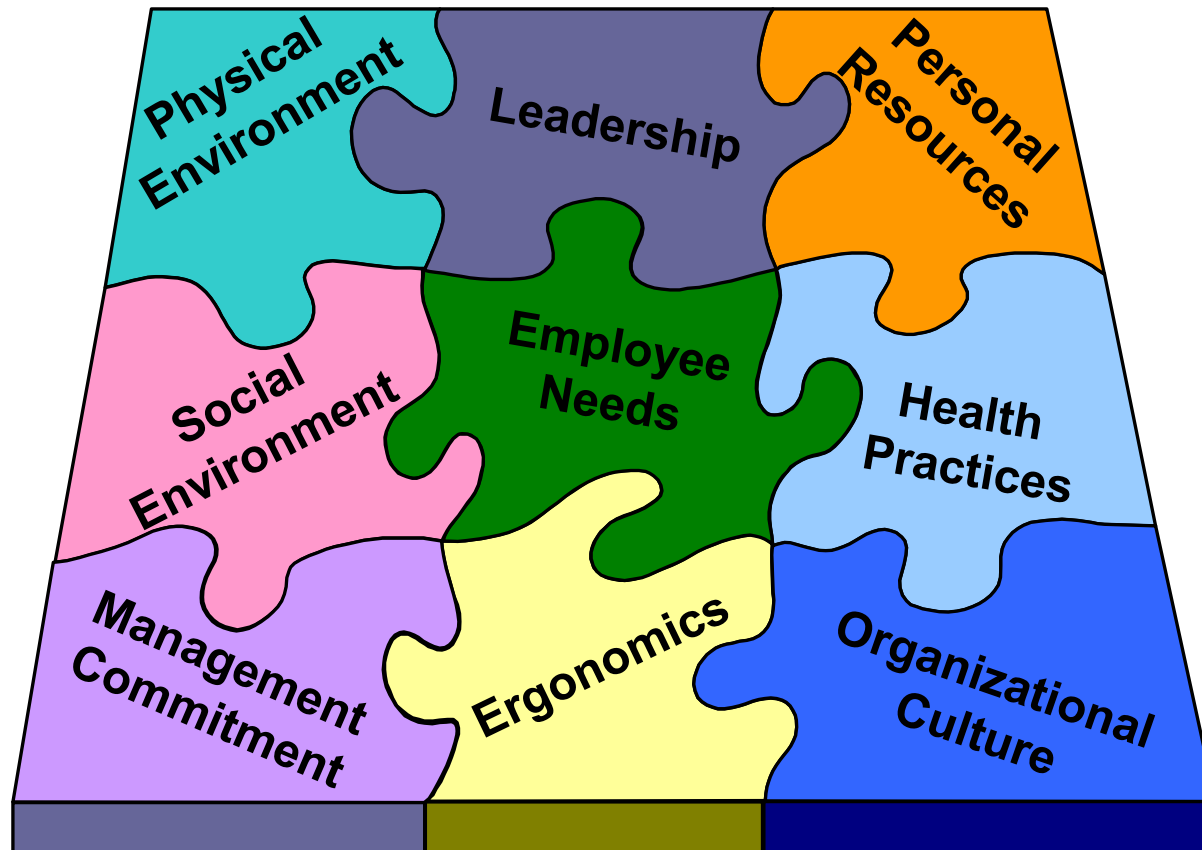
Ergo Coach Training and Awareness



Objectives

- Increase Awareness and Understanding of IEP
- Ensure potential Ergo Coaches understand their roles and responsibilities
- Introduce basic office ergonomics principles related to the user, the task, the workstation and the environment
- Identify ergonomic risk factors that may contribute to musculoskeletal disorders (MSDs)
- Demonstrate how to adjust the workstation and understand how to control ergonomic factors

Workplace Health and Safety



Understanding Ergonomics

Ergonomics is the relationship between an **employee**, their **tasks** and their **workstation / work area**.

- **Office ergonomics** applies to employees working from a desk or standard workstation
- **Design ergonomics** must be considered in areas such as the re-design of our front-end services
- **Industrial ergonomics** applies to employees working in our warehouses, mailrooms and similar work areas





Integrated Ergonomics Program (IEP)

Outlines the department's approach to providing ergonomic services through preventive measures

- Identifies roles and responsibilities to ensure ergonomic obligations are met
- Proactive and consistent approach to eliminate/reduce ergonomic hazards and prevent ergo injuries
- Applies to all employees





Why Implement an IEP?

- Supports a healthy and enabling workplace through injury prevention
- Ensures compliance with legislative obligations, such as the CLC-II, and addresses ergonomic-related hazards
- Provides a fair, consistent and timely approach to proactively managing the demand for ergonomic services



Meeting Our Ergo Obligations

Preventive Measures

- Providing employees with access to the necessary information, tools and procedures
- Adjusting equipment to fit the worker through self-adjustment tools and ergo coaches

Corrective Measures

- Conducting assessments based on *medical indications* for employees with limitations, barriers or injuries, using qualified specialists
- Eliminating hazards and addressing limitations or barriers

National Tools

- Support the implementation and management of the IEP

Medical Indication

1. Medical referral from a health care professional
2. Written verification from the manager that the employee:
 - is awaiting treatment that has not been administered
 - has personal attributes, related to physical variations, that may impact his/her ability to perform their duties at a standard workstation



Ergo Measures

Adjustments (Preventive)

- What is an adjustment?
- What is the expectation?
- How are they performed?
 - Self Assessment Tools
 - Certified Ergo Coaches

Assessments (Corrective)

- What is an assessment?
- What is the expectation?
- How are they performed?
 - Qualified Ergo Specialists



Our Ergo Activities and Investments

Activities

- 10% to 25% of ESDC's reported injuries are ergo related
- 1000 ergo assessments are expected this year
- Ergo injuries and assessment requests continue to rise

Investments and Expenditures

- ESDC spent over \$1.1 million on ergo in fiscal 2015-2016
- ESDC's WCB claims for repetitive motion injuries are represent 30% of our total claims
- Claims not approved by WCB may still lead to employees using their sick leave or disability leave provisions

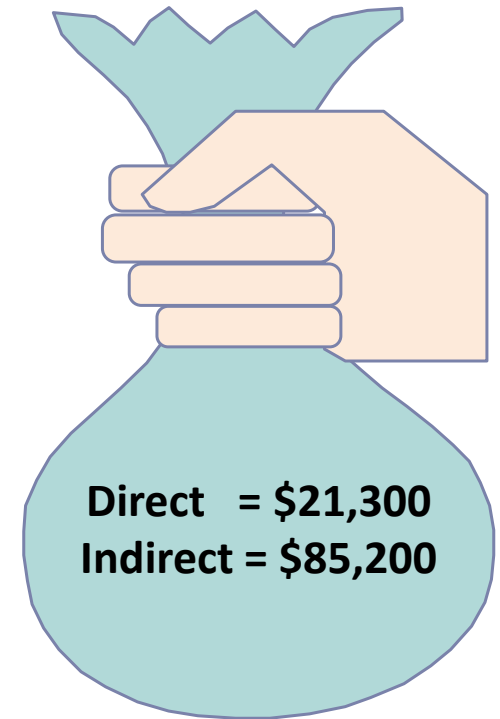
Direct and indirect Injury Costs

Direct Costs (20% of total cost)

