



OCCUPATIONAL HEALTH & SAFETY

Prevention is Proactive!!

What is Ergonomics?

Offices are the last place many people think about accidents and injuries occurring. Often employees have the feeling that since they don't work "out on a plant floor" on-the-job health and safety isn't something they need to pay attention to. As a result, many office workers don't consider health and safety issues as they do their jobs... or worse yet, they disregard established practices altogether.

Little do they realize that accidents and injuries in the office account for thousands of hours of lost time, and millions of Kina in medical costs and workers' compensation.

Many of the injuries experienced in office environments are "ergonomic" injuries. The causes of these injuries can often be subtle or so delicate or precise as to be difficult to analyse or describe (Its Hidden).

Each job in an office or outdoors is slightly different, using different materials and tools. As a result, every task makes a distinct set of demands on the human body.

Ergonomics means taking a look at these demands, examining the work area (as well as the equipment and tools employees use)... and making sure that each employee performs their job in the most effective and safe way possible for their own physical make-up.

In short – Ergonomics is the study of the kind of work you do, the environment you work in, and the tools you use to do your job. The goal of office ergonomics is to set up your office work space so that it fits you and the job you are doing.

Benefits of Workplace Ergonomics

1. **Ergonomics reduces costs.** By systematically reducing ergonomic risk factors, you can prevent costly injuries. Keeping in mind that Indirect costs can be up to twenty times the direct cost of an injury.
 - ◆ **Direct costs of injury** - physician and hospital bills, prescription medicine
 - ◆ **Indirect cost of injury** - Cost of hiring and training a temporary or permanent replacement for the injured employee, with lower productivity during the hiring and training process and also it takes time for your supervisor to prepare the incident report.
2. **Ergonomics improves productivity.** The best ergonomic solutions will often improve productivity. By designing a job to allow for good posture, less exertion, fewer motions and better heights and reaches, the workstation becomes more efficient.
3. **Ergonomics improves quality.** Poor ergonomics leads to frustrated and fatigued workers that don't do their best work. When the job task is too physically taxing on the worker, they may not perform their job like they were trained. For example, an employee might not fasten a screw tight enough due to a high force requirement which could create a product quality issue.
4. **Ergonomics improves employee engagement.** Employees notice when the company is putting forth their best efforts to ensure their health and safety. If an employee does not experience fatigue and discomfort during their workday, it can reduce turnover, decrease absenteeism, improve morale and increase employee involvement.
5. **Ergonomics creates a better safety culture.** Ergonomics shows the company's commitment to safety and health as a core value. The cumulative effect of the previous four

benefits of ergonomics is a stronger safety culture for the company. Healthy employees are your most valuable asset; creating and fostering the safety & health culture within the company will lead to better human performance for the organization.

Why should your work area be ergonomic?

It's common for injury and illness to happen at work. Both can cost you and the company time and money. They can also affect how well you do your job.

Most on-the-job injuries are caused by:

- ◆ Falls.
- ◆ Repetitive movements.
- ◆ The way you sit or stand (posture).
- ◆ Bending over, lifting heavy objects, or using pressure or force.
- ◆ Working with vibrating tools.

Ergonomics can help you to be more comfortable at work. It can help lower stress and injury caused by awkward positions and repetitive tasks. It focuses on how things are set up in your office work space, such as:

- ◆ Your workstation setup, how you sit, and how long you stay in one position.
- ◆ How you do a certain task, the kinds of movements you make, and whether you make the same movements over and over.
- ◆ Your work area, including light, noise, and temperature.
- ◆ The tools you use to do your job and whether they are set up to fit your needs.

What kinds of injuries happen at work?

Most injuries that happen at work are caused by physical stress and strain, such as sitting in the same position for a long time, making repetitive movements, and overuse. These injuries can cause stress and strain on your muscles, nerves, tendons, joints, blood vessels, and spine.

Symptoms can include pain in your;

- ◆ Back - Ruptured / Herniated Disc
- ◆ Hand, wrist, or arms.
- ◆ Neck and shoulders.
- ◆ Muscle / Tendon strain
- ◆ Ligament Sprain
- ◆ Tension Neck Syndrome - often causes fatigue, stiffness in the neck, neck pain or a headache pain from the neck. .
- ◆ Thoracic Outlet Compression - Thoracic outlet syndrome is a group of disorders that occur when the blood vessels or nerves in the space between your collarbone and your first rib (thoracic outlet) become compressed. This can cause pain in your shoulders and neck and numbness in your fingers.
- ◆ Digital Neuritis - a painfully enlarged nerve complain of a sharp shooting pain affecting the ball of the foot
- ◆ DeQuervain's Syndrome - Also known as BlackBerry thumb, texting thumb - painful tendons on the thumb side of the wrist.
- ◆ Mechanical Back Syndrome - pain is the general term that refers to any type of back pain caused by placing abnormal stress and strain on muscles of the vertebral column.
- ◆ Degenerative Disc Disease - is not really a disease but a term used to describe the normal changes in your spinal discs as you age. Spinal discs are soft, compressible discs that separate the interlocking bones (vertebrae) that make up the spine.



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- ◆ Ruptured / Herniated Disc - When discs are damaged by injury, disease or normal wear and tear, they may bulge or rupture, becoming a herniated disc.

How can you improve your workstation and prevent injuries at work?

A comfortable work space can help you feel your best. If you sit behind a desk for hours at a time, you're not doomed to a career of neck and back pain or sore wrists and fingers.

Proper office ergonomics including correct chair height, adequate equipment spacing and good desk posture can help you and your joints stay comfortable at work.

