

Backpack Facts: What's All the Flap About?



National School Backpack Awareness Day is an annual event in September. Across the country, events are being held to educate parents, students, educators and school administrators, and communities about the serious health effects that backpacks that are too heavy or worn improperly have on children. Backpack Day is also a time to promote the full range of occupational therapy benefits and services.

- More than 79 million students in the United States carry school backpacks. ¹
- More than 23,000 backpack-related injuries were treated at hospital emergency rooms, doctor's offices, and clinics in 2007. ²
- It is recommended that a loaded backpack should never weigh more than 15 percent of the student's total body weight (for a student weighing 100 pounds, this means that the backpack should weigh no more than 15 pounds). ³
- About 55 percent of students carry a backpack that is heavier than the recommended guideline of 15 percent of the student's total body weight. ⁴
- In one study with American students ages 11 to 15 years, 64 percent reported back pain related to heavy backpacks. Twenty-one percent reported the pain lasting more than 6 months. ⁵
- In a study on the effect of backpack education on student behavior and health, nearly 8 out of 10 middle-school students who changed how they loaded and wore their backpacks reported less pain and strain in their backs, necks, and shoulders. ⁶
- According to a study by Boston University, approximately 85 percent of university students self-report discomfort and pain associated with backpack usage. ⁷
- The way backpacks are worn affects your health. The height of the backpack should extend from approximately 2 inches below the shoulder blades to waist level or slightly above the waist. It is recommended that individuals always wear the backpack on both shoulders so the weight is evenly distributed. ⁸

Sources:

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3. Hu, J., Jacobs, K., & Pencina, M. (Submitted for publication). Backpack usage and self-reported musculoskeletal discomfort in university students.
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