- Salary
- Compensation
- Medical

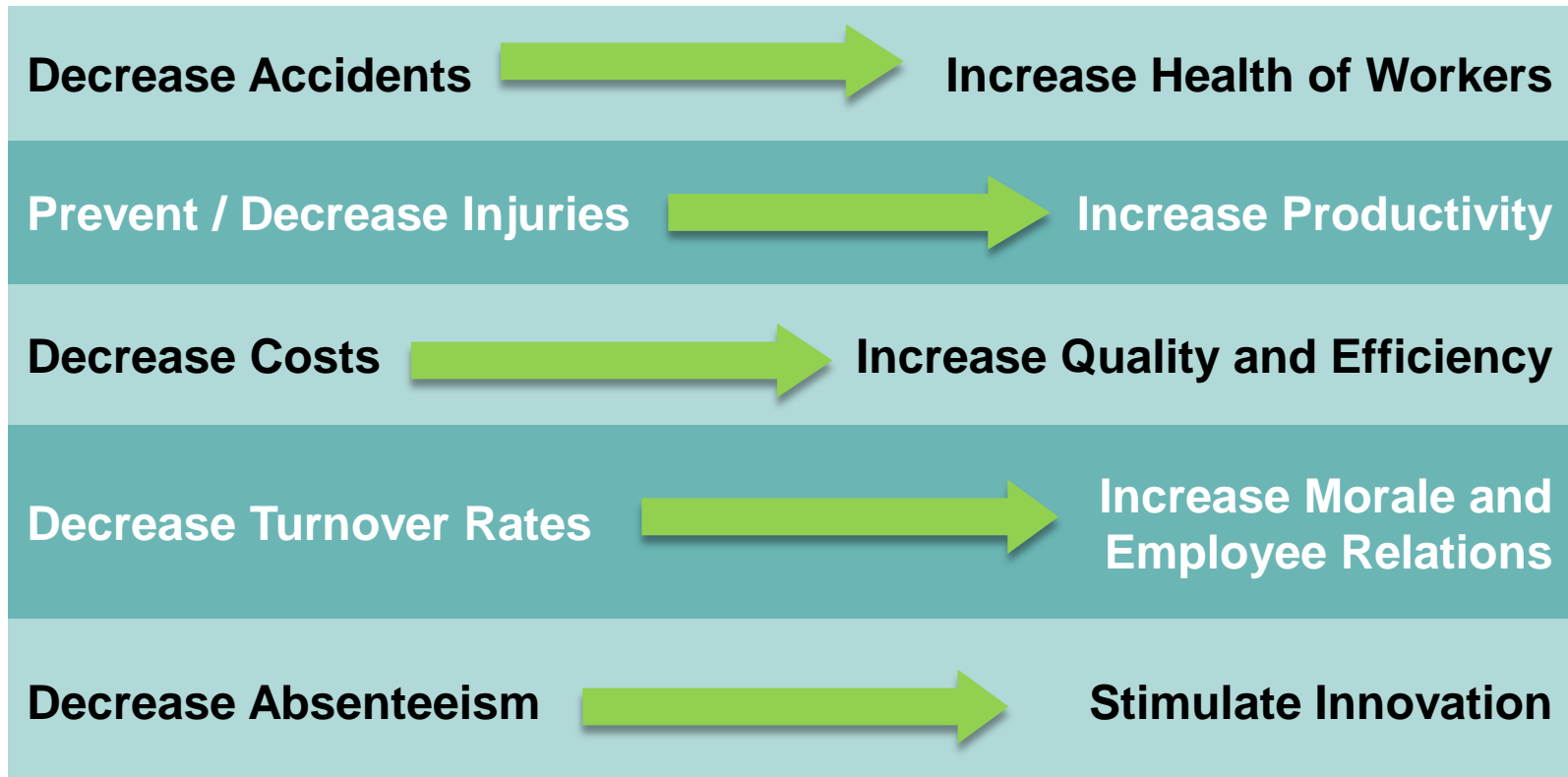
Indirect Costs (80% of total cost)

- Replace worker and retraining
- Lost productivity of injured worker and colleagues
- Manager and supervisor time
- Lowered employee productivity while on light duty





Benefits of Office Ergonomics



Responsibilities and Duties



Ergonomics is a shared responsibility



Ergo Responsibilities and Duties

Regions and Branches

- implement the IEP at the regional / branch level

Management Reps

- promote preventive measures and awareness activities
- implement corrective measures
- identify, and eliminate / reduce ergo hazards
- identify ergo coaches

Employees

- follow procedures
- report ergo hazards / discomfort
- attend awareness sessions



Ergo Responsibilities and Duties

Regional OHS Advisors

- provide expert ergo advice and guidance to managers;
- train ergo coaches

Committees and Representatives

- participate in implementing and monitoring the IEP

National OHS Office

- develops and maintains the IEP



Ergo Coach Responsibilities and Duties

- Provide employees with information regarding workstation adjustments:
 - Make adjustments that can easily be made at the visit
- Provide employees with ergonomic education
- Refer employees with symptoms or specific physical limitations or barriers to the supervisor
- Complete accurate record of findings and adjustments in the Ergonomic Adjustment Checklist

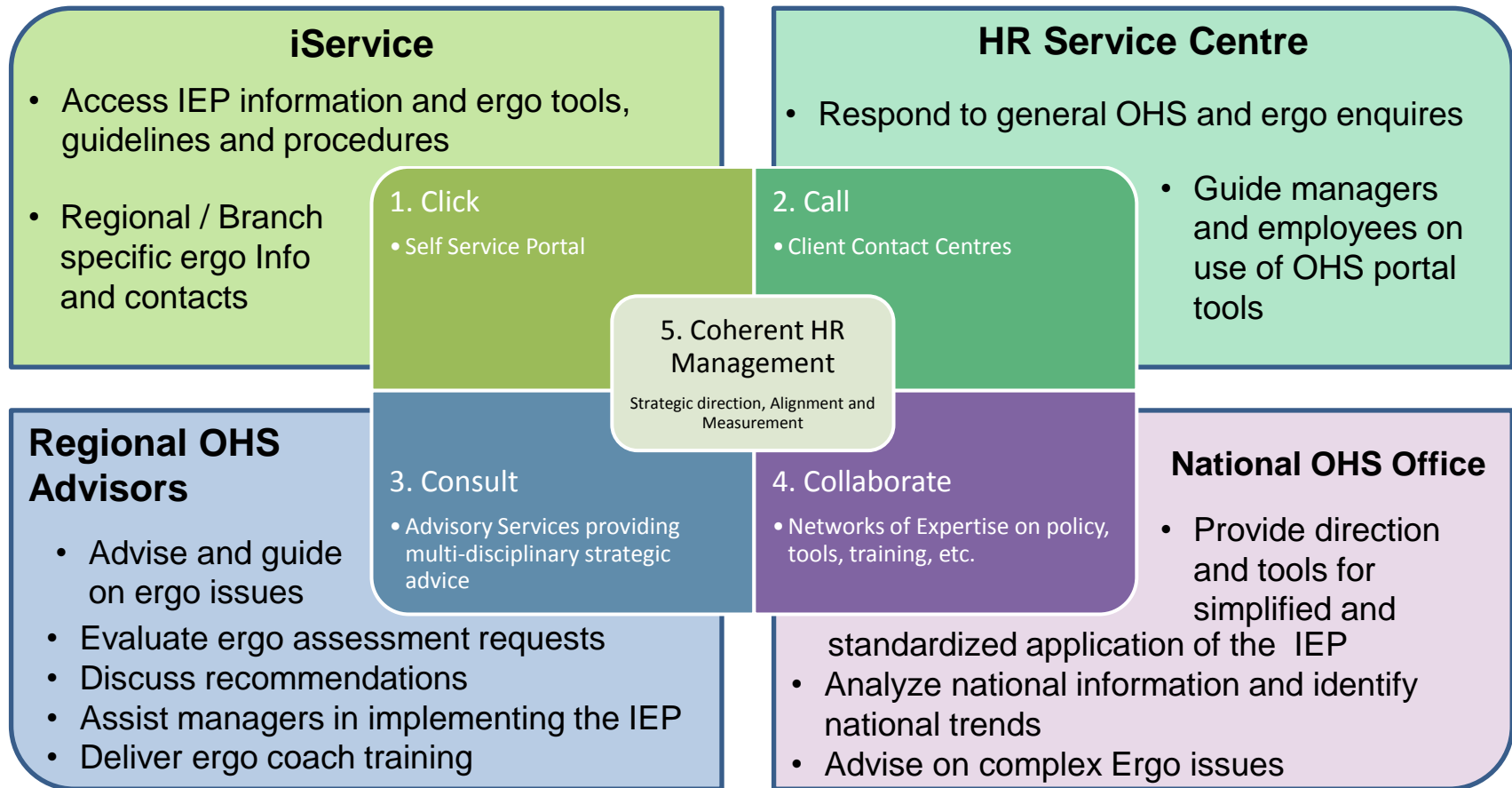
Ergo Coach Responsibilities and Duties

- Report ergonomic findings and observations to management
- Evaluate the success of the changes by doing a follow-up visit/telephone call
- Communicate issues and concerns with your Regional OHS Advisor



Accessing Ergonomic Services

Human Resources Business Model



Ergonomic Fundamentals

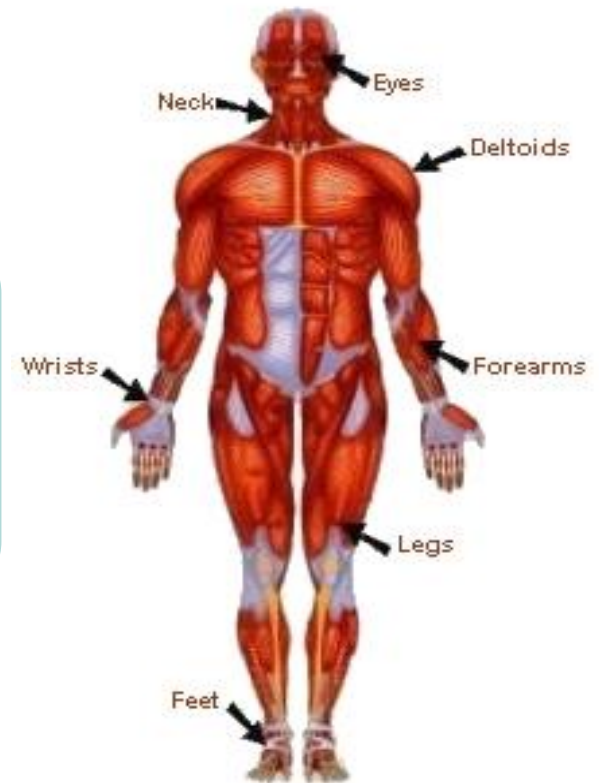


Prevention of Musculoskeletal Disorders, Risk Factors and Postures

Musculoskeletal Disorders (MSDs)

