

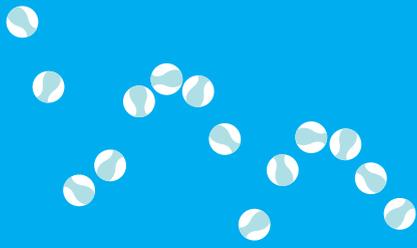
MY COACH

A SECTION DEDICATED TO TENNIS AUSTRALIA COACH MEMBERS

MyCoach

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Tennis Australia is focused on developing viable clay court options for use in elite training and high level tournament environments.



Clay crafting the modern game

With sliding, long rallies and the pure magic achieved on the red dirt, it isn't any wonder that clay has returned to the forefront of player development in Australian tennis.

By DANIELA TOLESKI

If we take a look back to the legends of the game and the top players of today, there's a common thread running almost through them all. The majority began playing tennis, and developed their game, on clay.

"History tells us that a large percentage of the top 10 players learned to play on clay courts," former head of the Australian Institute of Sport tennis program in the 1990s and current Tennis Australia's Clay Court and Development Manager Chris Kachel says.

"A clay court is a slower surface and makes more demands on the player's endurance and stamina thus strengthening these characteristics. Longer rallies are the norm meaning the tactical components of the game, variation, power, touch, point construction and concentration are challenged."

It therefore goes without saying that clay is universally regarded as the premiere surface for the development of elite champions and Tennis Australia is addressing the need to install clay courts with a clay court research venue established at the Macquarie University in Sydney.

When the dust rises

When you consider Australia's harsh climate and generally short water supply, as well as the cost of installation and maintenance, it becomes clear that it is difficult to develop and maintain sufficient numbers of international quality clay courts.

The research venue at the Macquarie University in Sydney though aims to discover the best court surfaces for Australia's climate and environment.

Currently, four courts have been developed and include an Italian clay court with a sprinkler system, Italian clay with KISSS watering system (sub surface), Har Tru Hydro court (American green clay) and Conipur all weather clay court (BASF Switzerland).

Research and development over the past two years has been focused on discovering a clay surface that suits Australian weather conditions, a surface that solidifies and does not break up with a heavy volume of play e.g. National Academy training sessions, a surface that has the playing characteristics of European clay courts, a surface where

maintenance requirements are manageable, a surface that considers water usage and a surface that could be viable for more widespread use in Australia.

Many young athletes at the National Academy in Sydney are already reaping the benefits, being some of the first players who have trialled the courts.

“I would have to say without a doubt that they are the best clay courts in Australia. I think the Italian clay suits the Australian climate ... Sydney has had some extreme weather with warm, windy and wet conditions giving the courts a real test,” Ben Pyne, National Academy – Sydney coach says.

Perfecting the art

Another element synonymous with clay is the act of sliding. Perfecting this will also give athletes an added advantage.

“Being able to slide across clay is the easy part, the tough part is being able to time the slide into the shot whilst maintaining balance to be able to swing freely through the shot and then to finish in a strong position to allow good recovery back into court. Sliding is an art and can only be mastered through spending a considerable amount of time on the surface,” Shannon Nettle, AIS Pro Tour Program men’s coach says.

“Movement is very important in the game of tennis and on clay it allows you (to do that),” Tony Roche, coach to the Australian Davis Cup team adds. “It’s a different type of movement that you do on the hard courts ... It’s important that our juniors become accustomed to this surface. But I think it just teaches you more about the game – how to develop and construct points basically.”

With clay being a surface that is most forgiving on their bodies, an athlete’s career can also be prolonged in the long run.

“Clay is a very user-friendly surface and has a lower frequency of injuries compared to most other surfaces. This is so important

“When I was a kid, I did not consider myself as a clay court specialist. But apparently since 2005, well, clay has been the surface of which I achieved the best results and which I best adapted my way to move and to play. Apparently my game is perfectly suited to this surface. I love it with all my heart, because it gave me so much joy.”

– RAFAEL NADAL *after winning the French Open title in 2010.*

for developing athletes as the much needed training volume can be done day in day out without causing too much stress on the body,” Kachel says.

