

# An employer's guide to healthy computing

How to reduce costs related to Repetitive Strain Injuries (RSIs) and improve productivity in the workplace.

## What is healthy computing?

"Healthy computing" addresses the idea that products should be designed to fit the posture of the human body, using ergonomic principles to create products that are naturally comfortable by design.

Business professionals use their PCs more than ever before. In fact, the average user spends more than 6 hours a day on a computer. How they sit, type, swipe, point, and click — and the products they use to do these things — can affect productivity, comfort, and more importantly, a person's overall health.

Ergonomically designed keyboards and mice in particular can help improve comfort while working on a PC. While users may experience comfort the moment they start using an ergonomic mouse or keyboard, the long-term benefits of ergonomic hardware may only become fully apparent after they are used for an extended period of time.

## Reduce costs and increase productivity

Computer use requires a large number of repetitive actions for long periods of time; damage from repetitive strain injury (RSI), such as carpal tunnel syndrome, can occur as a result of many small injuries from these daily, routine activities.

The costs associated with RSIs to businesses is estimated at \$20 billion every year in the U.S., according to the federal Occupational Safety & Health Administration (OSHA).

Fortunately, there are things you can do to help mediate the discomfort and injuries that can be associated with computer use, such as using computer peripherals that are ergonomically designed.

## An industry leader for more than 25 years

Microsoft has a long history of leadership in the PC peripherals industry, bringing the world such breakthrough innovations as:

- The first ergonomically designed mouse
- Fixed ergonomic keyboard layout
- Mouse scroll wheel integrated with desktop software
- The padded keyboard palm rest
- And optical mouse sensor, to name just a few

Today, Microsoft continues to hold a leadership position in the input device industry in the design and production of ergonomic mice and keyboards with more than 200 patents and numerous industry awards.

## Find more information on healthy computing:

For more information on how to properly position users at their desks or in front of their PCs, visit: [Healthy-Computing.com](https://www.microsoft.com/healthy-computing).

## Ergonomically designed products

Microsoft designs devices such as ergonomic mice and keyboards to help users have the best computing experience possible, which is especially important given most people are on their computers frequently, and for long periods of time every day. The company's products undergo rigorous design and testing processes conducted by an on staff certified ergonomist to ensure they are exceptionally comfortable.

### How to choose a mouse

**No one mouse is perfect for every situation. Here are a few things to consider:**

**Wired or wireless.** A wireless mouse provides more freedom and less clutter on the desktop. It's easy to transport with your laptop or tablet, increasing productivity on the go. However, a wired mouse is simpler to set up and requires no batteries.

**Comfort.** A good mouse design pays attention to things like rubber side grips for ease of use, thumb scoops that fit the contours of the hand, and undercuts that make the mouse easy to pick up.

**Size.** Users should be able to reach all the buttons without straining or arching their fingers, which can lead to fatigue and carpal tunnel syndrome. Smaller mice are good for confined spaces and also pack well into a briefcase for travel, while larger mice tend to have more ergonomic benefits and are ideal for a desktop workspace.

**Notebook.** An external pointing device is recommended for use with notebook computers according to a study<sup>1</sup> performed by the Human Factors and Ergonomics Society following the differences in usage patterns between desktop and notebook computer users. One of their most profound findings was that notebook users who used an external pointing device reported a lower incidence of pain when compared with notebook users who used only the notebook's internal pointing device. Microsoft offers a variety of comfortable, portable and convenient notebook computer mice.

### Recommended Microsoft mice



### How to choose a keyboard

**There are many great options for keyboards, depending on specific needs. Here are some things to consider:**

**Wired or wireless.** A wireless keyboard provides more freedom and less clutter on the desktop. However, a wired keyboard is simpler to set up and requires no batteries.

**Comfort.** There are three main types of keyboards: split, curved, and straight.

- Split keyboards are the least stressful on hands and wrists.
- A curved design combines some of the familiarity of a straight keyboard with some of the ergonomic benefits of a split keyboard.
- And a straight keyboard, with or without palm rests, has a traditional feel without the ergonomic benefits of a split or curved design.

**Size.** If the keyboard is going to be used in a work environment where the user spends a lot of time in one location, they might want to choose a larger, more ergonomically designed keyboard. However, for traveling and mobile computing, a compact keyboard without the 10-key pad is easy to pack and still provides some ergonomic benefits.

### Recommended Microsoft desktops and keyboards



To find out more on Microsoft ergonomically designed devices visit: [Healthy-Computing.com](https://www.microsoft.com/healthy-computing)

<sup>1</sup> Sommerich, C., "A Survey of Desktop and Notebook Computer Use by Professionals," Proceedings of the Human Factors and Ergonomics Society, 2002, 46th meeting, pp. 1124-1128