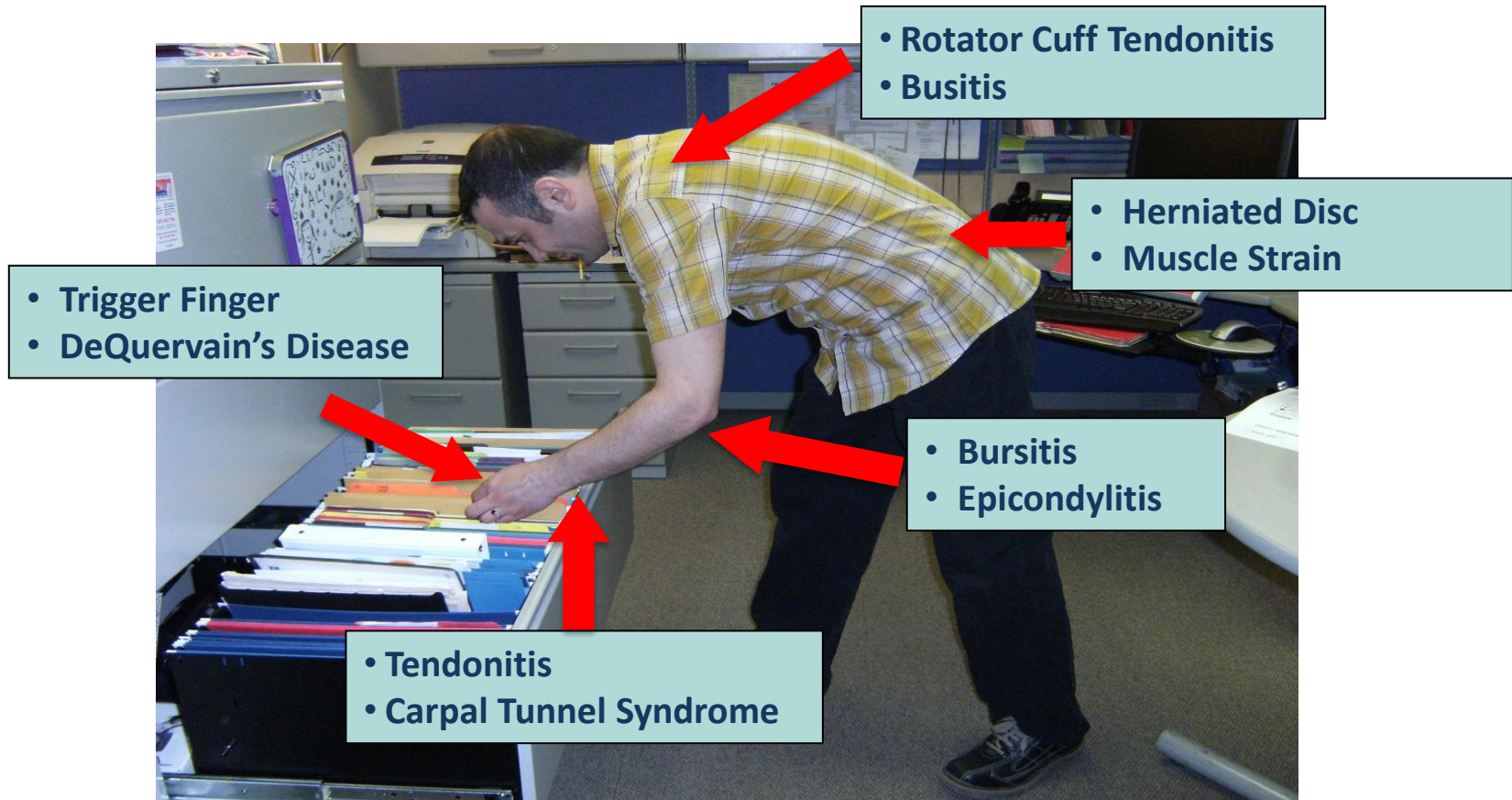
- Injuries and illnesses of the soft tissues that may affect:

- Muscles
- Tendons
- Ligaments
- Nerves
- Cartilage / Joints
- Spinal discs
- Blood vessels

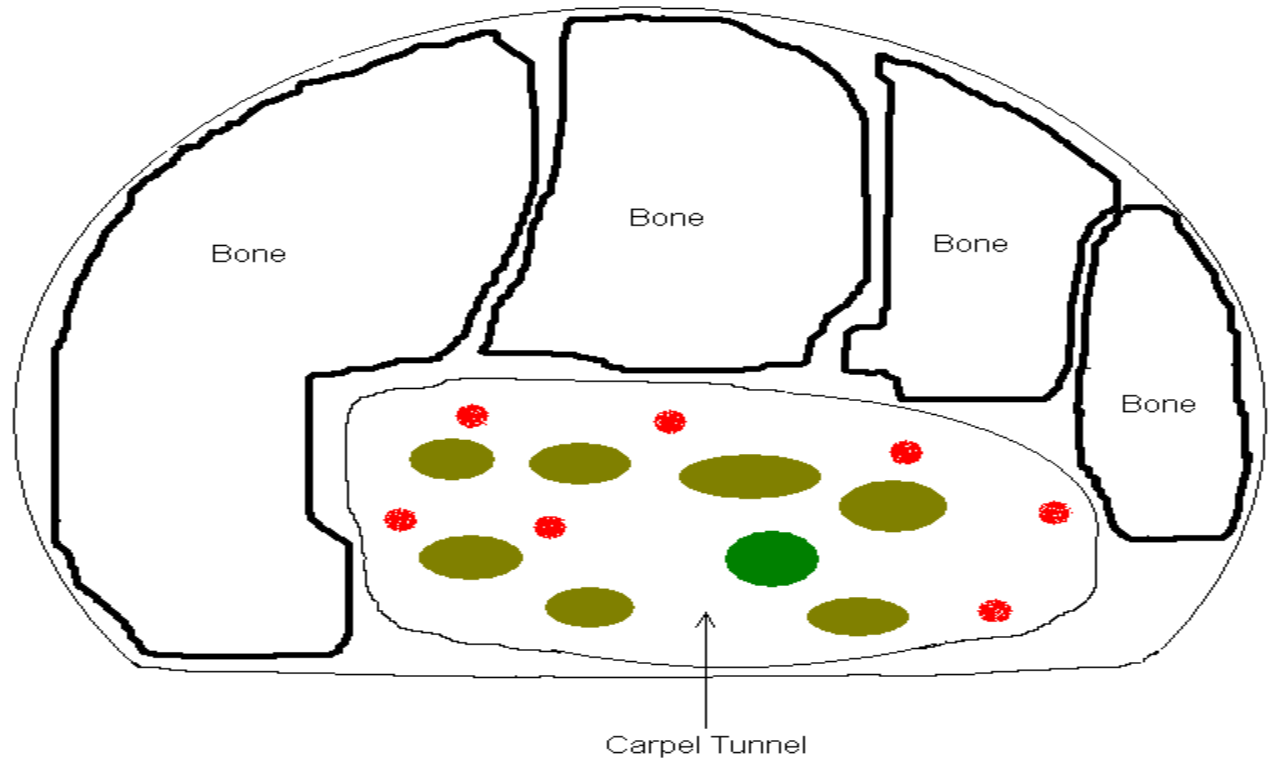


- Most frequently involve the upper extremities and spine




Most Common MSDs



Carpel Tunnel



Legend

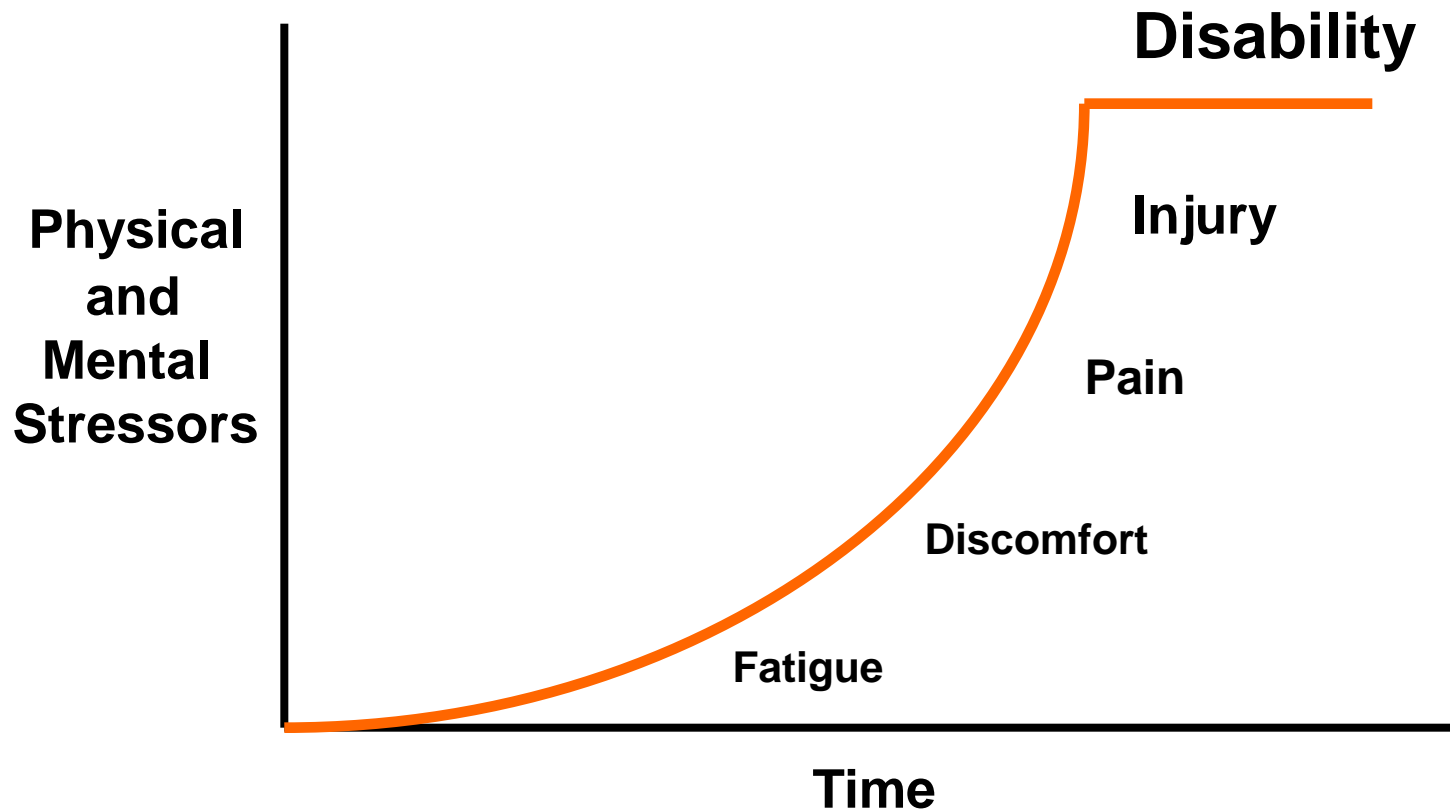
-  **Blood Vessel**
-  **Tendon**
-  **Median Nerve**