Tailored for Australia

Conditions in Europe or the United States can’t be automatically replicated in Australia, but the clay court facility is helping Tennis Australia to implement a surface that is specifically suited for Australian conditions.

“I think it’s important that we get the right (clay court surface) for our conditions because as you know, the weather is a lot different in Europe than it is here in Australia,” Kachel says. “With our harsh conditions it’s important that you get the right surface to handle those conditions.”

With the final truss on the new Eastern Plaza at Melbourne Park having been put in place in March 2012, elite Australian players and juniors coming through the National Academy program will soon benefit.

The Eastern Plaza building will feature eight new indoor and 13 new outdoor tennis courts, including eight clay courts, and will also house a specialised tennis training gym equipped with an indoor running track, recovery pools and treatment rooms.

Scott Draper, Head Coach of Tennis Australia’s National Academies, said the clay courts would allow elite players and emerging juniors to train and play in tournament competitions, providing them with invaluable experience for events such as the French Open.

“(With) \$363 million being invested into the Australian Open and this sport, we’re just so lucky. The young players in this country ... for them to have the opportunities of a facility like this all right here ... I wish I was 14 again and trying to become a tennis player,” he said.

“Clay really is just so good for player development. I guess the tactics of the game, the sliding, the physicality, the mentality of the game – it’s a wonderful surface, and it’s something that we really want to grow in this country. For us to be able to put some new clay courts right at this facility is just extraordinary for these young kids.

“A facility like this really can just inject that enthusiasm and keep us on track.”

Looking further ahead, Tennis Australia is working towards constructing 12 European style clay court centres around the country, introducing a comprehensive clay court tournament schedule and constructing MLC Tennis Hot Shots courts where the art of sliding is learned from a young age.

While the installation of clay courts is a huge commitment, it’s one that’s well worth making, with the investment extending from quality playing facilities to the future of Australian tennis.

Five reasons to train on clay

1. Improved decision making as longer rallies are played.
2. Improved mental toughness and endurance.
3. Players learn to be a lot more patient.
4. A variety of shots including spins and angles are required to win points.
5. Softer surface provides less stress to the body.



COACHES' CORNER

Attract new clientele

With over 297 coaches delivering the program nationally, and participant numbers well in excess of 1600 across Australia, Cardio Tennis has certainly made its mark as the newest way of injecting tennis into our lives.

According to the Tennis Industry Association, during a Cardio Tennis session, women will burn between 300–500 calories per hour and men can burn around 500–800 calories per hour (on average).

Coaches who incorporate Cardio Tennis into their available programs are guaranteed to build a bigger and better business base and attract a whole new demographic of clientele. With this win-win system in place, we took some time to discuss how Cardio Tennis has changed Matt Bull's (Western Australia) business.

Bull is a Tennis Australia Club Professional coach with over 15 years experience in both the United Kingdom (five years) and Australia (10 years). He has been running his own business 'Tennis Factory' since 2004, spent time as the Head Professional at Nedlands Tennis Club until 2008 and then moved to Onslow Park Tennis Club in Perth during 2009.

When was Cardio Tennis implemented into your club, and why?

We have a large number of juniors playing at the club and we wanted to help grow the numbers of adults playing. Cardio Tennis appeared to be a great way to stimulate interest amongst the adults and so at the end of last year we decided to sign up to Tennis Australia's Cardio Tennis program.

How have you incorporated Cardio Tennis into your business?

Cardio Tennis is a standalone program that has been added to our morning and evening programs at the club. It's an easy-fit as Tennis Australia has done a great job of branding Cardio Tennis (website, free trial offer etcetera), which has made it easier for us to 'sell' it to our customers. Cardio Tennis also has scope to diversify including being run at schools, on corporate days etcetera.

Who is responsible for delivering your Cardio Tennis sessions, and how many coaches do you have signed up as assistant deliverers?

My Head Cardio Tennis coach is Jack Baldwin who runs most of the sessions. He has completed the online tutorial, attended professional development days in Perth and



Matt Bull (inset) has attracted a new demographic with Cardio Tennis.

also attended the Cardio Tennis workshop Michele Krause (Cardio Tennis Global Tennis Manager, TIA) ran at the Australian Tennis Coaches' Conference at the beginning of the year. He does a fantastic job and our customers love his sessions.

