

Tool Box Talk

Leg Safety

Every worksite has hazards when work is being done. These hazards have the potential to cause injuries. The legs often take most of the workload and are therefore susceptible to injury.

The legs have some of the largest and most durable muscles and tendons in the body. Muscles and tendons are the connective tissues that attach to our bone structure and allow us to work, play and move freely.

The three parts of the leg that get injured the most are the knee, the Achilles tendon and the ankle.

Common Ways of Injuring the Leg

- Getting on and off equipment, such as trucks, heavy machinery and ladders.
- Falling off of equipment. **Not using three points of contact.**  A black silhouette of a person climbing a ladder. Three red circles highlight the points of contact: the feet on the ladder rungs, the hands on the ladder, and the knee against the ladder. A red arrow points from the text 'Not using three points of contact' to the diagram.
leg to
- Getting crushed or pinched by equipment.
- Planting the foot and getting it caught so the foot can not move with the rest of the leg.
- Slipping on wet or slippery surfaces.
- Tripping due to tripping hazards or poor housekeeping.
- Wearing the wrong type of footwear or footwear that has worn out. This can cause the ligaments and muscles in the leg to be out of alignment and cause unnecessary tension.
- Sitting for long periods of time.

Preventing Leg Injuries

The following tips may prevent leg injuries:

- Stretch before and after physical exercise or work activities to warm up your muscles.
- Use the correct techniques or positions during activities so that you do not strain your muscles.
- Use equipment appropriate to your size, strength and ability. Avoid repeated movements that can cause injury (repetitive strain injury).
- Do not carry objects that are too heavy.
- Use a step stool. Do not stand on chairs or other unsteady objects.

- When working, wear the correct footwear that is made for the job you are doing.
- Maintain good housekeeping and keep travel ways clear of trip hazards.
- Be aware of your surroundings and other equipment on the worksite. Keep a safe distance from and be mindful of all hazards on the worksite.

How to Treat Sprains

A sprain is damage to the ligament. It varies from simply stretched or slightly torn to completely torn. In many cases, you can first use the RICE method to treat a sprain injury:

Rest – Rest the injured leg. Keep weight off of it. You may need to use crutches until you can walk without pain.

Ice – For at least the first 24 to 72 hours after injury, or until the swelling goes down, apply an ice pack for 10 to 20 minutes every hour or two during the day. Always keep a thin cloth between the ice and your skin, and press the ice pack firmly against all the curves of the affected area.

Compression – An elastic compression wrap, such as a tensor bandage, will help reduce swelling. You should wear it for the first 24 to 36 hours after injury. Compression wraps do not offer protection, so you may also need a brace to protect your ankle if you try to put weight on it.

Elevation – Raise your ankle above the level of your heart for 2 to 3 hours a day if possible. This helps to reduce swelling and bruising.

Recently, the application of R.I.C.E. to injuries has been questioned, and alternative treatments have been proposed. The practice of rest is being replaced with load or activity management, with the idea being that light, modified movement is beneficial for healing. Also, the application of ice to an injury reduces blood flow and may delay the healing process.

The treatment you decide to use depends on your injury and rehabilitation goals. Do your research, consult your medical provider and do what feels comfortable to you.

More info: <https://www.yalemedicine.org/news/rice-protocol-for-injuries>