# **KSU Facilities Safety Bulletin**

# **Back Injury Prevention**

# Why Stay Active?

A common and sometimes harmful myth is that all activity should be avoided when experiencing back pain. Many people are afraid that activity will only make the pain or

## **June Vivid Courses:**

All: Back Safety & Injury Prevention

Heat Stress

injury worse. For most back problems, light activity helps speed the healing process. Gradual activity and stretching may reduce future back pain and reduce the likelihood of re-injury.

#### How Stretching Helps

You can minimize and prevent back pain with stretches that make the muscles in your back, stomach, hips and thighs flexible and strong. Stretching activities also:

Reduce Injuries: When you stretch, muscles relax and lengthen. Relaxed muscles withstand stress better than tight ones. Typically, the more flexible you are, the less likely you are to suffer back pain *Improve Performance*: Stretching can increase your range of motion, making you more effective at work and in other activities. It may help you become more efficient in performing your daily tasks

## Safe Work Practices

To reduce back injuries at work, it is important to find and avoid risk factors that increase your chance of injury. When any of the following occur in combination your risk of a back injury is increased:

1. Awkward posture 2. Overexertion 3. Repetition 4. Fatigue

# **Safe Lifting Techniques**

When lifting, know your body's limitations and use proper techniques to protect your back from injury. Follow These Steps for Safe Lifting:

- 1. Plan the Lift Consider all possibilities. Do I need to clear the path? Do I need to reduce the load? Should I use a material handling device? Are there steps, ledges or other obstacles? Will I need to stop for rest?
- 2. Size up the Load Check the load to see that it is stable and balanced. Before lifting an object, test the weight of the object by lifting a corner If you are unsure of its weight, use a material handling device.
- 3. Establish a Base Use a wide stance, with feet about shoulder's width apart, and one foot slightly in front of the other. This staggered position gives you more stability and reduces the risk of falling. With the load close to your body, bend your knees and keep your heels off the floor.
- 4. Get a Good Grip Use your palms to grip the object. Make sure you have an adequate hold before moving.
- 5. Lift Steadily Use your leg strength to lift in a smooth, controlled manner. Keep your stomach muscles tight and your head and shoulders up. Avoid jerking and twisting motions.
- 6. Keep it Close The closer the load is to your body, the less strain on your back.
- 7. Move your Feet Don't twist the trunk; move your feet to turn.

Source: https://www.osha.gov/dte/grant\_materials/fy06/46g6-ht22/back\_injury\_prevention.pdf

# **Protecting Yourself from Heat Stress**

Heat stress, from exertion or hot environments, places workers at risk for illnesses such as heat stroke, heat exhaustion, or heat cramps.

<u>Heat Stroke:</u> A condition that occurs when the body becomes unable to control its temperature, and can cause death or permanent disability.

#### **Symptoms**

- High body temperature
- Confusion
- Loss of coordination
- Hot, dry skin or profuse sweating
- Throbbing headache
- Seizures, coma

#### First Aid

- Request immediate medical assistance.
- Move the worker to a cool, shaded area.
- Remove excess clothing and apply cool water to their body.

<u>Heat Exhaustion:</u> The body's response to an excessive loss of water and salt, usually through sweating.

## Symptoms

- Rapid heart beat
- Heavy sweating
- Extreme weakness or fatigue
- Dizziness
- Nausea, vomiting
- Irritability
- Fast, shallow breathing
- Slightly elevated body temperature

#### First Aid

- Rest in a cool area.
- Drink plenty of water or other cool beverages.
- Take a cool shower, bath, or sponge bath.

<u>Heat Cramps:</u> Affect workers who sweat a lot during strenuous activity. Sweating depletes the body's salt and moisture levels.

#### **Symptoms**

■ Muscle cramps, pain, or spasms in the abdomen, arms or legs

#### First Aid

- Stop all activity, and sit in a cool place.
- Drink clear juice or a sports beverage, or drink water with food. Avoid salt tablets.
- Do not return to strenuous work for a few hours after the cramps subside.
- Seek medical attention if you have the following: heart problems, are on a low-sodium diet, or if the cramps do not subside within one hour.

## **Protect Yourself**

Avoid heavy exertion, extreme heat, sun exposure, and high humidity when possible. When these cannot be avoided, take the following preventative steps:

- Monitor your physical condition and that of your coworkers for signs or symptoms of heat illnesses.
- Wear light-colored, loose-fitting, breathable clothing such as cotton. Avoid non-breathable synthetic clothing.
- Gradually build up to heavy work.
- Schedule heavy work during the coolest parts of day.
- Take more breaks when doing heavier work, and in high heat and humidity. Take breaks in the shade or a cool area.
- Drink water frequently. Drink enough water that you never become thirsty.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat-related illnesses.

Source: https://www.cdc.gov/niosh/docs/2010-114/pdfs/2010-114.pdf