How has Cardio Tennis added to/changed your client and business base?

It's early days with our Cardio Tennis program but we are finding a number of our customers are becoming addicts! I believe we are tapping into a segment of the market that we previously hadn't, that being the adult who would like to get fitter and healthier whilst having fun hitting balls.

Cardio Tennis has fast become our most popular adult program, with twice as many people regularly participating when compared to our mixed and ladies' drills and coaching sessions.

It's important to note that Cardio Tennis is not drawing people away from our existing adult programs; almost all of our Cardio Tennis participants were either completely new customers or players who had participated only occasionally in other sessions.

What is your favourite thing about delivering Cardio Tennis on court?

Although I am not working as hard out there as the participants I get a massive buzz from the music and the intensity of the session. It gives you a natural high, which makes you feel great for the rest of the day. I love it!

Do you have any recommendations for coaches that are yet to get into Cardio Tennis?

Cardio Tennis is a great program, which will value-add to your business if it is run really well. You will be able to tap into a different market-segment that will help develop your customer base further. The beauty of the program is that you can schedule sessions at quieter times (it doesn't clash with your traditional busy junior coaching times in the early afternoon) therefore generates income for quieter periods.

Want to sign up? Find your nearest Cardio Tennis venue? Visit www.cardiotennis.com.au or contact your local Community Tennis Officer.

HEART RATE MONITORS THE KEY

"The beauty of the Cardio Tennis product is that it is so easy to implement with the support of visual aids that you can take on court including Activity Cards, Heart Rate charts and pre-programmed music etcetera that anyone with a decent level of enthusiasm and an ability to feed a tennis ball can deliver the product with ease.

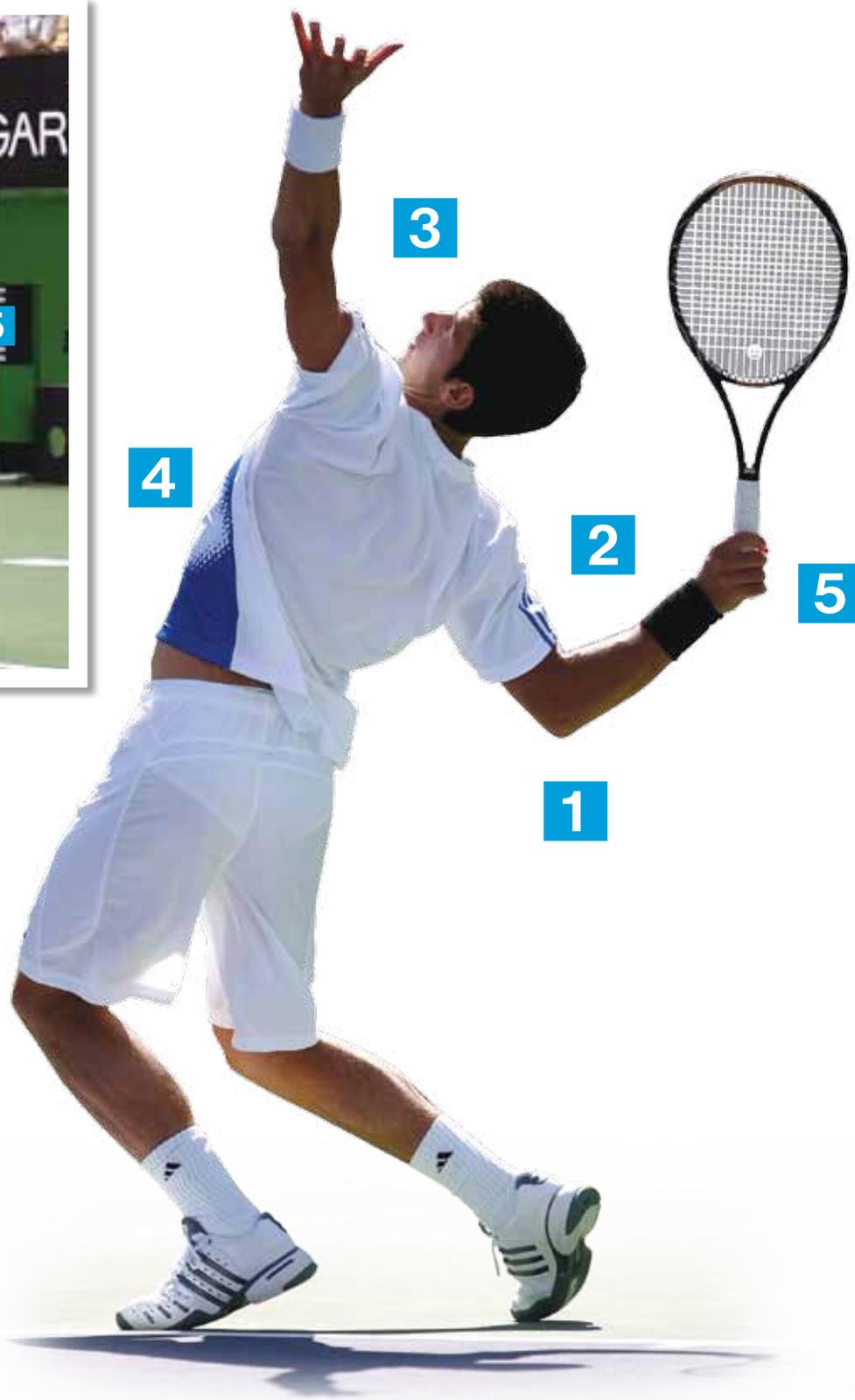
I think the heart rate monitors that all of the clients wear are going to be the secret to the success of my coaching program, as my clients will be able to observe their achievements in the form of calories burnt, average heart rates, percentage of time in a 'high workout' state etcetera, so it's not just a case of me telling my people how hard they worked and my athletes taking my word for it BUT they'll be able to see the results for themselves."

