



SPRING 2010

PHYSIOSOUTH

PRE-SEASON CRICKET NEWSLETTER



ALL PHOTOS BY KERRY EVANS/WWW.KERRYEVANS.COM

THIS NEWSLETTER is an initiative from PHYSIOSOUTH and the Canterbury Cricket Association to provide some insight to the wider Canterbury cricket community on how to better manage and prevent injury.

Graeme Nuttridge has been involved with Canterbury and New Zealand Cricket for close to two decades. Dayle Shackel has toured with the Black Caps for 10 years and is employed 8/10s with NZC and 2/10s at PHYSIOSOUTH. Blair Jarratt is the current Wizard's physio with over 10 years clinical experience, just under half of it at PHYSIOSOUTH surrounded by injured cricketers.

We are an experienced team in managing cricket injuries and on top of that we regularly review cricket-related literature to keep up to date with the latest research.

Both Dayle and Graeme have completed Masters of Physiotherapy with research specifically related to cricket. We are here to offer you the same care and experience that the Wizards, Magicians and the Black Caps have access to.



CRICKET CLINIC

PHYSIOSOUTH is charging \$6 (usual rate \$15) per physiotherapy session (if covered by ACC) to all club registered cricketers. This offer is for cricket players only and will be honoured with evidence that you belong to a club on presentation of the "Injury Card." This holds for all our eight clinics. However specialist cricket clinics for problem injuries are available from our Cityfitness Clinics (Moorhouse and Northwood). Graeme, Dayle and Blair work from these clinics along with Simon Cutler who has played cricket at senior level. The same rate applies, but all physios at all clinics are experienced with sports injuries and are only a phone call away from an expert clinician.



CONTACT

FREEPHONE
0508 4 PHYSIO
0508 4 7 4 9 7 4

PH 332 6487
FAX 337 2052
A/H 0274 331 965

CLINIC LOCATIONS

PHYSIOSOUTH@ COLOMBO
167 Colombo Street

PHYSIOSOUTH@ CITYFITNESS MOORHOUSE
Moorhouse Avenue
Harvey Norman Building

PHYSIOSOUTH@ CITYFITNESS NORTHWOOD
Northwood
Belfast Supa Centa

PHYSIOSOUTH@ PIONEER
Pioneer Leisure Centre

PHYSIOSOUTH@ MOORHOUSE MEDICAL
3 Pilgrim Place

PHYSIOSOUTH@ KAIAPOI
Unit 6 /77 Hilton Street

PHYSIOSOUTH@ MERIVALE
152-154 Leinster Rd

PHYSIOSOUTH@ RICCARTON
4-6 Yaldhurst Rd





THREE BIG RISK FACTORS TO INJURY

The big three factors which are associated with cricket related injuries are early season; old injuries (recurrences) and loading (too much or too little). Becoming aware and managing these risk factors with a common sense type approach outlined here will go a long way to ensuring your season is not interrupted by injury.

INJURY FACTS (FROM RESEARCH ON CANTERBURY BOWLERS)

- You have a 59% chance of being injured
- If you bowl you have a 14% chance of a stress fracture
- 56% of injuries are lower limb
- 30% of injuries are to the trunk
- The average time to full recovery if injured was 9.8 weeks
- 34% required 13 weeks or more to recover
- If you have been injured previously you have a 78% chance of re-injury in the same region
- Around 41% of all injuries occurred in the first month of season commencement.

1 EARLY SEASON

The aim is to get through the season uninjured; the highest risk period is the first month (over 40% of all injuries). The problem is thought to be the difference between training and competition. Intensity increases and volume increases when you play competition. Bridging the gap is really all about doing in training, at sufficient volume and intensity, what it is you hope to do in the games. Graduate exposure to more load (volume and intensity) and get discomfort assessed and managed before it becomes an injury.

2 RECURRENCES

Old injuries come back, often many times. The recurrence rate must be related to "failure to fully rehabilitate" or risk factors to injury not addressed. Playing comfortably after injury does in no way signify full recovery. It can take months and months after an injury to build up capacity such that tissues are as good as new or better. You may also have some biomechanical reasons which produced focused load (like tight hamstrings and back pain). We recommend a screening of old injuries either pre-season or at the first sign of discomfort.

3 TOO MUCH OR TOO LITTLE LOAD

Too much and you expose yourself to injury (see the case study and bowling load chart on page 3), bowl too little and you are not prepared for higher loads when they arrive. The Australians have been at the forefront of this research and have found that an increase in stress fractures 2-3 weeks after bowling a higher than usual workload (see case study on page 3).

7 PILLARS FOR PREVENTION OF STRESS FRACTURES IN FAST BOWLERS

With summer fast approaching it means cricket season is almost upon us and pre season cricket training is about to start. It is at this stage of training that the management of the players is most important to decrease risk of injury and ensure they can perform and thrive to the best of their abilities.