Typical Signs and Symptoms of MSDs

- Persistent fatigue, discomfort or pain
- Swelling, redness or warmth
- Pinching sensation
- Loss of grip strength
- Decreased range of motion
- Numbness and tingling



Fatigue to Disability: A Continuum



Common Ergo Risk Factors



Physical Risk Factors



Posture



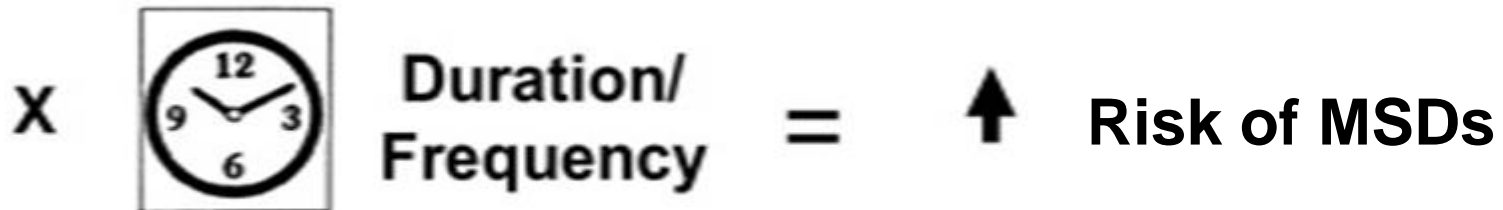
Repetition



Force



Other



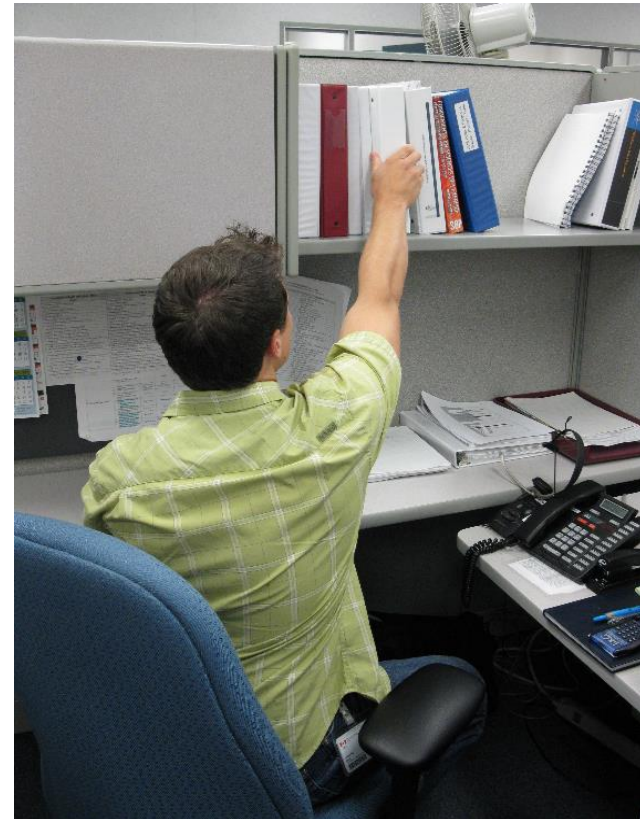
Identify the Risk Factors



Identify the Risk Factors



Identify Potential Risk Factors



Taking care of your back



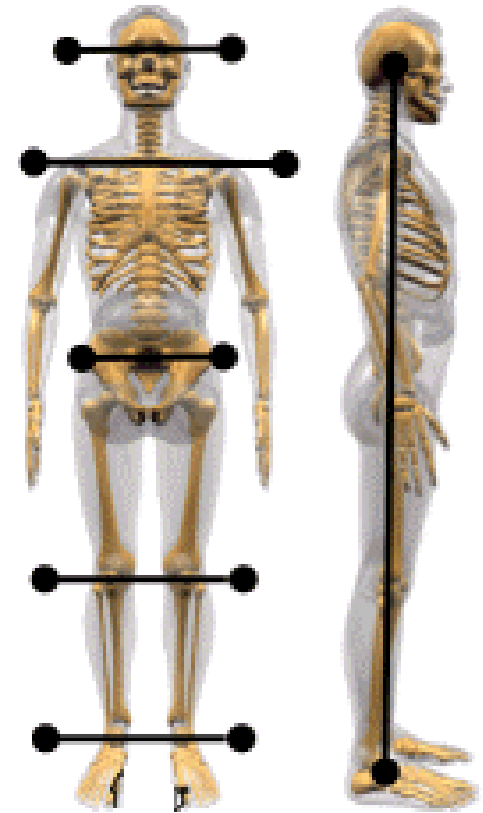


Look for the Following Awkward Postures in your Workplace

- Outstretched Arms
- Overhead Reaching
- Bending
- Leaning
- Raised Elbows
- Bent Wrist
- Slouching
- Turned Neck
- Twisting
- Reaching

Why do Awkward Postures Lead to Injury?

- Tissue tolerance < work force
- Increase distance = increase work force
- Add hidden load = increase work force
- Physical trauma to tissue = increase work force
- Reduced blood flow = decrease tissue tolerance

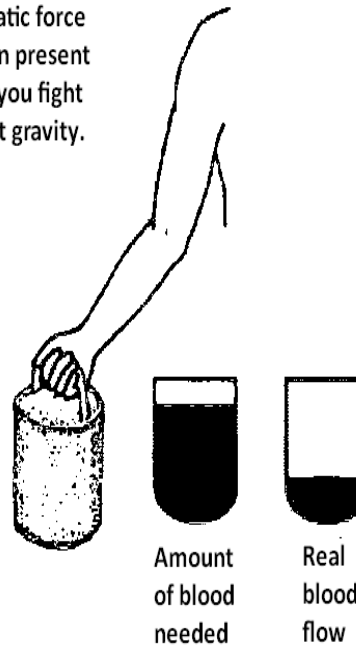


Why do Static Postures Lead to Injury?

- Accumulation of Force
 - increased work force
- Insufficient Rest/Recovery
 - decreased tissue tolerance
- Reduced Blood Flow
 - tissues tolerance

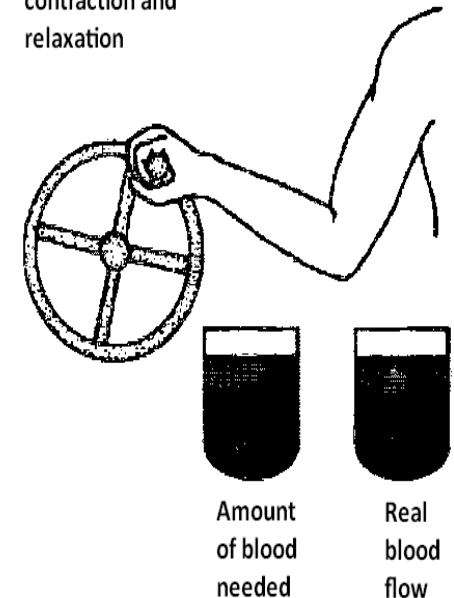
Static Work

The static force is often present when you fight against gravity.