WAYNE FIELDER, *Tennis Australia Club Professional coach, Innisfail*

What do you see?

By the Stroke Master

The world No. 1 has changed, and improved, his service action. Below we break down the benefits Novak Djokovic now experiences.



- 1** Improved elbow position (90 degrees to the trunk) which allows for a more efficient throwing motion.
- 2** More effective shoulder tilt (hip extension) allows for a successful shoulder over shoulder swing path.
- 3** Head is balanced and focused on the ball toss.
- 4** Trunk is on pre-stretched to allow for greater rotation and acceleration in the forward swing.
- 5** Greater spacing between the racquet and the body to allow for an increase in racquet head speed.

A progressive training approach

Improving power development in sports is critical; tennis is no exception. To compete successfully at an elite level the capacity of a tennis player to generate optimal levels of power is critical to their performance whether it is in executing the serve, ground strokes or simply moving to position. The ability to generate sufficient levels of power consistently through explosive movement patterns will ultimately determine the outcome of the game. However, while it is fair to assume that power is one of the prerequisites to meeting the physical demands of tennis, many players, coaches, and fitness coaches, sometimes find it difficult to integrate power development into specific tennis movement where they are able to achieve the desired outcomes both physiologically and biomechanically.

This difficulty may often be related to finding an effective and workable balance between developing specific power, exercise selection and achieving efficient movement. This is where the focus on training specificity becomes important and by adopting a progressive training approach that emphasises integrating power development into specific movement patterns, in the way they are used on the tennis court across a loading spectrum, will offer a structured and measured format that will result in an effective performance outcome. In addition, it will also help reduce injury by addressing any imbalances and pre-existing conditions specific to the athlete.

Five things to think about before you get started

- 1. Understand your athlete.** In some instances this may involve conducting a brief *needs analysis* or *screening* of your athletes physical capabilities to help identify various strengths and deficiencies in terms of the style that you are wanting to play (i.e. aggressive baseliner) or quite simply the areas they need to work on (rotational power for ground strokes). This will help prioritise the areas to focus on.
- 2. Time.** Of course in the world of tennis timing is everything. To develop power initially takes time provided your athlete has a relatively sound strength base. Ideally, your aim should be to commit to a minimum of three to four weeks, two times a week of intensive training focusing on developing power followed by integrating functional power movements specific to tennis. This however can be

Figure 1. *Beginners – squat jump.*



quite challenging so prioritise your time. Also, it is best to address this during a training block phase or during ‘pre-season’.

