

TOP 5 Strength Exercises for Rugby

By

Jason Shea PICP Level IV, CSCS and Dave Gonzalez M.Ed., CSCS

As Rugby's popularity is increasing in the U.S. and worldwide, it is no longer viewed as an "old man's game" reserved for beer drinking weekend warriors. In contrast, this "gentleman's game" has become a serious sport offering professional contracts, national teams, and serious competition at both the high school and college levels. So fast is the growth of this sport that YMCA's are even offering Rugby development programs for pre-teens.

With athletes becoming bigger, faster, and stronger due to better strength and conditioning practices, the level of competition continues to rise. In order to gain a competitive advantage, physical preparation has become an intricate part of the game. In most contact sports, when given two teams with equal skill set, the more physically prepared, better conditioned team usually wins out.

The demands of this sport require maximal output of all of the body's energy systems. Athletes looking to compete in rugby at the highest level often underestimate the challenge of strengthening and conditioning their body's properly. The expertise of a qualified strength and conditioning coach can dramatically increase the efficiency and effects of a team's training. As many athletes today understand, there is much more to playing rugby than just showing up for matches. Time is easily stolen by travel, sociables, work, classes, and study, leaving scant time for strengthening, conditioning, pre-hab and rehab.

Maintaining and developing specific match fitness is a key priority for any team. Players need to ensure that they are following adequate training prescriptions. The exercises listed here are a mainstay in our rugby strength and conditioning program and ensure the athletes are able to compete against the highest levels of competition both on a local and national level.

1. **Tire Flipping:** The start position of correctly performed tire flips is similar to that of a scrum position, in that the torso is nearly parallel to the ground. To initiate the flipping movement, powerful forward drive of the hip extensors is required, while keeping the torso rigid and flat. Once the tire reaches hip height, powerful triple extension as seen in sprint accelerations or tackling is required to build enough momentum to dip into the final push position. The final push and flip requires powerful shoulder, tricep, low back, leg, and pectoral strength/power. Other benefits include:
 - **Elbow flexor strengthening:** The elbow flexors are required for tackling, ripping, and maintaining possession of the ball. When tire flips are performed correctly the elbow flexors are worked as stabilizers and should not be used as prime movers, so as to avoid excessive strain or tears.

- **Grip Strength:** After a hard session of tire flips most athletes comment on the forearm and grip muscle soreness the next day. During the initiation of the movement, the grip musculature is eccentrically loaded resulting in delayed onset muscle soreness (DOMS) usually peaking 48 hours after the training session.
- **Core Strengthening:** A 2008 study performed by McGill et al showed high degrees of trunk muscle activation during tire flips and other strongman training modalities.
- **Anaerobic Training:** After a few consecutive intensive reps with a heavy tire most athletes will feel the need for a quick breather.
- **Mental Toughness:** The challenge of getting a heavy tire up and over for a single rep can be daunting, never mind the thought of performing multiple consecutive reps without rest.

2. **Standing Overhead Pressing:** Shoulder injuries are prevalent in rugby, especially at the novice levels, as wrap tackling technique is often traded in for football style hitting. To prevent injury, shoulder strength and structural balance needs to be optimal. The standing overhead press not only strengthens the shoulders and triceps, but also requires low back and core stabilization to perform effectively. For example, if the low back is weak, the brain can send an inhibitory message to the shoulders to shut down in order to avoid serious injury to the back.

Strong, structurally balanced shoulders can provide a sense of security to athletes competing in contact sports. If the shoulder is healthy, the athlete knows they can lower their shoulder and tackle with “bad intentions” without risk of serious injury. Variations of overhead pressing include: log presses, varied grip positions, behind the neck pressing, dumbbell presses, or push press.

3. **Front Squats:** The athletes who can accelerate the best over 5-10 yards in field sports are usually the most successful at their given positions. Now think for a moment, what sport comes to mind that requires quite possibly the greatest amount of ***horizontal*** acceleratory ability? If you guessed Bobsledding, then you are correct.

