

Health & Safety Tip #77

Backpack Ergonomics For Kids

Backpacks that don't fit properly or are too heavy can cause serious problems for kids' back health.

"Overstuffed backpacks might seem harmless enough, but the weight can cause painful back and neck problems for students who don't carry them properly," says VIHA School Physiotherapist Robyn Misovic. "They can cause sore backs and shoulders, muscle strain, numbness, and poor posture at a time when children and youth are experiencing physical growth and motor and spinal development."

Here are some tips to prevent backpack related pain:

Lighten the load:

- Weigh the backpack. Aim for 10-15 percent of body weight.
- If the backpack is still too heavy, talk to your child's teacher. It might be possible to leave the heaviest books at school, and bring home only the lighter handout materials or work books.

Distribute the weight:

- Distribute weight evenly across your back. The more spread out a load is, the less strain it puts on one part of the body. Load the heaviest items first so they are closest to your back and then distribute the load on the right and left.
- A backpack with individualized compartments will help in positioning the contents most effectively. When packing the backpack, make sure that pointy or bulky objects are packed away from the area that will rest on your child's back.
- Neatly pack the backpack and keep it organized. Clean it out regularly to keep it free of unnecessary clutter and weight.
- Use your locker between classes to replace books.
- Use the correct lifting techniques - bend at the knees when picking up a heavy backpack.

Straps:

- Wear both shoulder straps. Wearing a backpack over just one shoulder can cause leaning to one side, which could curve the spine over time. Also avoid athletic bags that have only one strap.
- Wide, padded straps add comfort - avoid straps that dig into your child's shoulders.
- Adjust shoulder straps so the backpack fits close to the upper part of the body. The further a backpack is away from the body, the more difficult it is to achieve proper balance.

