

# A LAYPERSONS GUIDE TO WHEELCHAIR RUGBY CLASSIFICATION

## Functional Classification



Classification is a unique and integral part of sport for persons with disabilities. The purpose of classification is to ensure fair and equitable competition at all levels of sport and to allow athletes to compete at the highest level, regardless of individual differences in physical function.

Classification systems have been in use in sport for persons with disabilities since the mid-1940s. The early classification systems were based on medical diagnoses, such as spinal cord injury, and were not specific for the unique functional demands of each sport. However, more recent transitions from medical classification to sport-specific classification systems have resulted in functional classification, where class is based on an athlete's functional abilities specific to the physical demands of each unique sport. Functional classification systems ensure that athletes with a combination of impaired or absent upper and lower limb movement have an opportunity to play the sport and that the strategies and skills of competing teams and athletes, rather than the amount of movement of the athletes, are the factors determining success in competition.

## The IWRF Functional Classification System

Wheelchair Rugby, with roots in wheelchair basketball and ice hockey, began in Canada in the 1970's as a counterpart to wheelchair basketball for persons with tetraplegia or tetra-equivalent function. The first classification system was medically based and there were three classes, largely determined by medical diagnosis and level of spinal cord injury. In 1991, the system was changed to a functional classification system unique to the sport of wheelchair rugby. This was done for many reasons, including the need to have a system that would accommodate the growing number of athletes both with and without spinal cord injury (such as polio, cerebral palsy, muscular dystrophy, multiple sclerosis and amputations).

## The Classification Process

Wheelchair rugby athletes, because of the unique and varied nature of their muscle function, demonstrate combinations of varying stomach, back, chest, arm and leg movement in performing the wheelchair rugby skills of ball handling, such as passing, catching, carrying, and dribbling; and wheelchair skills that include pushing, starting, stopping, directional changes, tackling and blocking.

To determine an athlete's class, classifiers observe athletes as they perform a variety of these movements. Firstly, classifiers test athletes' limbs for strength, flexibility, sensation, and muscle tone; and athletes' trunks (abdominal and back muscles) for balance, ability to bend over and rise up and the ability to rotate to both sides (in combination with leg function, if present). The athlete is then observed performing both ball handling and wheelchair skills prior to game play and during game play, if necessary. In addition, the athlete's execution of ball and wheelchair handling skills are observed on court during actual game play.

Typically, an athlete is assigned a class following the completion of the bench test and the functional skills test prior to game play (observation of ball handling and wheelchair skills). The athlete's execution of ball and wheelchair handling skills are observed on court during actual play to make a final determination of the athlete's class.



Occasionally, an athlete presents with characteristics of two classes (for instance, following bench and functional skills tests, the athlete appears to fall between two classes). Standard practice in classification is to assign the athlete the higher class to begin competition and leave them “in review” for observation during game play. Review status is indicated by the letter “R” following the athlete's class number (such as 1.0R). Observation of the athlete's function on court during actual game play would be the final determination of the athlete's class. The classification panel attempts to make these decisions as quickly as possible, however, it is dependent on having the opportunity to adequately observe the athlete during competition. If an athlete does not have an opportunity to play a sufficient amount of time during the game, the athlete may not get a final class determination. In some cases when an athlete does not get adequate playing time throughout the tournament, the athlete may conclude the tournament under review (in this case, following the tournament the athlete will still have a class number followed by an R, such as 1.0R).

For example, an athlete appears to be between two classes following the bench and functional skills tests—based on the bench test and functional skills test the athlete functions in some areas like a 0.5 athlete while in others like a 1.0 athlete. In this example, the athlete would begin play as a 1.0R athlete, which indicates the athlete has a 1.0 class but is still under review. Observation of the athlete's function on court during actual game play would determine whether the “R” or review is removed and whether the athlete's final class was 1.0 or 0.5.

### Player Responsibilities

It is responsibility of both players and coaches to be educated about the classification process and the proper procedure. Athletes are responsible for arriving at the classification area at their assigned times and in their playing chairs with gloves, straps and any other equipment that they use during play. Equally as important, the athlete must give full effort and cooperation. Any athlete perceived as not fully cooperating with the classification process may sustain penalties such as:

- May not be given a classification, thus be ineligible to play
- May be disqualified from a tournament, thus be ineligible to play
- May have their class changed at any time
- May not be awarded an international class

In the event that an athlete enters the classification area under the influence of any performance altering substance, the athlete will be asked to leave without receiving a classification and therefore will not be eligible to play.

### Team Point Totals

There are seven classes ranging from 0.5 to 3.5 with functional characteristics identified for each athlete class. In general, the 0.5 class includes those athletes with the most disability and the 3.5 class includes those athletes with the least disability or “minimal” disability eligible for the sport of wheelchair rugby.

In international wheelchair rugby the total number of points allowed on court at any time is 8.0. That is, the total points of all four athletes actually playing cannot exceed 8.0 points. A team may play with a lineup that totals less than 8.0 points, but not more.

## Class Profiles



To be eligible to compete in Wheelchair Rugby, an athlete must have an impairment caused by a verifiable and permanent health condition leading to activity limitation that impacts sport performance in Wheelchair Rugby (ICIDH-2, 2000; IPC Classification Code, 2007).