Dynamic Work

Alternating contraction and relaxation



Dynamic Posture

- No single sitting posture can remain comfortable for long periods
- Workstation design, chair design, and job organization should all allow dynamic sitting
- Movement may include slightly altering the angles at the neck, shoulders, elbows, wrists, hips, knees, and ankles

[Dynamic Sitting Posture](#) and [Shortcut Keys](#)



Neutral Posture



Sitting Postures

Correct posture

5.45 kg / 12 lbs



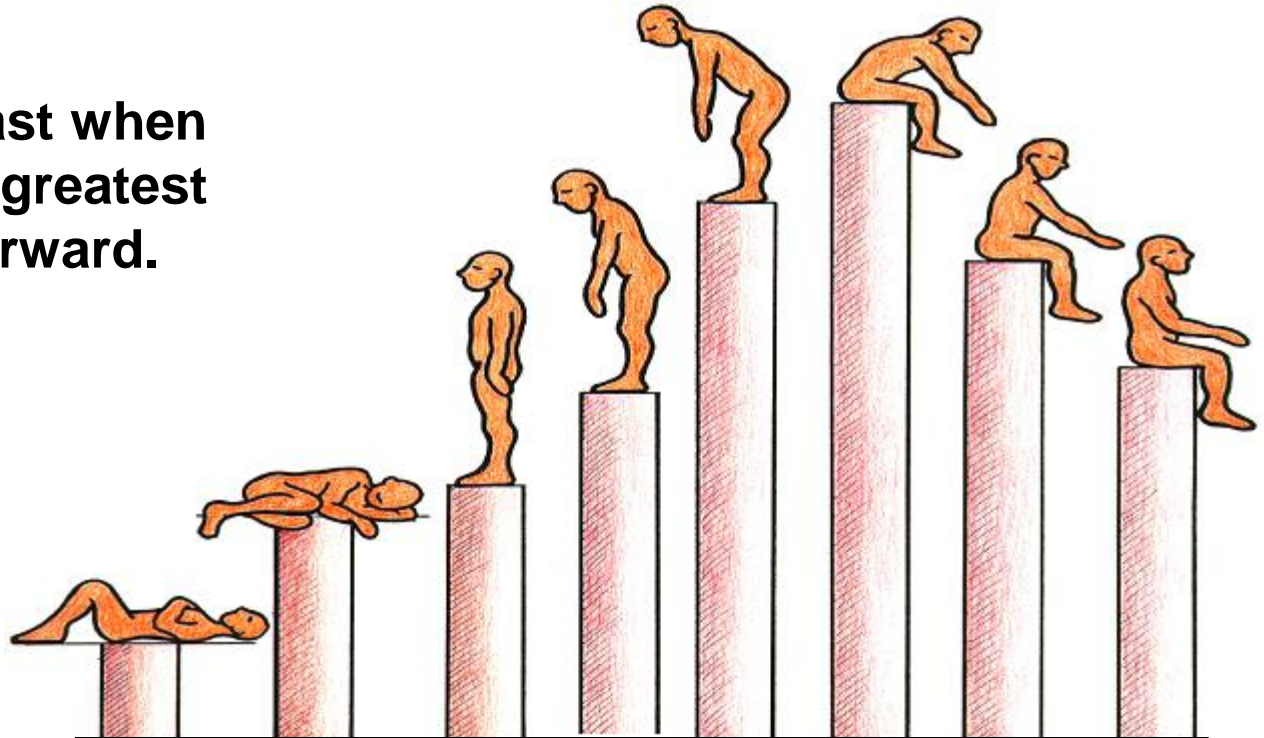
Incorrect posture

16.36 kg / 36 lbs



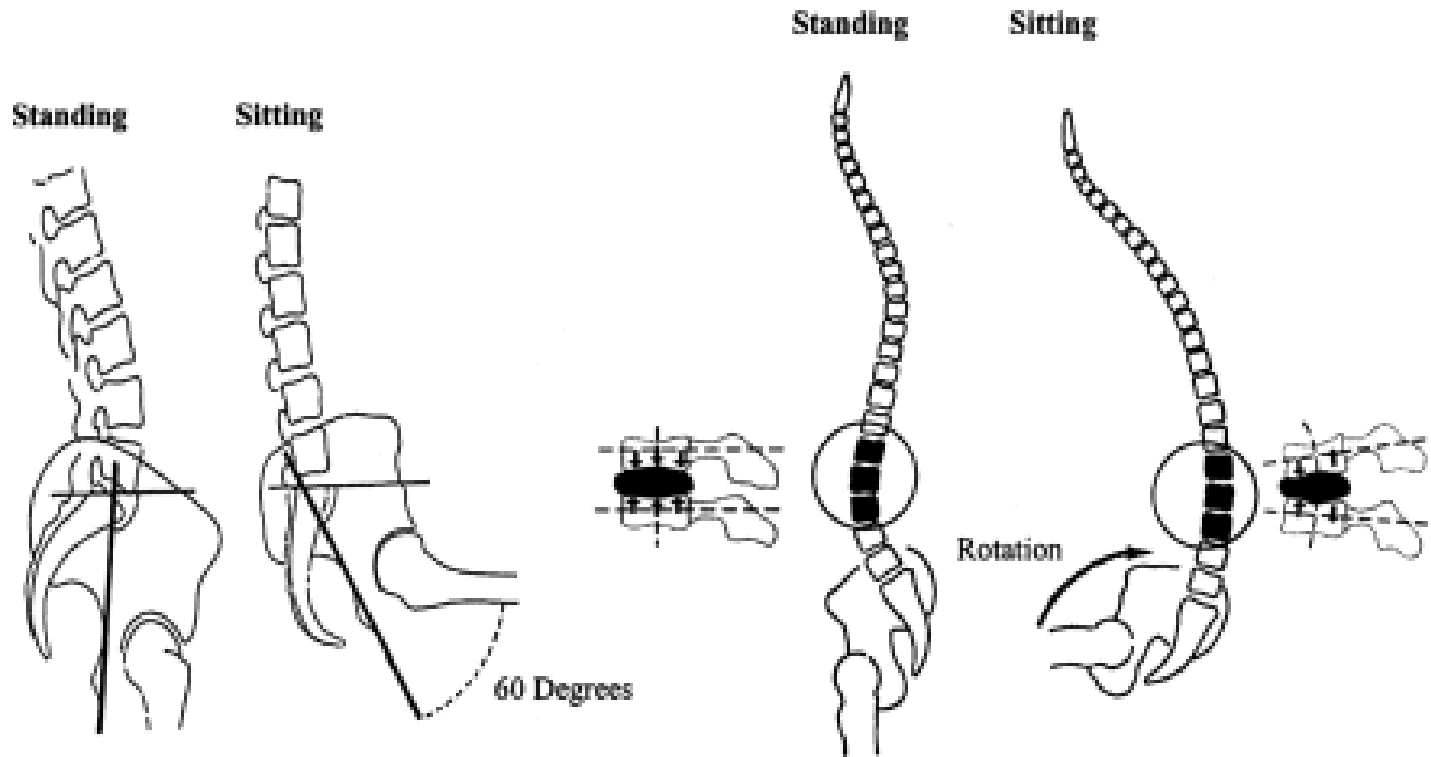
Taking Care of your Back

Pressure is least when lying flat & greatest while sitting forward.



Rotation of the Pelvis

Changing from Standing to Sitting



Other Ergo Tips



Considerations and Actions for the Employee

Exercises

Eyes



Neck



Shoulders



Back



**Wrist and
Hands**



Lower Limbs



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Rest Breaks

- Number of rest breaks depends on job demands
- The more intense and repetitive, the more frequent the breaks should be
- Breaks can include:
 - Short pauses (micro breaks)
 - Change activities
 - Formal break



