## FACT SHEET



## FS No. 88-044-0821 ERGONOMICS—TRAVELING WITH YOUR LAPTOP

The ideal "ergonomic" computer workstation includes an adjustable desk and chair with a separate computer screen, keyboard, and mouse. Adjustable furniture and separate computer components can be made to "fit" your needs, rather than you trying to adjust to the limitations of the workstation.

However, the design of laptop computers defies these basic ergonomic guidelines. Laptop users set up shop on any available surface, often in cramped spaces—a classroom desk, a



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conference table, an airplane tray, a hotel bed, or their own laps. The computer screen, keyboard, and mouse are all-in-one units that create a single, fixed design with typically smaller features than in a standard computer set-up.

Despite the poor ergonomic design of laptop computers, there are some guidelines you can follow to avoid musculoskeletal discomfort and injury.

Ergo on the Go: Tips for Laptop Computer Use:

- Using an external keyboard and mouse is the best thing you can do to make the time spent on your laptop more comfortable.
- Position your keyboard so that your elbows are at a 90° angle and your wrists are not bent.
- Adjust the screen so that the top is even with your eye level (you may need to put your laptop on a computer pedestal or a phone book). A specially designed laptop holder, which is portable and lightweight, may

eyes and the screen).



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Make sure your screen is at least 18 inches away (ideally 24 to 30 inches between your

also be used. There are many different designs available commercially.

 Clean your screen frequently; dust on the screen can make it difficult to read and increase eye strain. Be sure to use an appropriate anti-static cleaning material that is safe for laptop computers.

- Use a document holder so that you do not have to constantly twist or bend your neck (there are several lightweight, compact document holders that are portable). The most popular document holders for laptops are portable clip-on or side-mounting styles.
- If you can't find a good surface to work on, try your lap—
  - Sit with your knees and hips level to make a flat surface for your computer.
  - Angle the screen so that you can see it comfortably.
  - Use a chair that does not have armrests so that you have more room for your elbows.
  - Try using pillows to support your arms while typing.
  - Remove the laptop from your lap if you feel it is beginning to overheat.
- Position your laptop 90° from windows or bright light sources to reduce glare.



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- Change your position occasionally; sitting in one position or leaning on your arms for an extended period of time can interfere with circulation.
- Take frequent short breaks to rest your eyes and stretch your muscles.
- Suggestions to travel with your laptop include, using a bag with a wide padded shoulder strap to carry your laptop rather than using a bag with a handle. Remove unnecessary accessories to lighten your load, and switch the laptop bag from shoulder to shoulder to relieve the weight. Better yet, use a backpack to carry your laptop. This distributes the weight onto your back and shoulders. Best of all, use a laptop bag with wheels or a wheeled luggage cart and roll your computer with you!