

Office Ergonomics: A Ubiquitous, Background Threat

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Outline

- Definitions
- Examples
- Argonne resources



Ergonomic Definitions

- What is ergonomics?
 - From OSHA: Ergonomics is the science of fitting workplace conditions and job demands to the capabilities of the working population.
(<http://www.osha.gov/SLTC/ergonomics>)
 - From the Argonne Focal Point Blog: Ergonomics in the workplace deals with the safety of employees in an office setting.
(<https://blogs.inside.anl.gov/focalpoint/2011/09/30/stand-up-ergonomics>)
 - From Wikipedia: Ergonomics is the study of designing equipment and devices that fit the human body, its movements, and its cognitive abilities.
(<http://en.wikipedia.org/wiki/Ergonomics>)
- Musculoskeletal: A musculoskeletal system (also known as the locomotor system) is an organ system that gives animals (including humans) the ability to move using the muscular and skeletal systems.
(http://en.wikipedia.org/wiki/Human_musculoskeletal_system)
- Office ergonomics: effects on the musculoskeletal system of office work



Ergonomic Risk Factors (from <http://www.osha.gov/SLTC/ergonomics>)

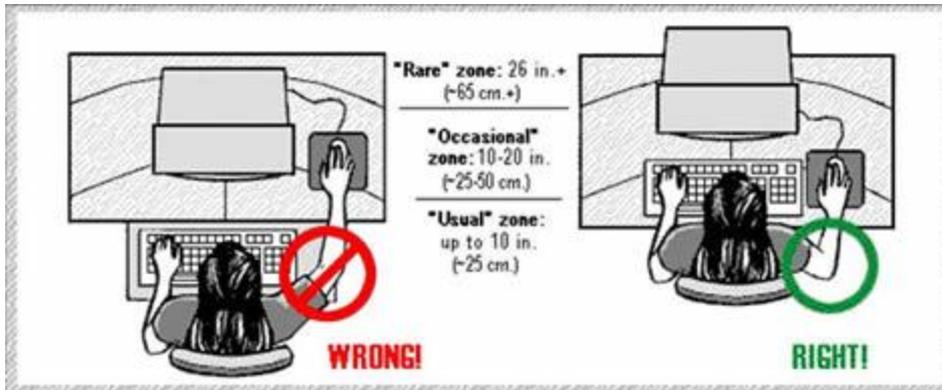
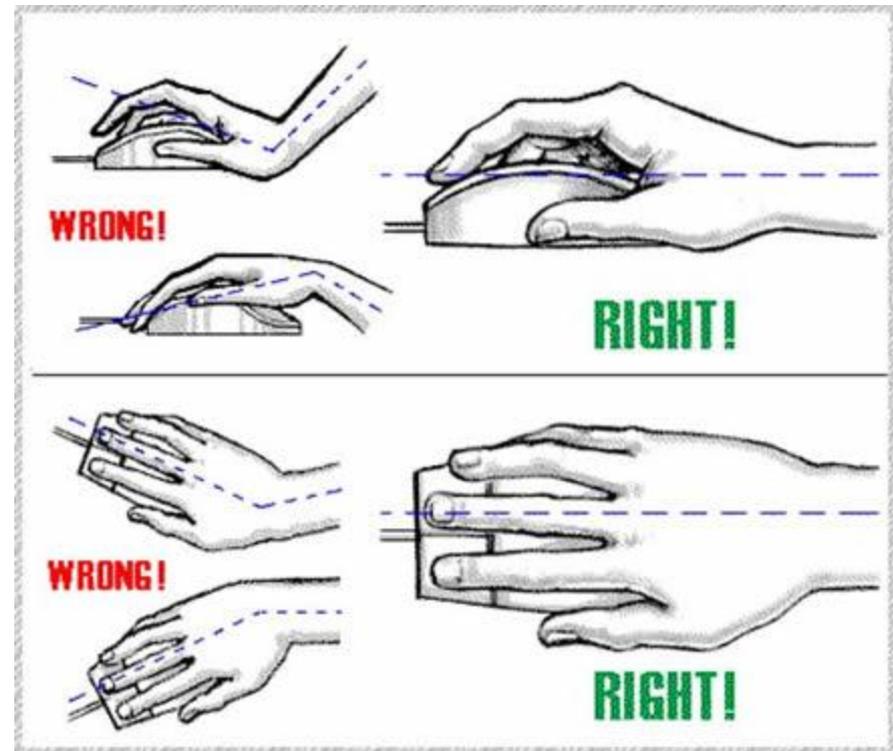
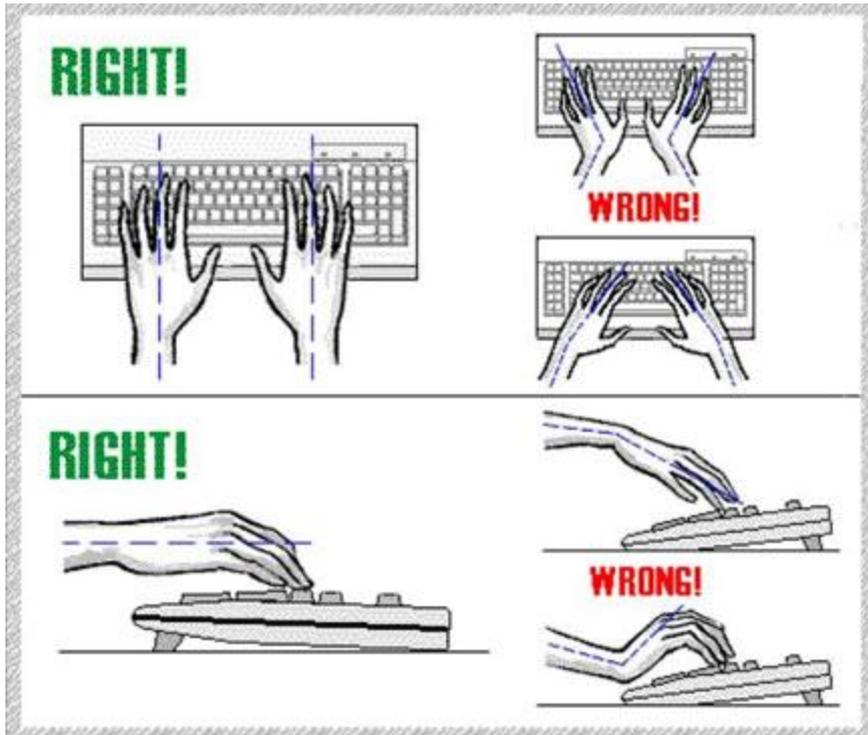
- Ergonomic risk factors are commonly found in jobs requiring :
 - Repetitive, forceful, or prolonged exertions of the hands
 - Frequent or heavy lifting, pushing, pulling, or carrying of heavy objects
 - Prolonged awkward postures
- Vibration and cold may add risk to these work conditions
- Working conditions presenting multiple risk factors will have a higher probability of causing a musculoskeletal problem
- The level of risk depends on
 - Intensity, frequency, and duration of the exposure to these conditions
 - Individuals' capacity to meet the force of other job demands

