Backpack safety facts

Overloaded backpacks used by children have received a lot of attention from parents, doctors, school administrators and the media in the past several years. The U.S. Consumer Product Safety Commission estimates there are more than 7,300 backpack-related injuries annually treated by hospitals and doctors. Injuries include bruises, sprains and strains to the back and shoulder and fractures.

The American Academy of Pediatrics recommends that a child's backpack should weigh no more than 10 to 20 percent of the child's body weight. This figure may vary, however, depending on the child's body strength and fitness.

Tips for safe backpack use

**Lighten the load**
A heavy backpack forces the wearer to bend forward. Choose to carry only those items that are required for the day. Each night remove articles that can be left at home. When organizing the contents of the backpack, distribute the weight evenly. Place the heaviest items on the bottom to keep the weight off of the shoulders and maintain better posture.

**Wear both straps**
Use of one strap shifts the weight to one side, causing muscle spasms and lower back pain. This is true even with one-strap backpacks that cross the body. By wearing two shoulder straps, the weight of the backpack is better distributed and it will help a child’s posture.

**Wear the backpack over the strongest mid-back muscles**
The size of the backpack should match the size of the child. It is also important to pay close attention to the way the backpack is positioned on the back. The backpack should rest evenly in the middle of the back. Shoulder straps should be adjusted to allow the child to put on and take off the backpack without difficulty and allow free movement of the arms. Make sure that the straps are not too loose and that the backpack does not extend below the low back.

**Use proper lifting techniques**
Bend at the knees and use your legs to lift the backpack, placing one shoulder strap on at a time.

Tips for selecting a backpack

- Choose ergonomically designed features that enhance safety and comfort.
- A padded back reduces pressure on the back, shoulders and under arm regions, and enhance comfort.
- Hip and chest belts transfer some of the backpack weight from the back and shoulders to the hips and torso.
- Multiple compartments better distribute the weight in the backpack, keep items secure, and ease access to the contents.
- Look for compression straps on the sides or bottom of the backpack. Tighten side straps to stabilize the articles and compress the contents so that the items are as close to the back as possible.
- Reflective material enhances visibility of the child to drivers at night.

Warning signs a backpack is too heavy

- Change in posture when wearing the backpack
- Struggling when putting on or taking off the backpack
- Pain when wearing the backpack
- Tingling or numbness
- Red marks