The average 2 man Olympic level bobsled team can accelerate a 384lb (minimum weight) sled over a 50 meter track in roughly 6 seconds or less. Strength standards and performance requirements to be considered for the Canadian National Bobsled team are:

- 3.8-4.00s 30m sprint
- 6.8-7.00 60m sprint
- 130-150kg (286-330Lbs) Bench Press
- 100-120kg (220-264Lbs) Power Clean
- 120-140kg (264-308Lbs) Front Squat

In interviews with world renowned strength coach, Charles Poliquin, has made mention of former Olympic Medalist in the Bobsled, and current strength coach, Ian Danney, front squatting 418lbs for 2 reps at a bodyweight of 185lbs. In the sport of rugby, the faster you can

accelerate, the better your chances of breaking into the backfield, breaking tackles, and breaking the spirits of the opposition.

Correct front squat technique pointers:

- Feet hip width or slightly wider with toes pointing out roughly 15 degrees.
 - Bar resting across shoulders with upper arm parallel to the floor
 - If you do not have the wrist flexibility to use clean grip, use straps
 - Keeping torso rigid, focus on pulling elbows upward while descending. Do not let the elbows drop during the movement as this can cause wrist, elbow, shoulder, or back injury.
 - Descend until your hamstrings touch your calves
 - As you begin concentric motion, focus on driving upward with the elbows first, as this forces your torso into correct posture.
4. **Farmer Carry:** As a rugby athlete, could you use more low back, leg, shoulder, core, and grip strength? Could you also use increased ankle stability, Vastus Medialis activation (a quadriceps muscle responsible for knee stability and patella tracking), dynamic neuromuscular stabilization, and enhanced muscle endurance? If so, then Farmer Carries should be a part of your training regimen.

If you have ever tried farmer carries, then you know the physical (and mental) demands required for success. At APECS, a team building exercise we utilize is to have groups of 4-5 athletes load up a pair of farmer carry handles and go for a “field trip”. Basically, the athletes will be required to cover a pre-determined distance as a team trading off carries. As soon as one athlete finishes his/her carry, the next athlete hops right in to pick up the handles.

5. **Power Clean from just above the knee:** Used by many top Division I football programs across the country, the Power Clean is one of the most effective movements for developing powerful triple extension. As mentioned earlier in the tire flip section, powerful triple extension is a key to acceleration.

Pointers:

- Pick up a pair of Olympic lifting shoes as these can make a big difference in lift quality.
- Try not to perform more than 5 reps per set as this is a power exercise not a muscle endurance exercise. Injury potential, incorrect mechanics and decreased fast twitch excitation can result with excessively high repetition power cleans.
- Always perform proper warm-up including wrist stretches, hip mobility exercises, and technical practice.
- Save the forced stomp technique for Broadway, as this has been shown in research to potentially decrease power output by minimizing plantar flexion.

Bonus Exercise: Prowler Pushes: Understanding that Rugby is a sport that involves intensive forward horizontal drive, what better way (besides car pushes) to duplicate this movement. The prowler allows for multiple hand positions (wide, close, low, high, etc), giving the exercise even greater potential for training variation. It also allows for resistance adjustments, allowing for progress to be

tracked. Short sprints, long sprints, figure 8's, and hill work are only some of the options this valuable training tool offers.

Be sure to check us out/like us on Facebook (under APECS or Boston Irish Wolfhounds) as we are continuously providing training tips, nutrition information, and much more. Also, be sure to check out our websites www.apec-s.com or www.biwrfc.com for more information.

Enjoy, Work, andSucceed!

Authors

Dave Gonzalez M.Ed.

Dave is currently the Head Coach and Director of Rugby at both Harvard University and the Boston Irish Wolfhounds Men's Team. Utilizing his expertise and experience as both a coach and certified strength and conditioning specialist, Dave was able to guide both teams to their respective National Final 4's in 2011.

Jason Shea, M.S.

Jason is a PICP Level 4 International strength coach, CSCS, and owner of APECS. In 2011 he was hired as the strength and conditioning advisor/coach to the Boston Irish Wolfhounds. Introducing the team to the world class training methodologies learned under the tutelage of premiere strength coach Charles Poliquin, Shea was able witness the fruits of the team's labor with an appearance in the National Men's Final 4 in 2011 and continues to provide his expertise throughout the year.