This Safety Meeting Outline is structured to help you apply general material handling rules to specific activities in which your employees are involved. You can choose work activities which apply to these principles and structure your safety meeting presentation to address them.

1. Identify a task involving material handling (lifting, pushing, carrying, setting down, etc.).
2. Break the task down into its most basic steps. What does the worker do? (Example: lift a case of material from a truck bed, turn and carry it to a location in the building where it is set on the ground).
3. Apply the lifting principles shown below, as applicable:

<table>
<thead>
<tr>
<th>PRE-LIFT TIPS</th>
<th>LIFTING FROM GROUND LEVEL</th>
<th>LIFTING FROM OVERHEAD</th>
<th>LIFTING FROM A SHELF, DESK, ETC.</th>
<th>SETTING LOADS DOWN</th>
<th>TIPS WHEN CARRYING</th>
<th>MOVING CARTS, HANGING LOADS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine the weight of the load to be lifted or carried.</td>
<td>Get as close as possible to the load.</td>
<td>Make certain you are standing on a stable surface before you attempt the lift.</td>
<td>Pull the load close to your body and test it for weight.</td>
<td>Bend your knees, not your waist.</td>
<td>Look ahead to make certain the way is clear.</td>
<td>Remember to push, not pull whenever possible.</td>
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<tr>
<td>Are you able to do it alone? Is help or mechanical assistance needed?</td>
<td>Bend your knees, not your back.</td>
<td>Test the load to be sure you can lift it safely.</td>
<td>Shift the weight of the load to your legs by keeping it close.</td>
<td>Set down the corner or edge of the object closest to you first - keeping your fingers out from under the load</td>
<td>Set the load down if it becomes too heavy or unstable.</td>
<td>Position the load so that your legs supply the force.</td>
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<tr>
<td>Does the size/shape of the load present any problem?</td>
<td>Get a good grip on the object and test its weight.</td>
<td>Bring the object off the shelf or support carefully, maintaining your balance.</td>
<td>Avoid reaching and lifting at the same time.</td>
<td>Avoid stairs when ever possible. If unavoidable, use the banister or wall or to help you maintain balance.</td>
<td>Use hands and arms for control and direction of the load.</td>
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<tr>
<td>Will you have to turn/change direction while carrying the load?</td>
<td>Keep the load close to your body and lift using your legs.</td>
<td>While maintaining control of the load, bring it down to waist level.</td>
<td>Keep your back in its natural position – Do not bend forward and place strain on your lower back.</td>
<td>Have someone open doors, gates, etc. for you.</td>
<td>Keep hands &amp; fingers inside the load whenever possible.</td>
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<tr>
<td>Is the route you will take clear of obstructions, slip, trip, or fall hazards?</td>
<td>Be aware of your balance and what part of your body is doing the work. It should be your legs.</td>
<td>Whatever the task, GET HELP for heavy loads!</td>
<td>Change direction by moving your feet not your hips.</td>
<td>Watch for pinch or shear points on carts, dollies or hoists.</td>
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<tr>
<td>Do you have a back support belt, and are you wearing it properly?</td>
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Never twist at the waist while carrying a load.
Sprains and Strains

Sprains and strains are among the most common injuries in sports and at work. Here are some facts about sprains and strains from the American Academy of Orthopedic Surgeons.

What is a sprain?

A sprain is a stretch and/or tear of a ligament, the fibrous band of connective tissue that joins the end of one bone with another. Ligaments stabilize and support the body's joints. For example, ligaments in the knee connect the upper leg with the lower leg, enabling people to walk and run.

What is a strain?

A strain is a twist, pull and/or tear of a muscle and/or tendon. Tendons are fibrous cords of tissue that attach muscles to bone.

What causes sprains and strains?

A sprain is caused by direct or indirect trauma (a fall, a blow to the body, etc.) that knocks a joint out of position, and overstretches, and, in severe cases, ruptures the supporting ligaments. Typically, this injury occurs when an individual lands on an outstretched arm; slides into a base; jumps up and lands on the side of the foot; or runs on an uneven surface.

Chronic strains are the result of overuse - prolonged, repetitive movement - of muscles and tendons. Inadequate rest breaks during intensive training precipitates a strain. Acute strains are caused by a direct blow to the body, overstretching, or excessive muscle contraction.

Who gets sprains and strains?

Professional and amateur athletes and the general public, as well, can sustain this injury. People at risk for the injury have a history of sprains and strains, are overweight, and are in poor physical condition.

What activities lead to sprains and strains?

All sports and exercises, even walking, carry a risk of sprains. The anatomic areas most at risk for a sprain depend on the specific activities involved.

What are the signs of a sprain?

While the intensity varies, pain, bruising, and inflammation are common to all three categories of sprains—mild, moderate, severe. The individual will usually feel a tear or pop in the joint. A severe sprain produces excruciating pain at the moment of injury, as ligaments tear completely, or separate from the bone. This loosening makes the joint nonfunctional. A moderate sprain partially tears the ligament, producing joint instability, and some swelling. A ligament is stretched in a mild sprain, but there is no joint loosening.

What are the signs of a strain?

Typical indications include pain, muscle spasm, muscle weakness, swelling, inflammation, and cramping. In severe strains, the muscle and/or tendon is partially or completely ruptured, often incapacitating the individual. Some muscle function will be lost with a moderate strain, where the muscle/tendon is overstretched and slightly torn. With a mild strain, the muscle/tendon is stretched or pulled, slightly. Some common strains are:

- **Back strain.** When the muscles that support the spine are twisted, pulled, or torn, the result is a back strain.
- **Hamstring muscle strain.** A hamstring muscle strain is a tear or stretch of a major muscle in the back of the thigh. The injury can sideline a person for up to six months. The likely cause is muscle strength imbalance between the hamstrings and the muscles in the front of the thigh, the quadriceps. Hamstring injuries tend to recur.

How are sprains and strains treated?
**Rest, ice, compression and elevation (RICE)** usually will help minimize the damage. It is important in all but mild cases for a medical doctor to evaluate the injury and establish a treatment and rehabilitation plan. A severe sprain or strain may require surgery or immobilization followed by months of therapy. Mild sprains and strains may require rehabilitation exercises and activity modification during recovery.

**Prevention tips**

No one is immune to sprains and strains, but here are some tips developed by the American Academy of Orthopedic Surgeons to help reduce your injury risk:

- Participate in a conditioning program to build muscle strength
- Do stretching exercises daily
- Always wear properly fitting shoes
- Nourish your muscles by eating a well-balanced diet
- Warm up before any sports activity, including practice
- Use or wear protective equipment appropriate for that sport

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**Suggested SIPE Safety Videos:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Video Title</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-5</td>
<td>Safe Lifting and Carrying Techniques</td>
<td>(5 minutes)</td>
</tr>
<tr>
<td>139</td>
<td>Safe Lifting</td>
<td>(8 minutes)</td>
</tr>
<tr>
<td>210</td>
<td>Back Safety Belt Use</td>
<td>(8 minutes)</td>
</tr>
</tbody>
</table>