The most common cause of injury in cricket is fast bowling due to the force put through the body during the delivery and follow through. With appropriate training the risk of injury can be significantly

reduced, and below are 7 steps that can be used to ensure good management of fast bowlers:

PLAYERS MUST BE SCREENED ANNUALLY

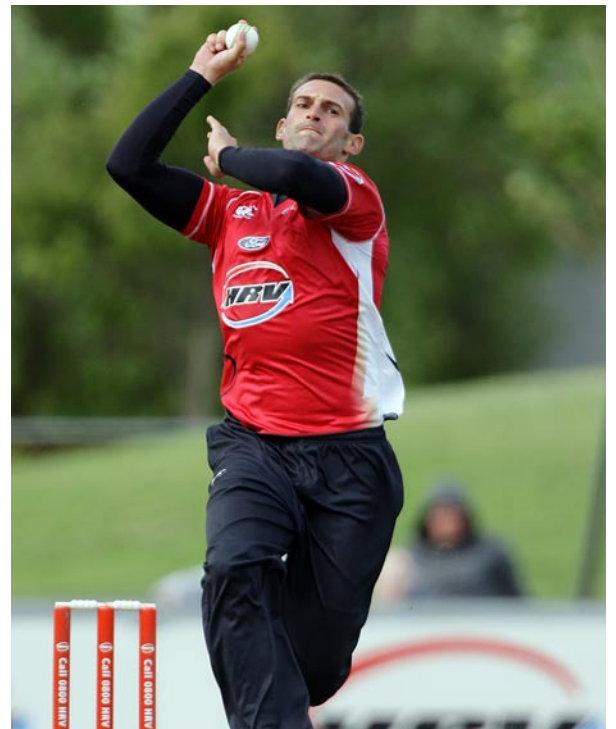
- Annual screening will ensure that predisposing factors to an injury are identified and the appropriate management can take place to decrease the risk of harm before the season starts.

USE VIDEO ANALYSIS

- Hard for coaches to detect mixed action
- The use of video analysis can slow down the action: look at it from different angles and detect the specific details of a bowler's action.

2 YEARS TO CHANGE A BOWLING ACTION

- Change in technique must be by consensus between bowler and coach
- Careful long term managed change
- Changes in action must be managed over two years – don't fix it if it is not broken.



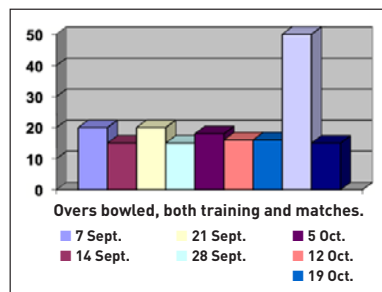
BOWLING WORKLOADS MUST BE MEASURED

- Bowlers should use bowling diaries to record the amount of balls bowled per session/game



- Bowling intensity should be at similar level to that of a game (means that the jump between practice and game is minimised)
- No more than 200 deliveries per week
- Bowlers should bowl between 2–5 sessions per week (try for 2 consecutive days off)
- Bowlers should bowl less than 520 match deliveries per month.

Below is an example of a national development level pace bowler who didn't measure his bowling loads. This resulted in him overloading in October and the consequence of this was a stress fracture in his lower back. If he managed his bowling correctly this injury would have been avoided.



BOWLER MUST BE FIT

- Bowlers should have good strength, especially in the core muscles to ensure good control and stability through their lower back.
- Bowlers should have a high level of cardiovascular fitness so they are able to maintain a controlled bowling action throughout a long bowling spell.

BOWLERS MUST BE RESILIENT

- Ability to bounce back after injury (positive rehabilitation and reintegration into bowling)
- Ability to bounce back after poor performance.

FIRST MONTH OF SEASON COMMENCEMENT IS CRITICAL

- Screening for predisposing factors to injury (video analysis)
- Gradual increase in load (the amount of balls bowled and the intensity of the bowling)
- Bowling diaries should be used to monitor the load
- Bowlers must be game fit (strength and cardiovascular fitness).

HOW I GOT MY STRESS FRACTURE A TRUE STORY THAT HAS MESSAGES FOR EVERY BOWLER AND COACH

During the season of 2009/2010

I'd had hardly any pain in my back at all (except for the occasional bit of stiffness). I'd been bowling full loads and some days would bowl around 20 overs without pain.

I went to Sri Lanka on the Willows Youth Tour in April and still hadn't had any pain. When I got back (mid April) I decided I would have about 3 weeks complete break from cricket and then I'd start training again. I was really determined to do as much training as I could over the winter because I wanted to make New Zealand 19s at the end of the year.

At the start of May I started bowling full loads straight away after my break from cricket. I have a key to an indoor centre (artificial surface) and I would go down there two or three times a week and bowl. When I was by myself I would bowl 5 or 6 overs without any break in between.

Then once a week I could go down and have a net session with another person. At the net session I would be the only bowler and I would bowl between 60–90 minutes and maybe bowl 10 or 12 overs without a break. From mid May until about mid June I would do this each week, along with basketball and fitness training.

Then about mid June I started feeling pain in my back and one session it got really bad and I had to stop bowling. I then reduced how often I bowled, usually bowling once or twice a week, but I still bowled full loads when I did bowl. However, I would often have to stop because of pain. Along with these trainings, I also had special-



ist bowling trainings with Canterbury, Canterbury Country Academy trainings and one Canterbury U18 training.

The pain continued through July and August as I kept bowling and playing basketball. Then on August 20th I had an MRI scan and found out I had a stress fracture. I think the biggest cause of my stress fracture was that I stopped bowling for 3 weeks and then started bowling full loads straight away after my break. Other contributing factors were that I was bowling on an artificial surface and that I started doing basketball training at the same time as I started doing cricket training again, which added to the stress.

FOR MORE INFORMATION please contact your nearest **PHYSIOSOUTH** clinic or call (03) 332 6487 and let us arrange an appointment for you.

