



## Common disability sports injuries

### Same rewards, same risks

Everyone benefits from playing sports. The improvements in physical health, the emotional rewards of setting and reaching goals, the strong bonds formed by engaging with a community of athletes—these benefits can enrich the lives of everyone who competes or plays for fun, regardless of physical or intellectual challenges they may face.

An estimated 12 percent of school-aged children in the United States are physically challenged, and there are more than 3 million children with physical and mental disabilities involved in organized athletics. Although many physically challenged individuals can compete at the highest levels, some people with physical disabilities need to be more cautious and even adapt their equipment or approach to training to avoid injury. For athletes with intellectual challenges, there may be barriers to full participation—such as limited attention spans, communication difficulties and problems with motivation—that need to be considered in order for them to take part in sports safely.



## Player Safety

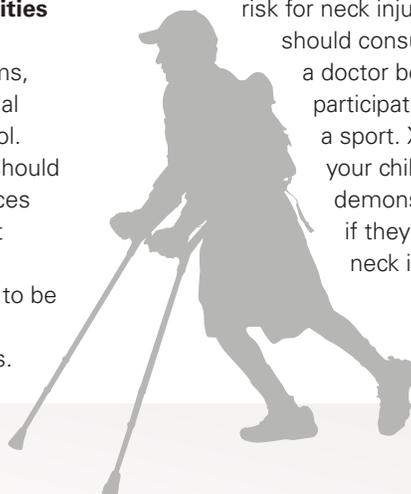
### Common accidents, serious injuries

**For wheelchair athletes** the most common injuries are sprains and strains related to overuse of the upper extremity muscles (shoulder, elbow and wrist).

**Athletes with intellectual disabilities** may have decreased or altered attention spans, behavioral problems, communication difficulty, poor social interaction and poor impulse control. Individuals with these challenges should be monitored closely during practices and games. Behavior management strategies, developed by coaches, teachers and doctors, have shown to be effective in reducing injuries in children with intellectual disabilities.

**Down syndrome** is a common cause of mental disability and is typically associated with loose joints and ligaments (laxity). Children with Down syndrome may be at increased risk for neck injuries, so they should consult with a doctor before participating in a sport. X-rays of your child's neck can demonstrate if they suffer from neck instability.

**Equipment and facilities** may need to be adjusted to help athletes with disabilities compete. Some physically challenged athletes may, for example, need ramps or automatic doors to safely take part in exercise or sports.



# How can you prevent disability sports injuries?

## Know your athlete

When choosing a sport or activity, consider possible limitations of an athlete's physical, behavioral and cognitive (thinking, reasoning, remembering) abilities. They must also know if their chosen activity provides them with the right equipment, accessible facilities and instructional support. While there may be obstacles, thoughtful program design and support from coaches, teachers, parents and primary care physicians can help athletes to fully participate and play their best.

Work closely with the athlete during workouts and games, and engage in regular and open communication about how the athlete feels both physically and mentally. Also, get to know an athlete's doctor, counselor or therapist. The more you know, the better you'll be able to monitor conditions and reduce the risk of injury.

## What to play?

International athletic organizations provide competitive opportunities for athletes who are blind and deaf, those with cerebral palsy, athletes who are wheelchair-bound and many more. Created for children with physical disabilities and visual impairment, the Paralympics offer a range of summer and winter sports, including many sports designed for athletes with specific disabilities (e.g., wheelchair rugby, sitting volleyball), and the Special Olympics—for children with intellectual disability, age 8 or older—has provided training and competitive opportunities to millions of athletes with intellectual disabilities since its founding more than 40 years ago. In addition, many athletes with disabilities compete and perform at a high level in non-disabled leagues and groups.

## Let's Get Physical

**In the United States, the rates of participation in physical activities are low for those with and without disabilities.**

When people are active, they can reduce their risk for obesity, heart disease and a host of other problems. What's more, the concentration and discipline required to take part in athletics have been shown to help control behavioral problems in some athletes. Also, choosing a physically active life can increase emotional well-being and self confidence while the reducing risk of stress and depression.

For individuals who have physical and mental challenges, sports and exercise may be even more beneficial than for people without mental and physical challenges. Through sports and exercise, disabled individuals can see an increase in independence and improvements in the way they face the challenges of everyday life. With better physical health, they may also find that they can take on more personal and professional pursuits with less assistance. In fact, through regular participation in sports or exercise, people who live with mental and physical challenges may feel more confident, more content and more engaged in the world.



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This piece is part of an informational series on sports injury prevention produced by the Orthopedic Center/Sports Medicine Division at Boston Children's Hospital. For materials on preventing injuries in other sports, call 617-355-3501 or visit [bostonchildrens.org/sportsmed](http://bostonchildrens.org/sportsmed).



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