Ready to give your work space a makeover? Get started making your sitting workstation comfortable with this guide to sitting workstation ergonomics.



Chair

Choose a chair that supports your spinal curves. Adjust the height of your chair so that your feet rest flat on the floor or on a footrest and your thighs are parallel to the floor. Adjust armrests so your arms gently rest on them with your shoulders relaxed.

Key objects

Keep key objects — such as your telephone, stapler or printed materials — close to your body to minimize reaching. Stand up to reach anything that can't be comfortably reached while sitting.

Keyboard and mouse

Place your mouse within easy reach and on the same surface as your keyboard. While typing or using your mouse, keep your wrists straight, your upper arms close to your body, and your hands at or slightly below the level of your elbows. Use keyboard shortcuts to reduce extended mouse use. If possible, adjust the sensitivity of the mouse so you can use a light touch to operate it. Alternate the hand you use to operate the mouse by moving the mouse to the other side of your keyboard.

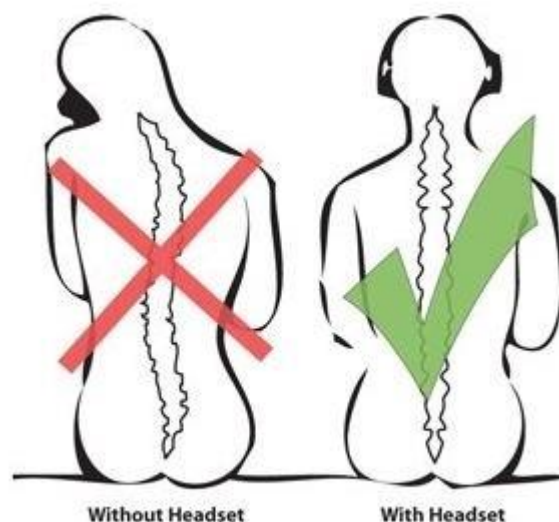
Telephone

Phone placement

- ◆ If set-up out of arm's length, repeatedly reaching for the phone can put strain on the arm, shoulder and neck.
- ◆ Place the phone where it is easily accessible to minimize the risk of injury from repetitive reaching.

Traditional phone usage

- ◆ Cradling the phone between your shoulder and head can result in neck pain, especially with prolonged phone use.
- ◆ Ideally, keep a neutral spinal posture and avoid using the phone on one side of the body.
 - A hands-free headset can help with maintenance of appropriate posture while also allowing one to write, type, and move about the area to perform other workplace tasks.
 - If office is set-up in a private space, use of speaker-phone may be appropriate to reduce undue strain from poor posture.





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Footrest

If your chair is too high for you to rest your feet flat on the floor — or the height of your desk requires you to raise the height of your chair — use a footrest. If a footrest is not available, try using a small stool or a stack of sturdy books instead.

Desk

Under the desk, make sure there's clearance for your knees, thighs and feet. If the desk is too low and can't be adjusted, place sturdy boards or blocks under the desk legs. If the desk is too high and can't be adjusted, raise your chair. Use a footrest to support your feet as needed. If your desk has a hard edge, pad the edge or use a wrist rest. Don't store items under your desk.

Monitor

Place the monitor directly in front of you, about an arm's length away. The top of the screen should be at or slightly below eye level. The monitor should be directly behind your keyboard. If you wear bifocals, lower the monitor an additional 1 to 2 inches for more comfortable viewing. Place your monitor so that the brightest light source is to the side.

Lighting

Good lighting in the workplace enables staff to see clearly and perform their work safely. Good lighting should enable employees to easily view their work and environment without the need to strain their eyes. Different activities require different levels and qualities of light.

Lighting and Glare – Glare is caused by light shining directly onto your screen. Sources of light include windows and interior lights. To test if you have glare on your computer screen, turn off your monitor. If there are reflections on the blank screen, you have glare.

To reduce the glare caused by window light, position your monitor so that your line of sight is parallel to the window; if this is not practical consider covering the window fully or partially. If interior lighting is causing the glare, the lights may be shaded/redirected to reduce glare.

Noise

Office noise is generally “annoyance” noise that is distracting and/or interferes with concentration. Consider the following options to address “annoyance” noise:

- ◆ Rearrange the office layout so the noise generating activities or equipment is separated from quiet tasks e.g. locate meeting rooms and lunchrooms etc. as far away from workstations as possible.
- ◆ Isolate noisy, high use photocopiers/shredders.
- ◆ Select equipment with low noise output – consider noise when purchasing new equipment.
- ◆ Noise ‘barriers’ can help contain noise to a particular area e.g. fabric covered room dividers placed around a group of work stations.
- ◆ Lower the volume setting on telephones – including personal mobile phones
- ◆ Consider co-workers when using radios/playing music at your work station
- ◆ Be considerate with speaking volume.

Layout of the Workplace

The layout of the workplace should be sufficient to allow people to enter and exit the workplace and to move about within the workplace without risk to health and safety, both under normal working conditions and in an emergency.

Posture

Most of us spend hours at our desk every day. Bad habits and incorrect posture can lead to short-term pains and aches that can turn into long-term injuries.

There is no one or single body position that is recommended for sitting. Every worker can sit comfortably by adjusting the angles of their hips, knees, ankles and elbows. The following are general recommendations. Occasional changes beyond given ranges are acceptable and sometimes beneficial.

- ◆ Keep the joints such as hips, knees and ankles open slightly (more than 90°).
- ◆ Keep knee joints at or below the hip joints.
- ◆ Keep ankle joints in front of the knees.
- ◆ Keep a gap the width of three fingers between the back of the knee joint and the front edge of the chair.
- ◆ Keep feet flat on the floor or on a foot rest.

