

# Backpack Safety

Backpacks are wonderful ways to carry our school supplies. But, as helpful as they might be, they can strain muscles and joints and cause back pain if they're too heavy or are used incorrectly.

Heavy backpacks can affect a child's body in many ways. The spine is made of 33 bones called vertebrae. These vertebrae have discs that help absorb the shock to our bodies as we walk and move. The strongest muscles in the body — the back and the abdominal muscles — support the pack.

When a backpack is filled with heavy books and is incorrectly placed on the shoulders, the weight's force can pull a child backward. To help balance the weight,

children will bend forward at the hips or arch the back, causing the spine to compress in unnatural ways. This causes shoulder, neck, and back pain in many kids.

Lots of kids sling their backpacks over just one shoulder because it feels more comfortable. Doing this causes them to lean to one side in an effort to balance the weight. As a result, they develop lower and upper back pain and strain in their shoulders and neck.

Straps that are narrow or tight can dig into shoulders and cause problems with circulation and nerves. This often results in tingling, numbness, and weakness in the arms and hands.

## Help Prevent Backpack Injuries:

- Lighten the load. Carry no more than 10% to 15% of body weight (8-12 pounds for most kids).
- Use and pick up the backpack properly. Use both shoulder straps. Tighten straps so the backpack fits closely to the body, resting evenly in the middle of the back, not sagging down to your bottom.
- Try a pack with wheels.
- Use your locker.
- Pick it up properly. Bend at the knees when lifting a backpack to your shoulders.
- Strengthen your core. Strengthen the muscles of your torso, including the lower back and abdominal muscles.

### How Do You Know If a Backpack Is a Problem?

You may need to put less in your pack or carry it differently if:

- You have to struggle to get your backpack on or off
- You have to lean forward to carry your pack
- You have back, neck or shoulder pain
- If you adjust the weight or the way your child carries the backpack and there is still pain, numbness or weakness in your arms or legs, talk to your doctor.



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