- 3. Plan.** Know what is ahead of you and ensure that you have a clear vision of what you are trying to accomplish. With young players in particular it’s about adopting a safe and effective long-term athletic development (LTAD) approach so it’s important to understand that the development of a player will take time but it depends on how well you plan ahead and how strategically you integrate power development into movement knowing that at times plans will change, however, provided you are clear on the long-term goal your player will benefit in the long run.
- 4. Training methodology.** This is perhaps the most important aspect of achieving a desired and safe result. Having knowledge of the relationship between various physical attributes (e.g. speed, explosive power, leg stiffness, muscular strength of upper and lower power) helps and more importantly know how it ‘fits’ into a training scheme. Methods can be delivered in a simple three-tier approach based on the player’s age, experience and capabilities. These are either beginners, intermediate or advanced. With each tier the approach to power development will vary significantly from body weight exercises (Beginners, Figure 1), power bands or elevated jump heights such as box jumps (Intermediate, Figure 2) to explosive Olympic lifts and medicine ball functional drills (Advanced, Figure 3). Safety and injury prevention should be a key priority for any program so seek advice from a qualified and experienced strength and conditioning coach before commencing a program.

Figure 2. *Intermediate – box jump.*



- 5. Program design.** Designing an effective program that addresses the key components and more importantly transitions into the specific and relevant movement patterns can sometimes be difficult to balance. A program should aim to be progressive (overload), objective and target the relevant muscle groups specific to the movement.

A basic three-step approach to integrating power development into tennis specific movement

Step 1 – Develop the foundations

According to research, maximal power represents the greatest instantaneous power during a single movement performed with the goal of producing maximal velocity at take off, release or impact (Newton et al, 2011). The ability to generate maximal power is influenced by several characteristics; type of muscle action involved, storage and utilisation of elastic energy, muscle fibre type, motor unit recruitment, rate coding and synchronisation and inter muscular coordination. Specific training modalities have been shown to impact these neuromuscular factors in quite specific ways. So developing the capacity to target these areas in conjunction with increasing sport specific movement will

Figure 3. *Advanced – medicine ball broad jumps.*



Figure 4. Single leg squat jumps.



help the athlete to develop a solid strength and endurance base, train the appropriate motor skills related to the tennis movements and improve general technique. Exercises are generally performed at low loads (45–55 percent 1RM) and in single plane movements. Common exercises in this stage can include squat jumps (Figure 1), single leg squat jumps (Figure 4) or single leg bench squat (Figure 5). It is necessary that the focus remains on ensuring the right work loads are monitored, a progressive approach to the exercise selection is adopted and variations are made based on current injury issues or musculoskeletal screenings that identify imbalances.

Step 2 – Multidimensional transitioning (Functional)

Select an appropriate training mode that involves neural integration and degrees of force variation specific to the movement. For example, static lunge medicine ball throw (Figure 6). The popular use of medicine balls is commonly adopted in tennis because you can more closely mimic the range of motion, velocities, plane of movement (transverse, circular or oblique planes) and body positioning during movements, in particular they can help achieve movements at higher outputs on the force-velocity continuum.

Step 3 – Tennis specific integration

Andy Murray's fitness coach, Jeremy Greene, believes in the philosophy that the process of developing strength and power has to link the movement issues with the exercises and most importantly train the movements not the muscles. This holds true when the movements specific to tennis are performed in a closed chain environment through a kinetic chain of movements (e.g. the forehand medicine ball throw). Here the athlete begins in a wide base athletic position holding a medicine ball in front (Figure 7.1). The athlete then moves into a dynamic split step position (Figure 7.2) followed by a forehand movement into a semi open stance (Figure 7.3) throwing the medicine ball in a flat trajectory movement at considerable speed (Figure 7.4). This sequence of activation allows a peak velocity

Figure 5. Single leg bench squat.



of more proximal muscles, such as the calves, quadriceps, and glutei, to serve as prime movers and movement initiators. In essence, this type of integration allows for a variety of exercises that can be used to help the player better produce power in a variety of angles, directions and from a variety of stances.