See also: http://www7.nationalacademies.org/ocga/testimony/Ergonomic_Hazards.asp

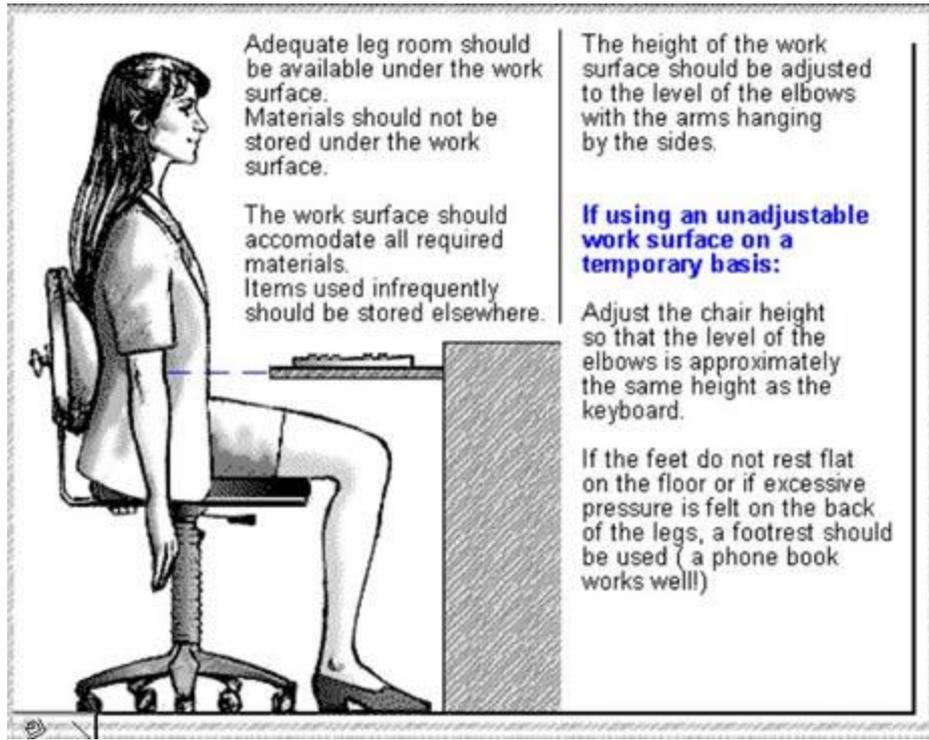


Ergonomic vs. Non-ergonomic Computer Postures

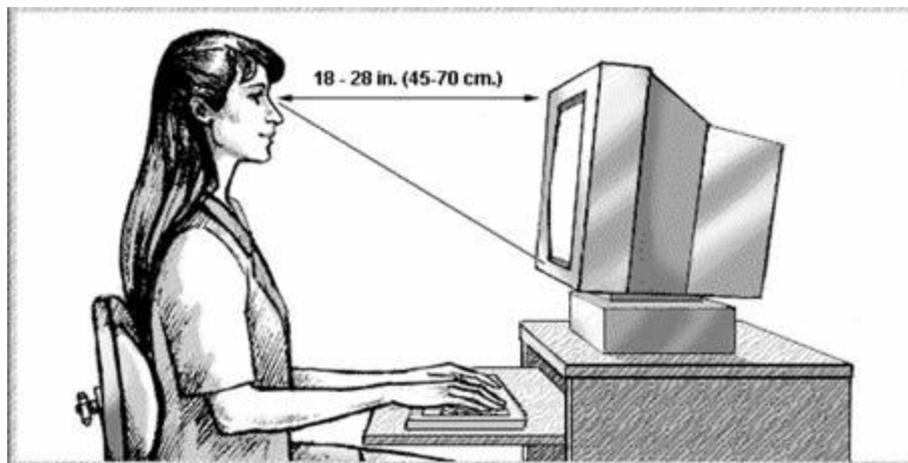
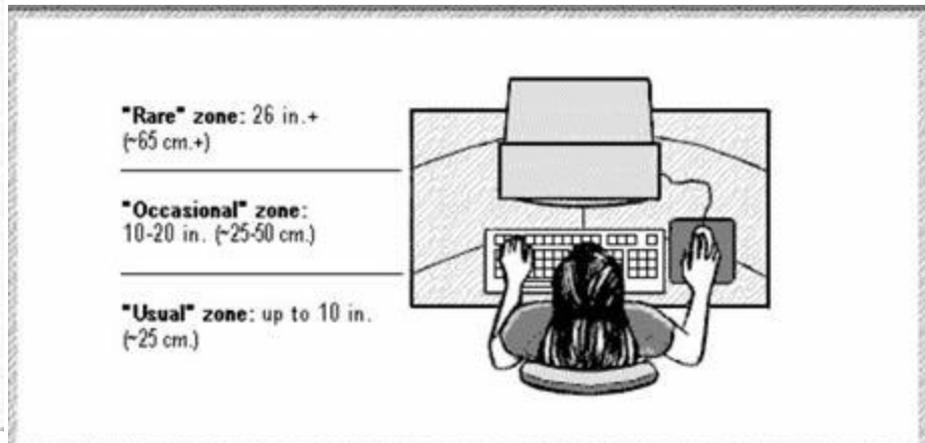
<http://www.amaltas.org/show/ergonomics-power-computer-users.html>



Computer Postures, continued



<http://www.amaltas.org/show/ergonomics-power-computer-users.html>



Usual Zone: This area should contain only items that are used most frequently, e.g. keyboard, mouse, note pad.

Occasional Zone: This area should contain items that are used periodically, e.g. telephone, calculator, in-out tray, rolodex.

Rare Zone: This area should contain only items that are seldom used or for display only, e.g. pen/pencil cup, desk plant, photos, clock.

Argonne Ergonomic Resources

Ergonomics/Office Safety

http://www.anl.gov/ESH/sub_pages/ergonomics/

Subject Matter Expert

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Ergonomics Display Room (in 201, on path to med center)

http://www.anl.gov/ESH/sub_pages/ergonomics/ergo_cube.htm

