

# MBAA Safety Toolbox Talk



## Ergonomics

### Overview

What is ergonomics? Ergonomics is the science of matching tools and tasks to the work environment. In other words, ergonomics tries to make your job fit *you*, rather than making *you* fit your *job*. The purpose of ergonomics is to reduce or eliminate injuries and illnesses that can result from stress on muscles, nerves, and joints. These types of injuries have been common to workplaces for a long time, but safety standards concerning them are new. If OSHA finds that poor ergonomics is a threat to employee wellbeing, it can cite a company for violating its duty to provide a safe and healthy workplace.

A variety of ergonomically related injuries take place and a variety of terms exist to describe them. The most common terms used are musculoskeletal disorders or cumulative trauma disorders (CTDs). They are also known as repetitive motion or stress disorders. Whatever they're called, they account for approximately one-half of all reported workplace illnesses each year. These are technically called "illnesses" because the problems generally build up over time, rather than being the result of a single event, as in the case of an accident.

### Physical Problems Stemming from Cumulative Trauma

These usually involve pain and damage to muscles, tendons, and nerves in the back, neck, shoulders, wrists, hands, and elbows. Discomfort can be mild and periodic, or long lasting.

### Typical Ailments Include:

- 1) Tendonitis: A universal term that indicates that tendon(s)—rope-like structures that connect muscles to bones—become sore. They do not heal readily due to lack of blood flow.
- 2) Tennis's Elbow/Golfer's Elbow: This happens when tendons connected at the elbow—tennis's tendon on the top of the

elbow and golfer's tendon on the back of the elbow—become inflamed. They also do not heal quickly because of lack of blood flow.

- 3) Trigger Finger: This is when one of the Tendons attached to the finger(s) gets "caught" on a bone and causes the finger to get stuck in a trigger position.
- 4) Lower back pain: About 90% of back pain is muscle strain and about 10% stems from a pinched nerve that causes pain to radiate into mainly one leg.
- 5) Carpal Tunnel Syndrome: This happens when the tendons from three fingers and a thumb get rubbed raw, swell-up and pinches the median nerve, causing hands and wrists to tingle and/or become numb.
- 6) Reynaud's Syndrome: This happens when the blood vessels near the surface of the skin get damaged/destroyed, causing the blood flow to be restricted and the fingers become white in color and cold.

All of these disorders can be caused by making the same motion over and over, staying in one position too long, or working in awkward positions. They also result from working with tools that don't fit the body, using a great deal of physical force, and exposure to long periods of heavy vibration.

### How to Avoid Discomfort

Ergonomically related disorders occur to all types of workers, from laborers to office personnel. You can often help yourself by learning and practicing basic ergonomic principles. There are many ways to reduce or eliminate the disorder; here are a few:

- Use two hands instead of one for a task—to reduce excess demand on a single muscle group.
- Use tools that are right for the job and proportioned for your body.
- Use power tools instead of manual tools when possible.

- Take frequent breaks from repetitive motion tasks.
- Avoid awkward movements or holding yourself in awkward positions.
- Wear protective gloves that reduce pressure or tool vibration on your fingers.
- For computer use—keep the screen at arm's length and at eye level.
- Position the keyboard so that your wrists are straight and your elbows are close to your body.
- Change positions, stretch often to improve blood circulation, and take breaks regularly. In ergonomics, your best position is your next position.

### Report Early Symptoms

Repetitive motion injuries are a growing concern in the workplace. Anyone who experiences numbness, tingling, or pain in their hands, arms, or neck should report to a supervisor. Changes in workstations and equipment can often alleviate these problems before they become chronic. Medical attention should be sought if the problem persists. Following this simple advice can help eliminate physical stress and keep employees feeling good all day.

### Learn More

More about ergonomics can be learned from the "Our Bodies Do Talk" poster series:

- [OBDT - Computers](#)
- [OBDT - Construction](#)
- [OBDT - Manual Lifting](#)
- [OBDT - You are in Charge](#)

**If you have any questions regarding this, please see your supervisor/manager or a member of the Brewery Safety Committee.**

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<http://www.mbaa.com/brewresources/brewsafety>