INTRODUCTION
The technological revolution has made computers a part of everyday work place environments and a tool in almost all work force endeavors. Personal use of computers has raised concerns, and studies assessing the impact of the computers and video display terminals in all job descriptions have been performed. Ergonomic stresses related specifically to repetitive computer usage have been studied, and remedies for health-related issues have been identified.

IMPLEMENTATION
The purpose of this advisory is to develop and implement performance guidelines for computer workstation equipment and related furnishings at the University of Cincinnati for employees whose jobs require them to work with computers for four (4) or more hours per day on a regular basis.

Existing Equipment and Furnishings:
Existing equipment and furnishings which do not meet the established performance guidelines should be evaluated by the employee and the supervisor to determine if modifications can be made to reduce ergonomic stresses until the equipment or furnishings are scheduled for replacement. If they are unable to resolve the problems, they may wish to consult with the Environmental Health & Safety staff for evaluation and recommendations on modifications. Call 556-4968 for assistance.

New Purchases:
As new computer equipment and furnishings are being purchased, these established performance guidelines should be utilized and implemented/incorporated.

EMPLOYEE EDUCATION AND INFORMATION
The University of Cincinnati will develop education and information programs concerning the health and safety issues associated with the use of computer equipment and make the program available to employees who work on computers

Operators who have health concerns may request information and education through Environmental Health and Safety, 556-4968. Employees with medical concerns may discuss the issues with University Health Services.

UNIVERSITY OF CINCINNATI GUIDELINES

Workstation Guidelines:
- An adequate work area should be provided.
- Chairs
  - Seat pans should be easily adjustable for height and angle.
  - Backrests should be easily adjustable for height and tilt.
  - Chairs should be on a stable base with five casters capable of being swiveled by the user.
  - Arm, foot, and wrist rests should be provided upon the request of the operator. Wrist rests will enable the operator to maintain a neutral position of the wrist while at the keyboard, should be padded and without sharp edges.

Lighting:
- The workstation finishes should be non-reflective surfaces.
The workstation should be arranged to avoid visual glare from overhead lighting and windows. The lighting should be adequate for the operator to see the screen, but not so bright as to cause glare or discomfort. Task lighting should be made available upon the request of the operator.

Glare from windows should be minimized through methods that include but are not limited to shielding windows with shades, curtains, blinds, or positioning the monitors so that the screen is at a right angle to the window producing the glare.

**Computer Monitor:**
- The monitor should meet all applicable federal and state laws and regulations with respect to health, safety, and radio frequency interference of electromagnetic capability (RFE/EMC).
- The monitor surface should have an anti-reflective coating or, upon the request of the operator, may be fitted with an anti-glare screen designed to reduce glare.
- The monitor should be adjustable for tilt, or be firmly attached to a separate base which can be adjusted for tilt.
- The monitor screen should be legible with adequate contrast between the characters, and the background free of flicker.
- Co-workers should not be permanently positioned or located in close proximity to the side or rear of another employee’s monitor.

**Keyboard Guidelines:**
- The keyboard should be detachable from the computer.
- The cable should be extensible to at least six feet in length, but should be coiled or retractable when the operator does not require it to be extended.
- An articulating keyboard tray may be attached to the workstation to provide more adjustable features.

**Furnishing Guidelines:**
- Computer stands, if used, should be adjustable for platform height.
- The leg space should be free of obstructions.
- The table and/or desk should have a non-reflective surface to inhibit glare.
- A document holder adjustable for placement, angle, and height should be provided upon the request of the operator when a document holder is appropriate for the performance of the operator’s duties.

**Alternative Work:**
- During the workday, a computer operator should rotate between computer work and other job assignments for which he/she is qualified.
- A computer operator should be provided an opportunity to perform alternative work assignments for at least fifteen (15) minutes after every two hours of continuous, uninterrupted work at a computer.