Conclusion

In summary, while the process of integrating power development into tennis specific movement may seem arduous it is however an important factor in achieving a successful performance. Taking the time to consider the necessary stages that a tennis player should go through will remove a lot of the guesswork out of trying to discover a successful formula and more importantly it will reduce the risk of long-term injury. So, do what is best for the athlete by understanding their individual needs and execute the program in a progressive and structured manner that is specific to the player's game style that is trying to be achieved.

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Figure 6. Static lunge medicine ball throw.



Figure 7.



7.1 Wide base athletic position.

7.2 Dynamic split step.



7.3 Transfers into semi open stance.

7.4 Rotate and throw flat.

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By DANIEL BUBERIS – Physical Performance Coach with Tennis Australia National Academy

Three Stage progressive approach from power development through to tennis specific movement

STAGE 1	STAGE 2	STAGE 3
Foundation	Functional transition	Specific
2–4 weeks	2–4 weeks	2–4 weeks
4–6 exercises	4–6 exercises	4–6 exercises
3 sets x 10–12 reps	3 sets x 8–10 reps	4 sets x 4–6 reps
Squat jumps	MB static lunge throw (multi directions)	MB dynamic semi closed fh/bh
Single leg squat jumps	MB hip wall throw	MB dynamic open fh/bh
Skater jumps	MB forehand/backhand wall throws	Lateral cross over step and throw
Scissor jumps	Single leg MB arabesque lunge throw	Over head MB serve and baseline return

COACH TALK

Local Advisory Groups

What is a Local Advisory Group forum (LAG)?

The key objective of the LAG is to provide a forum for coaches to discuss coaching issues and challenges and to make recommendations on possible solutions for the tennis coaching industry in your local area. It's an opportunity to attend a forum to have your voice heard about local issues affecting all aspects of tennis and contribute to finding solutions.

Who are the LAG representatives?

Each state/territory will have a core group of representatives from metro and regional areas that will act as the voice for the full group/forum. From this group a chairperson will be appointed who will represent their state/territory on the National Coaching Advisory Group (NCAG). If an issue or challenge arises in your area, you can call on one of the LAG representatives to discuss.

How can I become a LAG representative?

Nominations for new LAG representative terms opened in April. Coach members were notified via the *CoachesWorld* e-newsletter of nominations, voting and appointment processes.

All LAG representatives must meet the following criteria:

- Must be a current Tennis Australia qualified coach member.
- When nominated must complete the nomination process (form with name, profile, jpeg image).
- Must be prepared to work for coaches and have a willingness to service coaches and the coaching industry therefore being available to attend up to two meetings and forums per year.
- Must not be an employee of Tennis Australia or state/territory Member Associations.

Who can go to a LAG?

Any tennis coach or person/s involved in tennis in the community may attend the workshop. This may include council representatives, club delegates or committee members.

How do I find out about a LAG in my area?

Visit tennis.com.au/coaches/education/workshops to find out the date of the LAG in your state/territory.



First Aid in action

"AS manager of the Warrnambool Indoor Tennis Centre I have all coaching and reception staff complete First Aid and keep this certification current with regular refresher courses. As a busy commercial centre we have a wide variety of customers, from toddlers through to the elderly, in an active environment. With the large numbers of people attending the centre, accidents will occur and staff will be the first on the scene, so their First Aid knowledge gives them the confidence and skill to deal with any situation that may arise. The knowledge also allows them to follow the appropriate protocol in a calm manner in stressful situations for the injured. This allows for a safe and professional environment for our staff and patrons." – Rob Urquhart, Tennis Australia Master Club Professional coach and Manager at Warrnambool Indoor Tennis Centre.

Tennis Australia is committed to improving the quality of coaches at all levels. From 1 July 2012 First Aid will be introduced as a compulsory requirement of Coach Membership for all qualified coach members. There are two months remaining in which you can obtain your First Aid, refer to tennis.com.au/coaches for full information on how to access a course. Send your valid certificates to Coach Membership via fax 03 9650 1040 or scan and email to coachmembership@tennis.com.au.