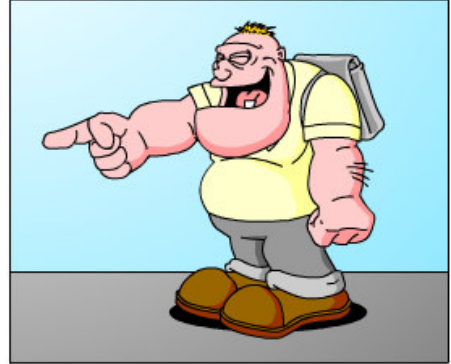


Schoolbags are a Pain

As our children went back to school this month, many faced the prospect of carrying a heavy schoolbag to and from school every day. So it is perhaps not surprising that the issue of schoolbags and their contents is a cause of some concern for parents and the children who have to carry them. If, after hauling a heavy school bag all day your child complains of aching shoulders, weakened muscles, tingling arms or has a stooped posture, the cause may be their schoolbag. It should be noted that this is not just a problem for Irish school children it is very much a worldwide issue.



Carrying too much weight in a schoolbag, or wearing it incorrectly, can cause long-term back problems in all children. The general rule is that a child should not carry more than 10-15% of their bodyweight. In the late 1990s, a Government working group found that many pupils were carrying bags that weighted significantly more than 10% of their bodyweight. A number of these pupils were actually carrying in excess of 20% of their bodyweight.



Improper schoolbag use can cause injury to children with young, growing muscles and joints. Injury occurs when a child uses harmful postures such as arching the back, leaning forward, or using one strap. The human skeleton doesn't form completely until a person is between 19 - 22 years old, so you can actually create physical change in a person by overloading their spine and overloading their capacity to carry weights

Here are some warning signs that a schoolbag is too heavy:

- Pain when wearing the schoolbag
- Tingling or numbness in the arms
- Red marks on the shoulders

Schoolbags worn on both shoulders may minimise the risk of injury to a person. Shoulder bags with a single strap are also not suitable as they concentrate all of the weight on the side of the body, placing undue downward pressure on the top of the shoulder dispersing down to the hip, knee and ankle. The back of the bag should be padded and the shoulder and waist straps should be adjustable. The way the schoolbag is lifted is also important. Children should not swing the bag around to get it on the back. Instead it should be placed on a surface at approximately waist height. The child should then, with their back to it, put their arms through the straps. The bag should only be carried when necessary. For example, if a child is standing on a bus or train, they should remove the bag for the duration of the journey.

When selecting a new schoolbag, the following features are suggested to enhance safety and comfort:

- **Padded back:** reduces pressure on the back, shoulders and under arm regions, and enhances comfort
- **Hip and chest belts:** helps transfer some of the backpack weight from the back and shoulders to the hips and torso
- **Multiple compartments:** better distribution of the bag weight, keep items secure, and ease access to the contents
- **Compression straps:** stabilise the articles and compress the contents so that the items are as close to the back as possible. The straps are located on the sides or bottom of the backpack

And what about those schoolbags with wheels? These may indeed reduce the need to carry heavy weight, however if a wheeled bag is chosen, be sure that the extended handle is long enough so that the child is not forced to twist and bend. Rolling backpacks may present problems when a child must twist and bend their body to get them up and down stairs or fit them into cramped locker spaces.

Lockers are a very useful solution in a lot of cases, as they reduce the need to carry a heavy schoolbag if books etc can be left in school. However the lack of space and cost of lockers are common problems faced by many schools and pupils. A number of schools have recognised that children have a heavy load to carry and many actively promote the use of specially designed school bags to minimise the risk of back injury. In general parent groups and schools need to come together and decide how to approach this matter. For example, specifying which books are needed on a particular day, so that pupils are not carrying in heavy books that are then not used is essential.

It is a well known and highly publicised fact that many adults suffer from severe back pain. In many cases the causes of this pain can be traced to bad habits in childhood or adolescence. Schoolbags can be a major contributing factor to this back pain in later life. Therefore it is important that the issues above are addressed by schools and parents.