Backpacks are a practical way for students to transport items to and from school and from class to class while in school. If used properly, most backpacks are designed to distribute the weight of the load to stronger muscle groups in the body. However, improper use of backpacks can increase strain on muscles, joints and ligaments in the neck, back and shoulders leading to poor posture and possible injury. Below is an easy guide to help you take the proper steps to improve safety when selecting a backpack or teaching children about proper backpack fit and use.

Step 1 – Selecting
- The backpack should have two wide padded shoulder straps and a waist strap
- The width of the backpack should not exceed the width of the user’s torso
- The back side of the backpack should be padded
- The depth of the backpack should reduce or expand with adjustable straps
- All straps on the backpack should be adjustable
- The backpack should have multiple compartments to organize and stabilize contents and distribute weight
- The backpack should be bright in color or have reflective materials to increase visibility at night

Step 2 – Packing
- The maximum weight of the load in the backpack should NOT exceed 10% - 15% of the user’s body weight
- Heavier items should be placed to the back of the backpack so they are carried closest to your body
- Pack only essential items to minimize the weight of the load in the backpack

Step 3 – Lifting
- Face the backpack and bend at your knees to lower yourself to the level of the backpack
- Keep the backpack close to your body and use both arms to hold the backpack by the straps
- Use your legs to do the work and lift the backpack as you straighten your legs and return to standing
- Once standing and steady on your feet, apply one shoulder strap of the backpack at a time

Step 4 – Wearing
- Wear the backpack on both shoulders to distribute the weight evenly
- Your arms should be able to move freely if the straps are adjusted correctly
- The shoulder straps should be snug and resting on both shoulders
- The waist strap should be snug and stabilizing the load
- The backpack should sit evenly in the middle of your back
- The bottom of the backpack should be at the contour of your low back

It is also important to monitor children for signs and symptoms of improper backpack fit or use. Warning signs, like the ones listed below, may indicate a problem.
- Your child struggles to put on or take off the backpack
- Your child complains of neck/shoulder/back pain during or after backpack use
- Your child needs to lean forward to carry the weight of the backpack contents
- Your child has red marks on their shoulders after wearing the backpack
- Your child complains of tingling or numbness in the neck/shoulders/back/arms/legs during or after backpack use

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