Manual Material Handling

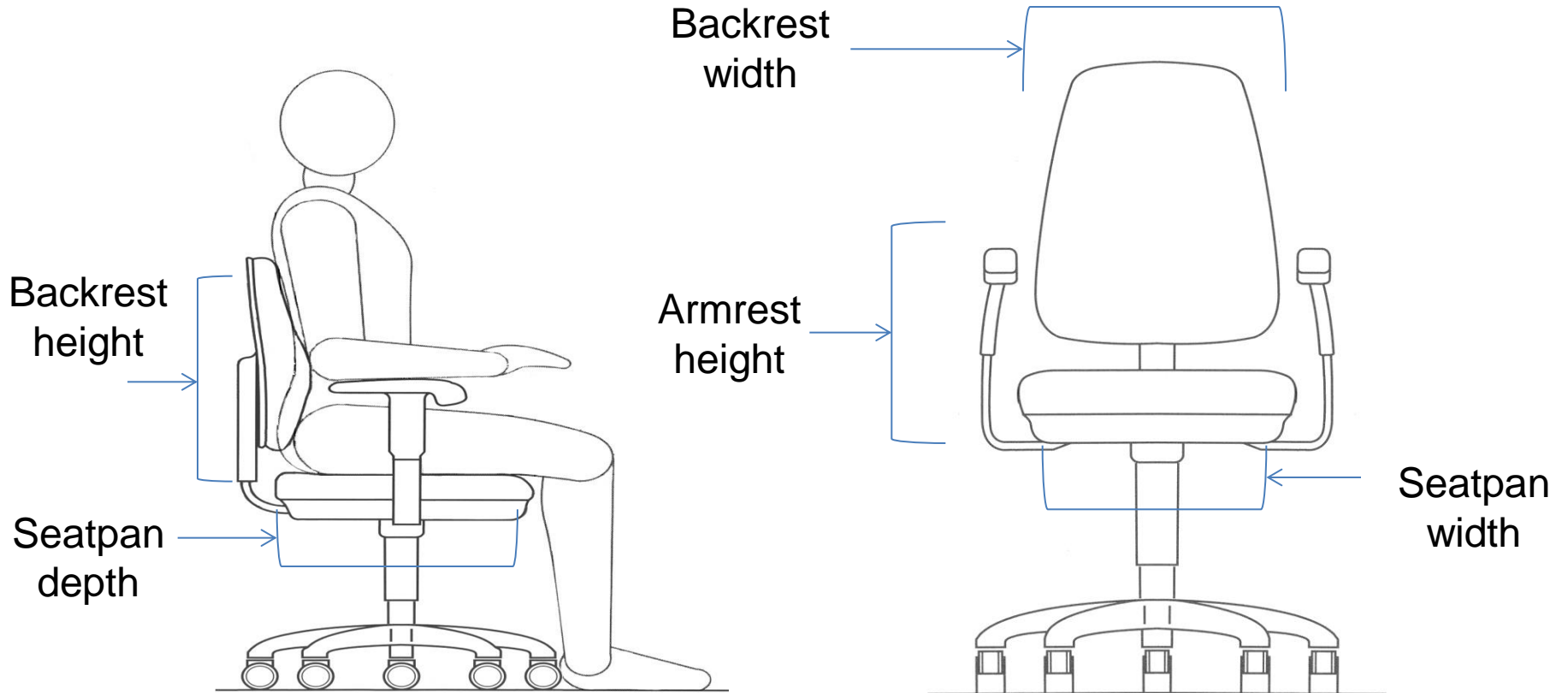
- Greatest concern of MMH for office workers is the timing of manual materials handling tasks
- Seated posture has been shown to compromise the condition of the intervertebral discs to tolerate forces
- Further, there is reduced joint stability of the spine
 - McGill (1992) back ligaments stretched
- This indicates MMH immediately following prolonged sitting has increased risk of injury

Fit the Workstation to the Worker



Helping employees adjust their existing furniture and equipment

Chair Features



Adjusting the Chair

1.



2.

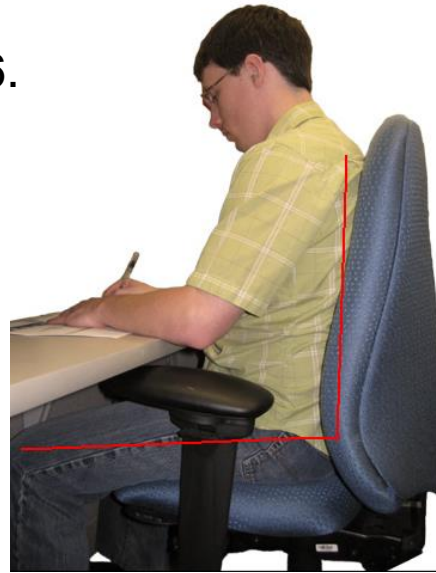


Adjusting the Chair

3. & 4.



5. & 6.



Adjusting the Chair

7.

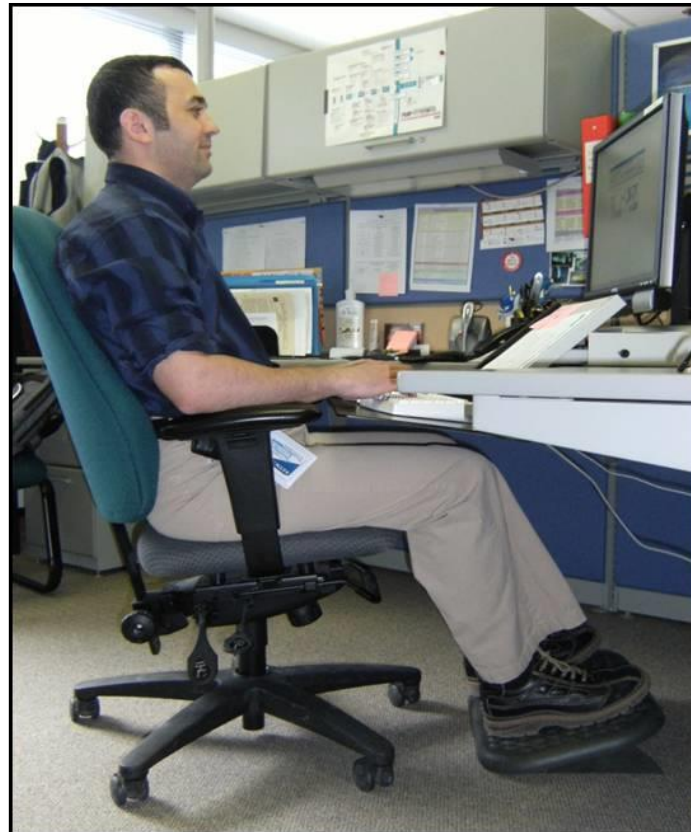


8. & 9.