Wheelchair Rugby is a sport originally developed for athletes with tetraplegia due to spinal cord injury and neuromuscular conditions such as poliomyelitis. Now, there are athletes participating in Wheelchair Rugby with conditions other than spinal cord injury and poliomyelitis, such as muscular dystrophy and various types of central and peripheral

nervous system conditions.

Also, athletes with conditions, such as multiple amputations, congenital limb defects and other similar musculoskeletal conditions are playing Wheelchair Rugby. Athletes with conditions other than neurological impairments may be eligible if the impairment type and severity results in activity limitation that impacts sport performance in a similar way to that of an athlete with tetraplegia.

**The following are incomplete descriptions providing a very general profile of each class. These descriptions are by no means complete, and an athlete may display certain characteristics of higher or lower sport classes.**

Class 0.5	
<b>Typical role on court</b>	Main role is as blocker, not a major ball handler
<b>Chair skills/function</b>	<ul style="list-style-type: none"> <li>• Because of extensive proximal shoulder weakness and lack of triceps function forward head bob present when pushing</li> <li>• Because of lack of triceps, pulls on back part of the wheel for push stroke using biceps by bending elbows; elbows are also out to side when pushing (called an “unopposed biceps push”)</li> <li>• Because of wrist extensor weakness and lack of other wrist and hand function, may use forearm on wheel for starts, turns and stops</li> </ul>
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Because of proximal shoulder weakness, arm and wrist weakness, traps direct passes on lap or bats it in from limited range</li> <li>• Bats ball using “underhand volleyball pass” for longer range pass or for shorter range pass uses “scoop pass” with the ball forward to the side uses a two hand toss</li> </ul>
Class 1.0	
<b>Typical role on court</b>	Blocker, may inbound ball, not a major ball handler
<b>Chair skills/function</b>	<ul style="list-style-type: none"> <li>• Because of proximal shoulder weakness and triceps weakness, may have slight head bob when pushing, but has a longer push on wheel (combination of push and pull on back part of wheel)</li> <li>• Because of increased strength in upper chest and shoulders, multidirectional start, stop and turn (Can turn in all directions without stopping; easier and faster turning than 0.5 athlete; but because of triceps and wrist weakness, 1.0 athlete may still use forearm)</li> </ul>
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Forearm or wrist catch</li> <li>• Weak chest pass or forearm pass</li> </ul>
Class 1.5	
<b>Typical role on court</b>	Excellent blocker and also may be occasional ball handler
<b>Chair skills/function</b>	Increased shoulder strength and stability allows for more effective and efficient pushing ball handling skills
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Increased shoulder strength and stability allows for some distance and consistency to chest pass</li> <li>• Typically has wrist imbalance that causes limited ball security when passing</li> <li>• May have asymmetry present in arms. If so, predominantly uses the stronger arm for chair and ball skills</li> </ul>

Class 2.0	
<b>Typical role on court</b>	Increasing role on court as ball handler
<b>Chair skills/function</b>	Typically has very strong and stable shoulder that allows for good pushing speed on court
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Effective chest pass with control over moderate distance</li> <li>• Because of lack of finger flexion, there is limited ball security against defense during passing</li> <li>• Can hold the ball with wrists firmly, but does not have hand function</li> </ul>
Class 2.5	
<b>Typical role on court</b>	Ball handler and fairly fast playmaker
<b>Chair skills/function</b>	<ul style="list-style-type: none"> <li>• Because of excellent shoulder strength and stability will see good pushing speed on court</li> <li>• Functional grip is used to advantage on the pushrim when challenged</li> <li>• May have some trunk control giving better stability in the chair</li> </ul>
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Reasonably balanced finger flexion and extension without true grasp and release</li> <li>• Dribbles the ball safely, but supinates forearm to scoop the ball onto the lap</li> <li>• Due to finger flexion strength capable of performing onehanded overhead pass, but limited accuracy and distance because of imbalance in finger strength</li> <li>• Safe two handed catching of passes, usually scooping ball to lap. May catch passes single handed and scoop to lap or chest</li> <li>• Improved ball security compared to 2.0 hand due to improved ability to isolate wrist/finger function</li> <li>• May have asymmetrical arm or hand function, noticeable with chair and ball handling skills</li> </ul>
Class 3.0	
<b>Typical role on court</b>	Very good ball handler and fast playmaker
<b>Chair skills/function</b>	<ul style="list-style-type: none"> <li>• Because of balanced finger function, athlete can grip wheelchair rim increasing pushing speed</li> <li>• May have some trunk control giving better stability in the chair</li> </ul>
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Because of function in fingers, can control ball in varying planes of movement for passing, dribbling, catching and protecting ball during these activities</li> <li>• Can dribble and pass ball well with one hand</li> <li>• Multiple dribble one handed with control</li> <li>• Stabilizes with the opposite arm to allow greater reach (if the athlete has no trunk function)</li> </ul>
Class 3.5	
<b>Typical role on court</b>	Major ball handler and very fast playmaker. Often primary ball handler and playmaker on team
<b>Chair skills/function</b>	Has some trunk function, therefore very stable in wheelchair and able to use trunk for ball and chair skills
<b>Ball skills/function</b>	<ul style="list-style-type: none"> <li>• Because of combination of hand and trunk function, usually has excellent ball control with controlled one hand passing for distance and excellent ball security during passing and receiving</li> <li>• May have asymmetrical arm or hand function, noticeable with chair and ball handling skills</li> </ul>