

Ergonomics Program

Purpose and Scope

Ergonomics is the study of the relationship between people, their work, and their physical work environment. The purpose of West Chester University’s Ergonomics Program is to promote employee health by limiting ergonomic risk factors.

Responsibilities

Environmental Health and Safety

EHS shall maintain the ergonomics program to meet in-house needs and comply with applicable regulations and standards as well as:

- Conduct ergonomic evaluations for individuals as appropriate.
- Train employees and supervisors in ergonomic concepts.

Supervisor/Manager and Departments

Each supervisor/manager is ultimately responsible for providing a safe work environment for their employees. Each department will be responsible for funding and providing appropriate ergonomic supplies and equipment for their employees.

Employees

It is the individual’s responsibility to follow recognized practices and information provided. Employees should alert their supervisor/manager any potential ergonomic problems associated with the work area.

Procedures

Work Station Design

The National Institutes of Occupational Safety and Health (NIOSH) recommend the following workstation design features:

- viewing distance to monitor should be 16 - 27 inches
- viewing angle of the monitor should be 15 - 35 degrees
- keyboard height of 28 - 30 inches
- Adjustable chair with lumbar support.

Screen Height

The top of the display screen of your monitor should be at your eye level but not higher. For individuals who wear bi-focals, you may want the screen to be lower and closer. It is important to avoid awkward neck postures when viewing the screen or hard copy documents (that you may be working from).

Keyboard and Mouse Height

The height of the keyboard and mouse should be at the same level (i.e., you should not be reaching for your mouse). The right “level” is one where you can sit with your shoulders relaxed, elbows bent (around 90°), and forearms, wrists, and hands parallel to the floor. The keyboard should be at an angle that helps you maintain a “neutral” or flat position of your wrists (i.e., your wrists should not be bending up or down).

Posture Support

Chairs should support the lower back region and help in avoiding pressure on the back and thighs (i.e., chairs should promote a comfortable posture). Your feet should rest firmly on the floor (or a foot rest if necessary).

Chairs

Employees sitting in chairs, especially all day, should have a comfortable fitting well-designed chair. The following features should be available:

- Pneumatic adjustments
- Seat adjustable with a tilt and depth slider.
- Backrest separate from seat, is adjustable, can tilt & lock, and has lumbar support.
- Arms adjustable - height and lateral movement
- Various sizes - can have optional lengths, wider seats, tall backs.

Illumination/Glare

- Lighting levels in work areas will be set at the recommended levels for the specific equipment/function.
- Screen hoods and anti-glare filters can be installed upon request, but it is important to reposition your monitor as a first step, when feasible, to help alleviate glare problems. For example, monitors should not be positioned in front of windows.

Work-Rest Regimens

- Take frequent breaks, get up and stretch, do not remain at the computer station for long periods of time, allow for rest.
- If you can, alternate tasks so that you are not conducting repetitive tasks (e.g., sorting or filing or typing, etc.) for prolonged periods of time. It is important to try to alternate between the various tasks to help prevent fatigue or discomfort.

Back Safety

Back disorders are listed in the "top ten" leading workplace injuries published by the National Institute of Occupational Safety and Health. They account for 27 percent of all nonfatal injuries and illnesses involving days away from work.

According to recent injury figures from the Bureau of Labor Statistics, each year there are over 880,000 cases of back injuries. In most sectors of industry, back injuries now rank either second or third overall (Bureau of Labor Statistics, 1998).

Over our lifetimes, 8 out of 10 people will experience a back injury and back pain. Most back injuries are painful, debilitating, and life changing.

- What can Cause Back Pain
- Improper lifting technique
- Picking up oversize loads
- Using back belts improperly
- Posture and poor alignment
- Awkward stretches while reaching
- Being in poor physical condition
- Static work postures

Prevention:

Preventing a back injury is much easier than repairing one. Because your back is critically important to your ability to walk, sit, stand, and run, it's important to take care of it, so here are a few basic rules:

- Exercise to strengthen your back and reduce stress
- Lose excess weight
- Maintain good posture – all the time!