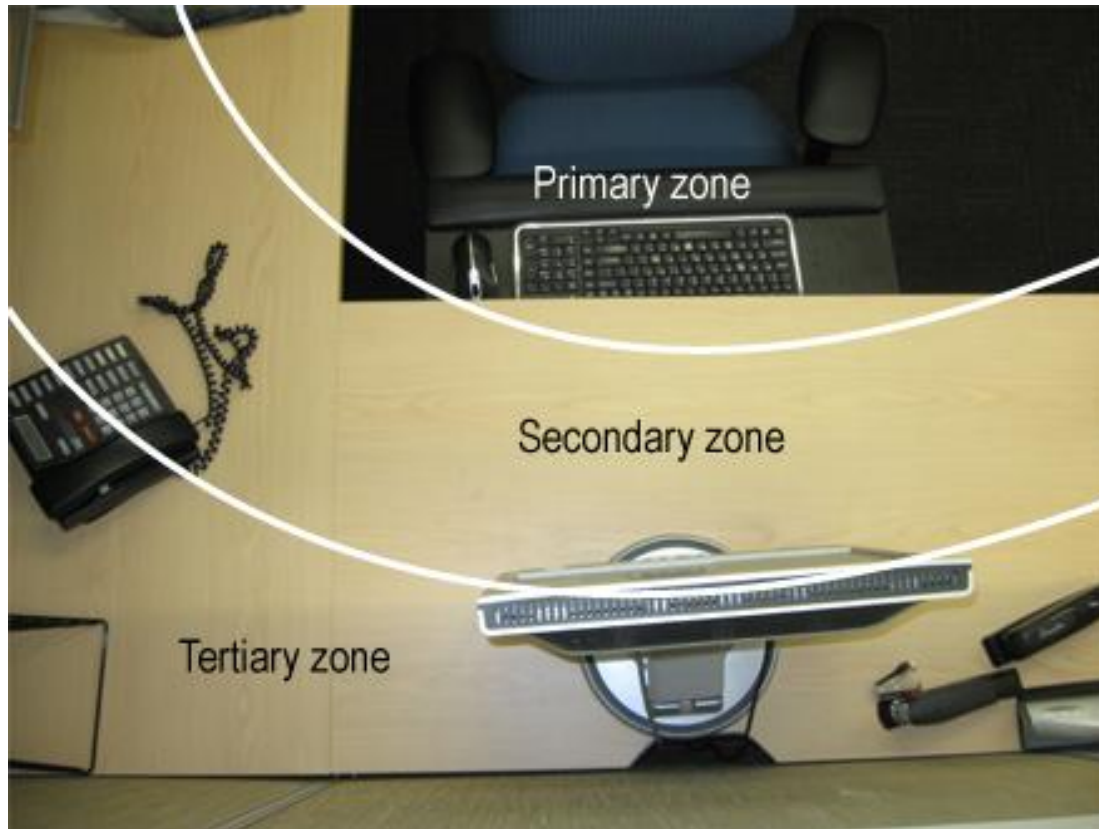
Footrest



Work Surface Height

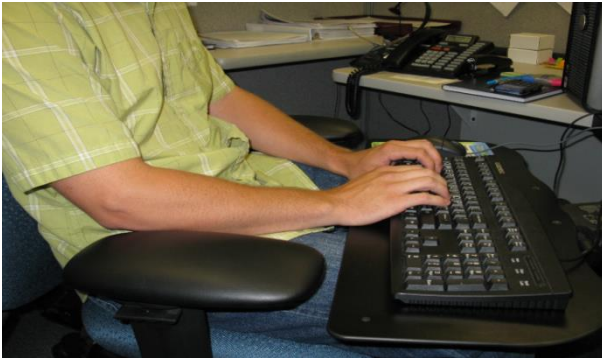


Work Reaches

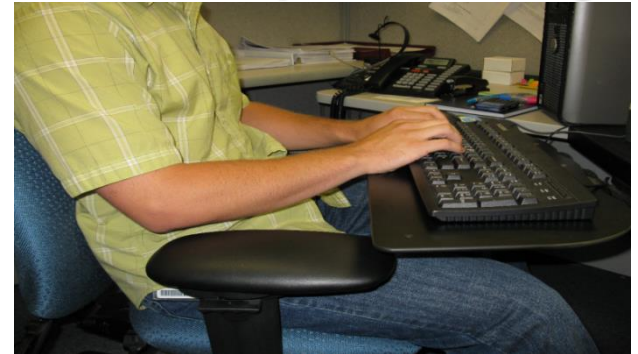


Keyboard

Incorrect posture - low



Incorrect posture - high



Correct posture

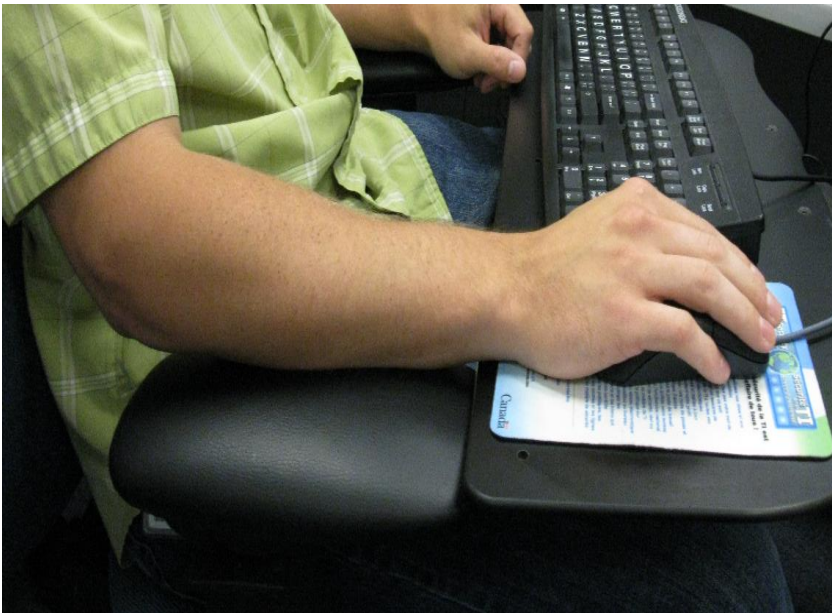


Keyboard Alignment



Using a Mouse

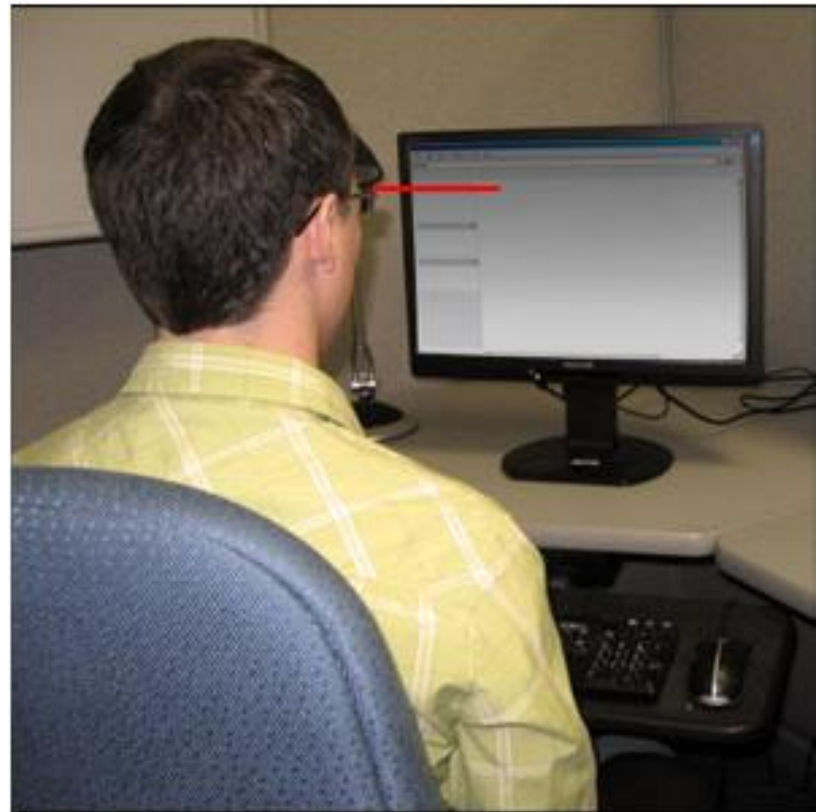
Incorrect Posture



Correct posture



Monitor Placement and Adjustment



Dual Monitors

If one is used more frequently



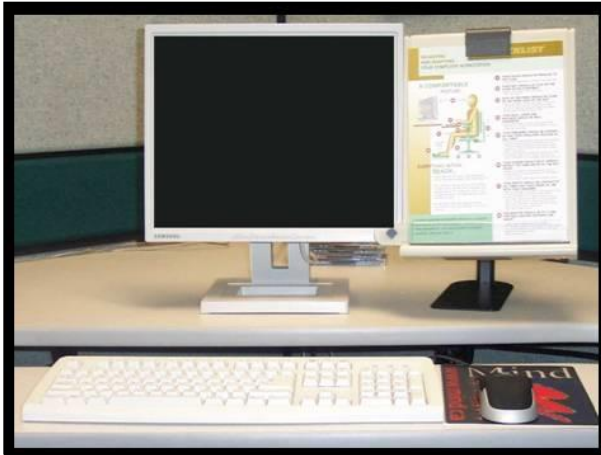
If one is used more frequently and one is a notebook



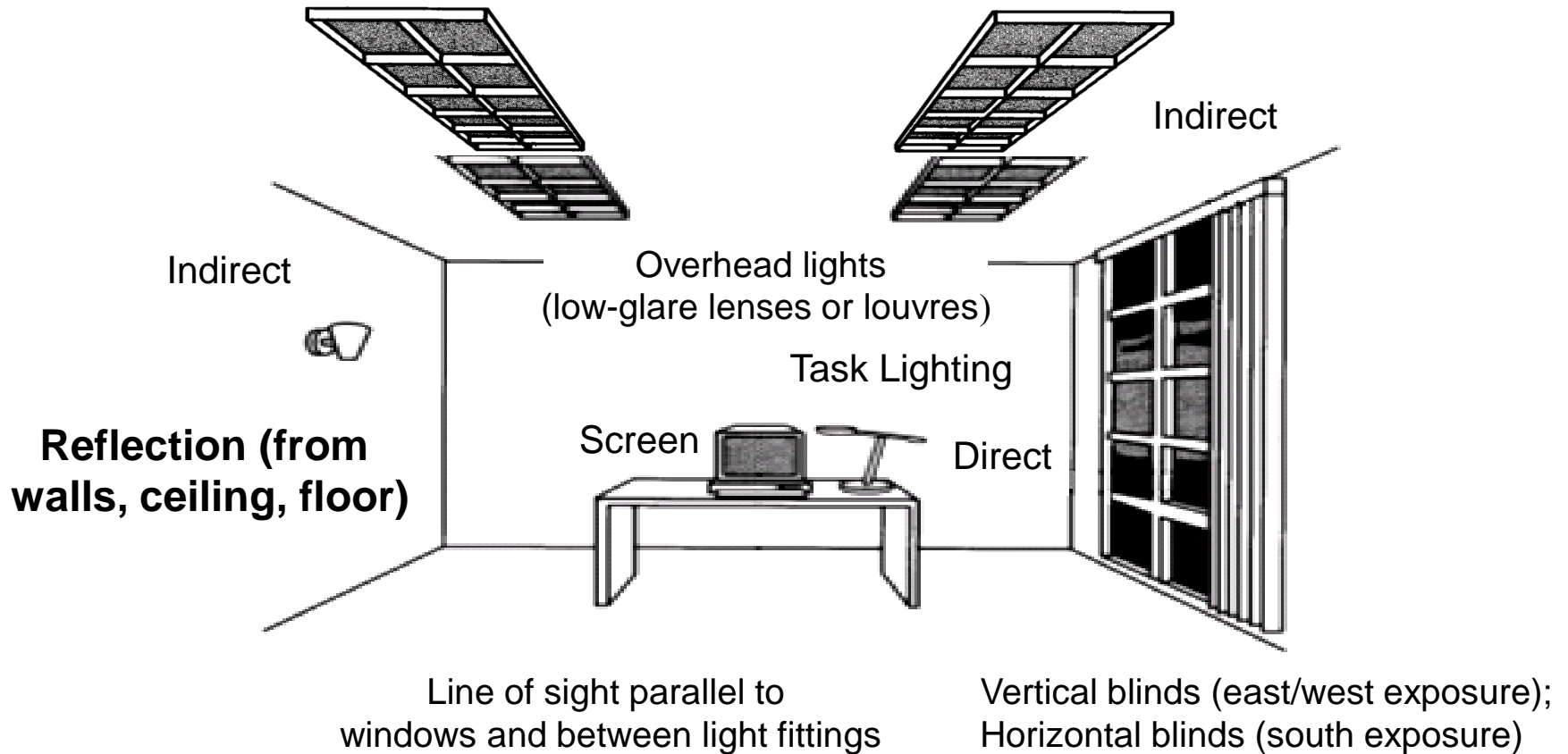
If both are used equally



Document Holder Placement



Glare Control Measures



Ergonomic Adjustments



Standards, Procedures and Tools



Standards and Guideline

- The [ergonomic technical standards](#) outline the general features and functions that standard departmental office furniture and equipment must have to ensure maximum adjustability to fit the worker.
- The [ergonomic guideline](#) describes how to adjust furniture and equipment in accordance with the technical standards.



