



THE WRONG SHOES ARE A BIG CAUSE OF WORKPLACE-RELATED INJURIES

Take a quick look at your shoes. Notice anything? If you're like most Americans, you chose fashion over functionality. In fact, most of us purchase shoes that are intended for both work and play. That is where the problem begins. It would be impractical to play basketball in a pair of dress shoes. You want a basketball shoe that is lightweight, cushioned, and that stabilizes the foot and ankle.

The National Safety Council and Bureau of Labor Statistics (BLS) recently released the following statistics about foot-related workplace injuries:

- An average of 400 foot-related workplace injuries occur each day in the United States at an estimated \$6,000 per incident.
- Approximately 75 percent of the accidents occurred when workers were not wearing proper shoes.
- In 2000, the BLS recorded 1,509 foot injuries serious enough to cause lost workdays in industrial workplaces.

Selecting the Proper Shoe

A shoe should be chosen for its intended purpose. Will you be standing for extended periods? Will you be walking on varying surface types? Are you sitting at a desk all day? These are the questions you need to ask yourself when purchasing the proper footwear for your job. The human foot is designed for mobility. Standing in an upright position or walking on a variety of surfaces without the correct footwear can cause permanent damage to the joints and bones of the feet.

Determining Your Foot Type

The first step in selecting the proper shoes is understanding your foot type. The key to determining your foot type is the height of your arch.

One may be thinking..."how do I measure the height of my arch?!" First, get a paper grocery bag and baking pan large enough for your foot or use a bath tub.



1. Fill the pan or bathtub with just enough water to cover the entire surface.
2. Dip your foot onto the water so it wets the sole of your foot.
3. Step onto the shopping bag and check the marking with the three images in Figure 1.

Results and Interpretation

Normal Arch: If you see about half of the arch, then your foot has a normal arch. A normal arched foot lands on the outside of the heel, and then rolls inward slightly.

Flat Arch: Do you see almost your entire foot? Then you have a flat arched foot. The force or pressure of a flat arched foot resides on the outside of the heel and rolls inward excessively (over pronates). Over time, this can cause overuse injuries, such as shin splints and even knee pain.

High Arch: High-arched feet leave an imprint showing a very narrow band connecting the forefoot and heel. A high-arched foot does not roll inward (under pronates) enough, so it is not an effective shock absorber.

Look at the bottom of your shoes. Which part of your shoe shows wear and tear? If the inside of your shoes' toes wear down quickly, you have a flat arch. If the outside heel of your shoes wears down quickly, you have a high arch. If the middle of your shoe shows wear and tear, you have normal arch.

The Next Steps

After discovering your foot type, you must now decide which shoes to purchase. However, it is important to understand the components of a shoe so you can properly customize it to meet your needs. The anatomy of a shoe can be broken down into four components; the upper, the insert, the midsole, and the outsole or tread.

1. The upper is the shoes external support. It provides the flexibility, durability and stability of the shoe.
2. The insert can affect the overall fit since it helps position the arch of the foot. An individual's foot is as unique as the individual. Each shoe is manufactured to fit a generic foot; the insert is what personalizes the shoe to the wearer. You can replace the insert with a variety of custom made or store bought insoles to increase the overall comfort and support of any shoe.
3. The midsole is the cushioning system of the shoe. The midsole can consist of rubber, foam, pressurized air, liquid, or gel systems to increase the overall cushioning power of the shoe. Remember, not all shoes are equipped with a cushioning system, so don't forget those insoles.
4. The outsole or tread of the shoe is vital to the wearer staying upright on their feet. Every shoe on the market today has its own tread design or lack there of, depending on its intended use. There are a variety of products on the market today to improve the traction of ones' shoes when traction doesn't exist or added traction is required.



Remember that buying the most expensive shoes isn't always the best option, but there is a good chance that those bargain bin shoes aren't either. Think of shoes as an investment into your well-being. Your feet are going to take the brunt of the forces from your day, so a good shoe is a necessity. Always try on a variety of styles and brands until you find that perfect fit.

The following stores and sites are suggested for further information.

Insoles:

- www.goodfeetcolorado.com
- www.superfeet.com
- www.yoursole.com
- www.bornshoes.com
- www.redwingshoe.com
- www.softshoe.com

Shoe Companies:

- www.eccousa.com

Traction:

- www.yaktrax.com
- www.amazon.com