**BACK INJURY PREVENTION**

**By Don Milani, Milani Safety Services**

We have a work force that is getting older and we are working in an industry that takes a toll on the back.

First off, let’s talk about the back and how it operates. Your back is also referred to as your spine. The spine is made up of bone called vertebrae, between each vertebrae is a disk, and running down the middle of the spine is your spinal cord. The spine is strong and is designed to protect your spinal cord. Your spinal cord starts at your brain and carries all messages from your brain to the rest of your body. It is an extremely important part of the body.

Your spine is supported by muscles that connect to other parts of the body. In many cases when someone thinks they hurt their back, they just sprained some of these muscles.

All these components work together to allow us to stand, bend, walk, twist, and sit. Without the mobility of the spine, we would not be able to move around like we do.

The bone or vertebrae is like any other bone in the body, if it is injured, it can heal. The disk is nothing more than a sack of fluid that acts as a shock absorber between the vertebrae. There is no healing mechanism in the disk. Once it is injured, it does not heal.

The spinal cord has the consistency of toothpaste. Once it is injured, the injury is permanent. However the medical community is getting closer to being able to heal an injured spinal cord. As of now, if the spinal cord is severed, that is cut; the person will be paralyzed from that point down. This is why when someone has a serious injury we want to do everything we can to keep the back from twisting while we are performing first aid or getting that person ready to load into the stokes to be packed out.

As you can see, the back is a very important structure for our life style and we need to do everything we can to protect it from injury. The good news is that there are several things we can do to protect our backs. The most important thing we can do is to understand how our back works and try to put as little stress on it as possible.

The first step is to ensure that you are in good physical condition. This means having a life style that keeps the muscles in good shape. Which muscles do you use most when lifting?? If you said the stomach muscles, you are correct. So it stands to reason that you want to do things that keep the stomach muscles in good shape and strong.

Next it is important to stretch before starting any physical activity. Did you plan high school or collage sports?? Did you ever start a practice or a game without stretching? Is there a difference between playing sports and working in the woods? No there is not. Both require a lot of physical activity.

If you are an equipment operator, it is important that you get off the machine every couple of hours and take a short stretch break. This will help keep your muscles active. Also when you are dismounting your machine, climb down, do not jump. Jumping causes stress on you back and knees.

Proper posture is also important. You should always sit straight and stand straight (your mother was right) to reduce the pressure on the disks. If you have to lift something or move something, use your stomach and legs muscles as much a possible. You want to keep as much pressure off the spine as possible. If you are five foot ten inches tall and you bend at the waste to pick up an object, you lower back supports ten times the weight you are picking up, plus ten times the weight of your upper body. So for most adult men, just to bend over at touch our toes, the lower back supports about one thousand pounds. A strong young person’s lower back can support about fifteen hundred pounds. The older we get the less our lower backs can support.

Try to not put pressure on the lower back. If you have to work in an awkward position, support your back by using your hand to keep the weight off the lower back. As an example, if you are bent over doing a task, try to use one out stretched arm to support your upper body weight.

You only have one back and it should last you for a life time. It’s up to you to protect it!!

*Don Milani of Milani Safety Services is the Safety Director for Associated California Loggers*