Ergo Coach Tool

- [Request Form](#)
- [Ergo Adjustment Checklist](#)
 - Observation
 - Identifies practices that require adjustments or corrective measures
 - Adjustments
 - Record final measurements of most comfortable setting
 - Basic Recommendations

Measurements

1.

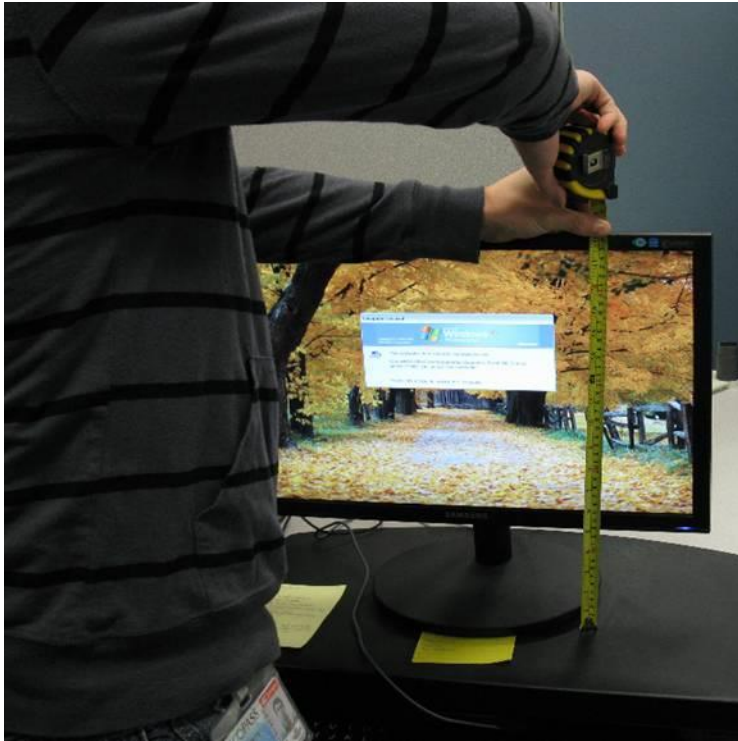


2.

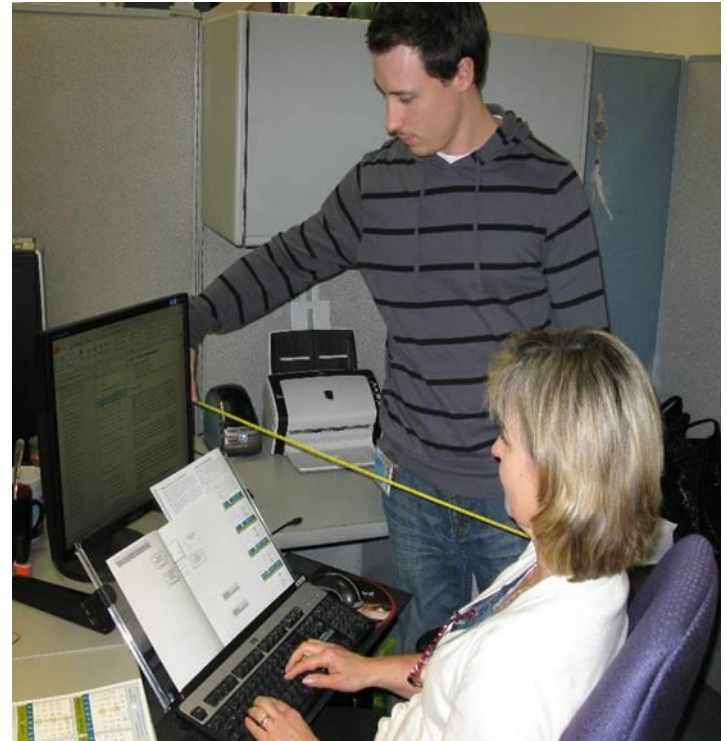


Measurements

3.

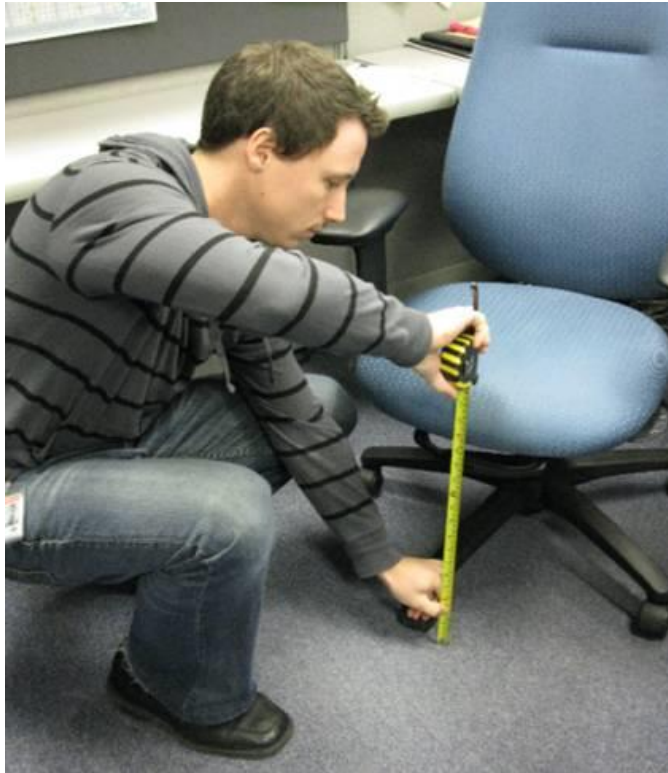


4.



Measurements

5.



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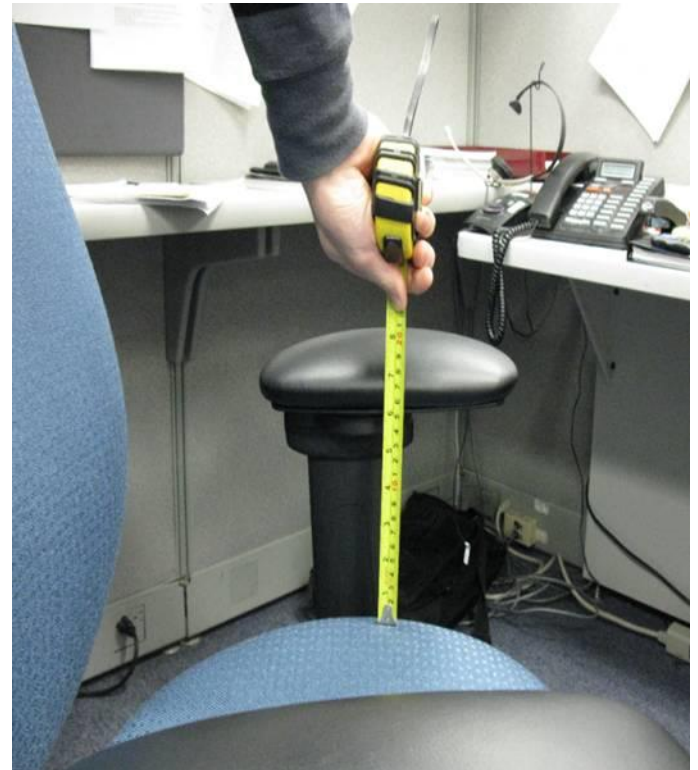


Measurements

7.



8.





Ergo Adjustment Procedure

- Employee communicates with the manager
- Manager contacts Ergo Coach to request an Ergo Adjustment for an employee
- Ergo Coach contacts employee to book the Adjustment
- Ergo Coach conducts ergo adjustment and educates employee on adjustment techniques and available tools
- Ergo Coach reports to employee and supervisor on ergo findings
- Supervisor and employee review and implement approved findings
- Ergo Coach conducts brief follow up call or visit



Observations and Concerns

- Must be based on meeting standards and guidelines
- Should not be focused on “purchasing equipment”
- Should focus on injury prevention and good ergo practices
 - i.e. introducing dynamic posture, organizing the work day, use shortcut key



Record Keeping

- Ergo Adjustment Checklist
 - One copy goes to the requesting manager
 - One copy goes to the employee
- Record Keeping and Tracking
 - Reports stats into [database](#)
- Questions and Support
 - Ergo Coaches and managers should direct their ergo enquires to Human Resource Service Centre



Additional Information on Ergonomics

- **National OHS Intranet site**
 - [Understanding Ergonomics](#)
 - [Self-Adjustment Tools](#)
 - Ergonomic Evaluations
 - [Adjustments](#) and [Assessments](#)
 - [Ergo Coach Directory](#)
- **Regional OHS Advisor**
 - Advice, guidance and clarification
 - Additional training and resource material
- **Learning Reports**
 - All activities related to this training session must be tracked in SABA by selecting “Add External Learning” from the *Actions* menu in *Plan* section of your profile.



Acknowledgements

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