



This fact sheet explains the important role that adaptive sports and recreation can play after a spinal cord injury (SCI). It also describes different types of sports equipment and points out some health problems to watch for as you participate in sports activities.

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## Introduction

If you have an SCI, adaptive sports and recreation may be key to your lifelong wellness. These activities may also help you to engage with your community. Many options are available:

- ◆ Outdoor recreation activities (for example, adaptive kayaking, fishing, or snow skiing)
- ◆ Performing arts (for example, adaptive dance group)
- ◆ Individual sports (for example, wheelchair racing or hand cycling)
- ◆ Team or competitive sports (for example, wheelchair basketball, wheelchair tennis, quad rugby, or sled hockey)



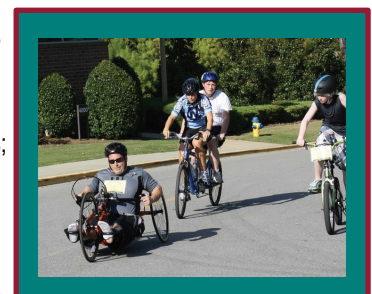
Even if you have never taken part in sports before, you can find an adaptive activity that is right for you!

## Importance of Adaptive Sports and Recreation

An SCI does not have to keep you from being active. Adaptive sports and recreation are good for your health. Without such activity, you may be at higher risk for physical and mental health problems, such as obesity, heart disease, and depression. You may also feel left out if you do not engage in enjoyable activities. Others may assume that you cannot be active just because of your injury.

Adaptive sports and recreation can help you get past these challenges. People with SCI who are involved in adaptive sports and recreation in the community are more likely to

- ◆ maintain a positive mood and prevent depression;
- ◆ feel more included and empowered in their communities;
- ◆ connect with positive mentors and peers with SCI; and
- ◆ hold a steady job.



But most of all, adaptive sports and recreation give you a chance to do fun activities with your family and friends.

## How To Get Involved in Adaptive Sports and Recreation

You can get involved in adaptive sports and recreation! Here are some tips to make it easier:

1. Think about your goals for participating in adaptive sports and recreation. Goals will be different for everyone. Here are some examples:
  - ◆ To do something with your family and friends that everyone will enjoy
  - ◆ To make friends by joining a sports team
  - ◆ To become physically fit and improve your health
  - ◆ To live an active life and enjoy the outdoors
  - ◆ To experience the thrill of competing

Keep your goals realistic and attainable. Ultimately, the goal of adaptive sports and recreation is to have fun and get out there!

2. Think about a location that is best for you to get involved in adaptive sports and recreation. You should consider your level of mobility, options for transportation, and how far you want to travel. Also think about whether you want to participate individually, on a team, or with family and friends.
3. Next, check out local resources. It may help to learn about all the options in your area so you can decide which one is best for you. Please see the section called “Adaptive Sports and Recreation Resources” for ideas.

Finally, try it out! Remember, it often takes time to learn a new skill. This may be true whether you are getting involved in adaptive sports and recreation for the first time or returning to sports after an SCI. If you don't like the activity you chose or don't feel successful at first, don't give up. You may find your activity more fun and fulfilling once you gain more skill and feel part of the adaptive sports community.



## Importance of Mentorship

Having a mentor may help you get started in a new activity, such as sports and recreation. Whatever sport you choose, there are likely other people with SCI who have tried and succeeded in that sport! A mentor can “show you the ropes” and help you to work on any challenges. If you can't find a mentor in your area, you could check out a magazine or blog that focuses on adaptive sports. The section below on “Adaptive Sports and Recreation Resources” lists some options.

## Types of Adaptive Sports Participation

You can choose from many types of adaptive sports and recreation. You may just be looking for fun, or you may want to compete. Here are some options to explore:

1. Community-based and nonprofit organizations may offer programs at no or low cost.
2. Every state has a parks and recreation association. Some focus on adaptive outdoor recreation. Examples include fishing, hunting, water skiing, or canoeing/kayaking.
3. Public schools must offer physical education and school-based sports to every student. Contact your local school district to find out about adaptive sports programs.
4. Many colleges and universities have adaptive sports programs. Examples include wheelchair basketball or track and field. Scholarships may be available to top athletes. Advocates are trying to get the National Collegiate Athletic Association (or NCAA) to sanction adaptive sports.
5. Paralympic sports highlight the skills of athletes with disabilities. People with SCI at all levels of function have the opportunity to compete.



## Adaptive Sports and Recreation Resources

Sometimes just knowing where to find the tools you need to succeed may help you get involved in adaptive sports and recreation. Here are a few tips.

### Organizations

1. Disabled Sports USA (DSUSA): DSUSA is a large membership organization with chapters across the United States. DSUSA leads a variety of adaptive sports programs for people with different types of disabilities, including SCI.  
<http://www.disabledsportsusa.org>
2. U.S. Paralympics Sports Clubs: Paralympics Sports Clubs offer entry-level competitive adaptive sports to athletes of all ability levels.  
<http://findaclub.usparalympics.org>
3. BlazeSports America: BlazeSports is based in Atlanta, GA, and provides adaptive sports and recreation programs regionally and internationally. Their goal is to make sure that youth and adults with disabilities have the same recreation opportunities as others.  
<http://www.blazesports.org>
4. Adaptive Sports, USA: ASUSA is also a membership organization focused on providing adaptive sports opportunities for youth with disabilities, including SCI.  
<http://www.adaptivesportsusa.org>
5. Rehabilitation Hospitals: Many rehabilitation hospitals support adaptive sports and recreation programs. Be sure to check out rehabilitation hospitals in your region or state to see if they have a sports program.



