

Tips to prevent back pain from kids' backpacks

Although there are very few studies and the medical literature does not agree on specific guidelines for backpack safety to avoid back pain, parents can use common sense to reduce the chance that their child or teen will suffer back pain due to carrying a backpack.

Look for **backpack design features** that help reduce the chance of back pain:

- Lightweight material (canvas as opposed to leather)
- Two padded, wide (2-inches), adjustable shoulder straps on the backpack
- Padded back
- Individualized compartments
- Hip strap, waist belt or frame to redistribute the weight of the backpack from the shoulders and back to the pelvis
- Wheels so that the backpack can be pulled rather than carried

Teach your child how to **properly load and wear the backpack** to avoid back pain:

- Always use both shoulder straps and wear the backpack on the back rather than over one shoulder
- Pack heaviest objects into the backpack first so they are carried lower and closest to the body
- Fill compartments so that the load is evenly distributed throughout the backpack and items do not shift during movement
- Pack sharp or bulky objects in the backpack so they do not contact the back
- Adjust the straps to fit the backpack snugly to the child's body, holding the bottom of the backpack 2 inches above the waist and keeping the top just below the base of the skull; do not carry the backpack low near the buttocks
- Lift the backpack by using the leg muscles and keeping it close to the body, not by bending over with arms extended
- Do not lean forward when walking; if this is necessary, there is too much weight in the backpack

Maintain a mindset to **watch the weight carried in the backpack** to reduce back pain:

- If the child complains of discomfort, reduce the weight in the backpack immediately
- Consider applying a guideline backpack weight limit as a percent of the child's body weight. The American Physical Therapy Association suggests 15-20%; the American Chiropractic Association advises 5-10%.
- Coach your child to carry only those books needed in the backpack, leaving unnecessary items at home and making frequent trips to his/her locker during the day
- Train your child to clean out the backpack at least once a week

Become a proactive parent on the issue of backpacks and back pain:

- Ask your child if they feel any back aches or pain
- Help your child choose the smallest backpack that will meet his/her needs
- Talk to teachers about how to minimize the need for children to transport heavy books back and forth daily in their backpacks; keep one set of books in the classroom for daily work while leaving heavy books at home; make photocopies of homework chapters and assignments that are easily carried
- Attend PTA meetings and discuss any proposal by school administrators to remove lockers or to reduce time between classes making it difficult to store unneeded books and materials

Finally, there are a number of alternatives to traditional backpacks on the market. These include saddle bags, rollerbags, backpacks with inflatable lumbar support and straps, totally inflatable backpacks and molded backpacks