# What Heavy Backpacks Are Doing To Kids' Bodies

About 5,000 children visit emergency rooms each year because of backpack-related injuries, and at least 14,000 kids are treated for them. While not every kid will go to the hospital because of heavy backpacks, overweight loads can cause neck, back and shoulder pain and more. Below, see what is so dangerous about kids carrying heavy backpacks — and what parents can do about it.

Forward Head Posture

Proper Posture
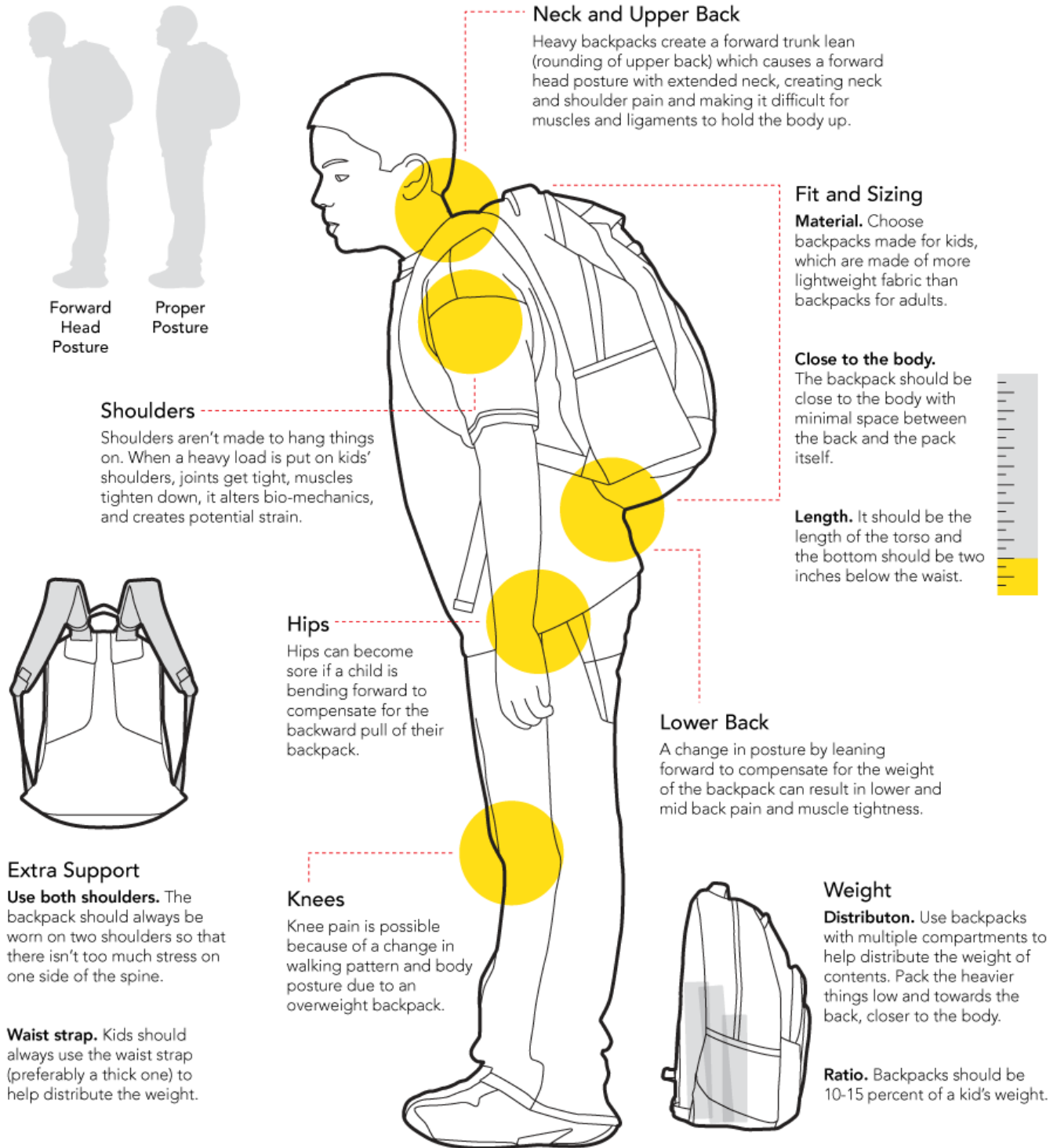
Neck and Upper Back

Heavy backpacks create a forward trunk lean (rounding of upper back) which causes a forward head posture with extended neck, creating neck and shoulder pain and making it difficult for muscles and ligaments to hold the body up.

Fit and Sizing

Material. Choose backpacks made for kids, which are made of more lightweight fabric than backpacks for adults.

Close to the body. The backpack should be close to the body with minimal space between the back and the pack itself.

Length. It should be the length of the torso and the bottom should be two inches below the waist.

Shoulders

Shoulders aren't made to hang things on. When a heavy load is put on kids' shoulders, joints get tight, muscles tighten down, it alters bio-mechanics, and creates potential strain.

Hips

Hips can become sore if a child is bending forward to compensate for the backward pull of their backpack.

Lower Back

A change in posture by leaning forward to compensate for the weight of the backpack can result in lower and mid back pain and muscle tightness.

Extra Support

Use both shoulders. The backpack should always be worn on two shoulders so that there isn't too much stress on one side of the spine.

Waist strap. Kids should always use the waist strap (preferably a thick one) to help distribute the weight.

Knees

Knee pain is possible because of a change in walking pattern and body posture due to an overweight backpack.

Weight

Distributon. Use backpacks with multiple compartments to help distribute the weight of contents. Pack the heavier things low and towards the back, closer to the body.

Ratio. Backpacks should be 10-15 percent of a kid's weight.