Some Tips:

Before you lift that box, or tool, or piece of equipment, take a moment to consider your action:

- Do you need to lift the item manually?
- How heavy is it?
- Is it packed correctly?
- Is it easy to reach the load?
- Where are you moving the item from?
- Where does it have to go?
- What route do you have to follow?

When Lifting:

- Keep feet parted for stability
- Squat down bending at the knees (not your waist). Tuck your chin while keeping your back as vertical as possible.
- Get a firm grasp of the object before beginning the lift.
- Begin slowly lifting with your LEGS by straightening them. Never twist your body during this step.
- Once the lift is complete, keep the object as close to the body as possible
- Pace yourself and get help before you try to lift a heavy load.
- Use mechanical lifting devices to lift and or move heavy objects. If using a forklift or similar type device, make sure you have the appropriate training.
- Slide heavy materials if possible rather than lifting them. Planks and rollers can make this job easier.
- Storing materials at least 12 inches off the ground, can minimize having to lift directly off the ground.
- Never try to catch heavy falling objects

Ergonomics Equipment

Each department will be responsible for funding and providing appropriate ergonomic supplies and equipment for their employees. Departmental supervisors/managers should reach out to EHS for assistance prior to purchasing any ergonomic equipment.

Ergo Evaluations

If you are symptomatic and need help in addressing your work station ergonomic concerns please have your supervisor/manager [print out/download this form](#) and either email or send Nicole Svetz (Nsvetz@wcupa.edu) in the EHS. EHS will then schedule an assessment of your current work station.

An office evaluation will look at the chair, how/where you place your feet, the desk, keyboard tray and keyboard, the mouse, monitor, lighting, telephone use, and behaviors while working.

Remember to take breaks, stand-up and stretch!

Suggested [stretches/workout](#) from Self Magazine

Training

An online training module and toolbox talks are made available by EHS. Contact EHS for access to training.

Tool Box Talks:

- [Intro to Ergonomics](#)
- [Lifting Safety](#)
- [Computer Ergonomics](#)
- [Carrying Buckets Ergonomics](#)

References and Other Applicable Standards

- OSHA Web Site - [Ergonomics](#)
- UCLA - [Ergonomics Web Page](#) - Groundskeepers, Dining Staff, Labs, etc.
- Yale University - [Ergonomics Web Page](#) - Library Staff, Maintenance, Custodial and more
- Oregon - [Occupational Safety and Health](#) - Ergonomics
- Microsoft Support - [Keyboard Shortcuts for Windows](#)
- [Video](#) from SAIF - Office Ergonomics - Simple Solutions for Office Safety
- CDC/NIOSH - [Ergonomics and Musculoskeletal Disorders](#)

Reviewed: July, 2022

Appendix A: Request for Ergonomic Evaluation

West Chester University Environmental Health & Safety
Ext. 3333

Date: ____/____/____

West Chester University Request for an Ergonomic Evaluation

Ergonomics is the scientific study of human work and considers the physical and mental capabilities and limits of the worker during interaction with tools, equipment, work methods, tasks, and the working environment. The goal of an evaluation is to identify and correct ergonomic hazards in the work place. Hazards can be caused by work tasks, work stations, or a combination of both.

Please fill out this form completely and forward to the Environmental Health and Safety Office: 201 Carter Drive Suite 300. Or Email to Nsvetz@wcupa.edu

Name: _____ Phone: _____

Department: _____ Bldg: _____

Work Location(s): _____ Position: _____

Reason for Request: _____

What part of your job do you think contributes to the issue? _____

Do you have any recommendations that might correct the issue? _____

How long have you been at this job? _____

Any other information that might be helpful? _____

Please provide a copy of this request to your supervisor and fill out the following:

Supervisor Name: _____ Ext: _____