### Magazines and Web Sites

1. *Sports 'N Spokes*: This magazine covers recent and upcoming events in adaptive sports and recreation.  
<http://pvamag.com/sns/>
2. *Mpower Sports and Recreation*: This website highlights interesting stories about adaptive sports and recreation.  
<http://mpower-sports.com/category/home/>

### Equipment

Some local and national organizations, such as the ones listed here, help qualified applicants get sports equipment such as a sports wheelchair. It is important to try out and identify the equipment that works best for you before purchasing it.

1. Challenged Athletes Foundation: The Challenged Athletes Foundation provides grants for sports equipment to individuals with various types of disabilities. You can learn more at [www.challengedathletes.org](http://www.challengedathletes.org).
2. Kelly Brush Foundation: The Kelly Brush Foundation's goal is to break down the financial barrier to living an active lifestyle for individuals with SCI. You can learn more at <http://kellybrushfoundation.org>.

## How Do Competitive Adaptive Sports Work?

Adaptive sports and recreation are activities that anyone can do, regardless of their level of physical ability. This includes people with SCI. This section provides information regarding how competitive adaptive sports are organized.

## Types

In general, there are two types of adaptive sports:

1. Sports adapted to meet the needs of people with disabilities. For example:
  - a. Wheelchair basketball
    - ◆ Wheelchair basketball is played on a regulation basketball court using similar rules, with a few differences. For example, if a player pushes his/her sports wheelchair more than twice before dribbling, a “travel” foul is called.
  - b. Wheelchair tennis
    - ◆ Wheelchair tennis is played on a regulation tennis court using similar rules, with a few differences. For example, the “two-bounce rule” allows up to two bounces of the ball before a player must hit a return.
2. Sports created especially to be played by people with disabilities. For example:
  - a. Quad rugby
    - ◆ Quad rugby is a competitive team sport specifically designed for tetraplegic athletes.



As you can see, there are plenty of sport and recreation opportunities for people with SCI.

## Classification

In competitive sports, people with disabilities can be placed in “classes” that match their functioning ability. This system was set up so athletes only compete with other people in a similar class. This way, the competition is fair and the best athlete wins, not the athlete with the most physical function.

In team sports, athletes are assigned a class, or “point” value, based on their physical function. Players with higher physical function are assigned higher point values. A team is then made up of several athletes whose total points cannot exceed a certain threshold. This ensures that the team includes people of all ability levels.

More information on classification can be found here: [http://www.paralympic.org/sites/default/files/document/120716152047682\\_classificationguide\\_2.pdf](http://www.paralympic.org/sites/default/files/document/120716152047682_classificationguide_2.pdf)

## Sports Wheelchairs 101

Not everyone who has an SCI uses a wheelchair. For those who do, finding the right sports wheelchair can be tough, financially and otherwise. Almost every sport has its own type of chair. There are racing chairs, basketball chairs, tennis chairs, adaptive skis, and more. The two most common types of sports wheelchairs are rigid/custom fit or adjustable. If you know that you are going to be playing just one sport, you may want a custom chair. If you are new to a sport or plan to play multiple sports, an adjustable chair may be best.

Often, purchasing your own sports wheelchair is a step to take only after you become experienced in a sport. Many adaptive sports programs have chairs that you can borrow or rent simply to try it out. If you do decide to purchase a sports wheelchair, you will need to work with a manufacturer to select the chair that’s right for you. You should be fit for your chair by someone familiar with the sport you will be playing and the chair you want to purchase.

Here are a few examples (and there are many more):

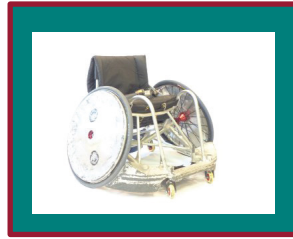
**Racing Chair**



**Basketball Chair**



**Rugby Chair**



**Tennis Chair**



## Sports Injury Prevention

Overall, for most people the health benefits of sports participation outweigh the risks. That said, it is important to be aware of how to prevent sports injuries. Injury risk varies depending on what sport you are playing, however here are some things to keep in mind:

- For wheelchair users, the area most affected by injury is the upper extremity, particularly the shoulder. If you begin to experience shoulder pain or other symptoms while participating in adaptive sports, be sure to tell your therapist or physician.
- All people with SCI who are participating in sports should implement a basic shoulder injury prevention program. For more information on how this can be developed, a resource is "Life on Wheels" from the National Center on Health, Physical Activity and Disability (NCHPAD): <http://www.nchpad.org/1200/5830/Life-on-Wheels>.
- For more information on injury prevention, please see the section on "Overuse injuries" in the factsheet titled [Exercise After SCI](http://www.msctc.org/sci/factsheets/Exercise_after_SCI) ([http://www.msctc.org/sci/factsheets/Exercise\\_after\\_SCI](http://www.msctc.org/sci/factsheets/Exercise_after_SCI)).

## Be Aware of Other Potential Health Problems

Adaptive sports and recreation should be fun and safe. But problems and injuries can occur, for example:

- ◆ Skin breakdown
- ◆ Difficulties with regulating body temperature
- ◆ Orthostatic hypotension
- ◆ Autonomic dysreflexia
- ◆ Broken bones

For information on these problems and how to prevent them, see the factsheet titled [Exercise After SCI](http://www.msctc.org/sci/factsheets/Exercise_after_SCI) ([http://www.msctc.org/sci/factsheets/Exercise\\_after\\_SCI](http://www.msctc.org/sci/factsheets/Exercise_after_SCI)).

## Authorship

Adaptive Sports and Recreation was developed by Cheri Blauwet, M.D., and Jayne Donovan, M.D., in collaboration with the National Center on Health, Physical Activity and Disability (NCHPAD) and the Model Systems Knowledge Translation Center. Credit for these images goes to Lakeshore Foundation and NCHPAD.

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