



Injury Prevention

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2026 South32 Rottnest Channel Swim





Welcome

- Past President of Rottnest Channel Swim Association
- Volunteer and member for SCA and FICS
- Sports Chiropractor
- 5 x RSC solo crossings

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AICE Sport and Exercise

AICE Sport and Exercise is Australia's national organisation for sports chiropractic and is a not-for-profit, clinical interest group of the Australian Chiropractors Association.

We help to coordinate sports chiropractic treatment at community, state and national level sporting events. We use a combination of different modalities in our treatment including soft tissue therapy (massage), joint mobilisation/manipulation, stretching, strengthening, dry needling, rehabilitation and lifestyle/performance advice.



**SPORTS &
EXERCISE**

**AICE Sport and Exercise will be on the finish line proving
complimentary post race care to all swimmers.**

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Demographic



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Overview



- What injuries can occur
- How they occur
- How to prevent them



Injury Types

- Acute injury vs **chronic injury**
- Chronic injury = accumulation of small repetitive loads placed on the body that the body is not adequately conditioned for.

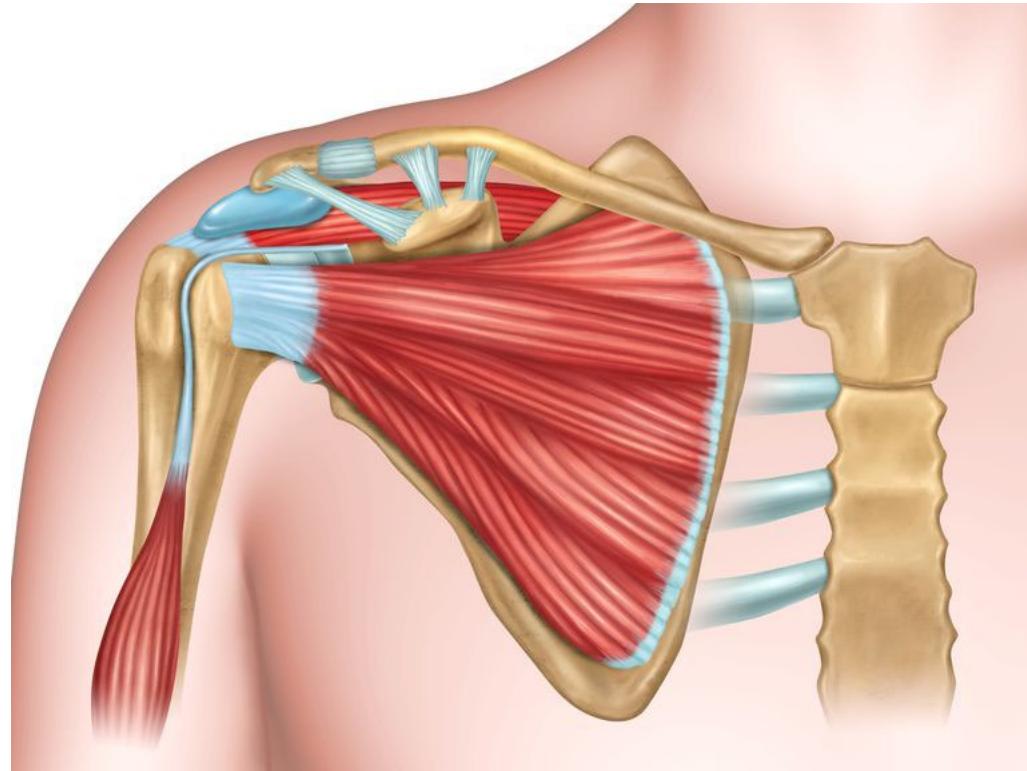


Common Injuries in Open Water

- Shoulder, neck, low back, ankles
- Shoulders are by far the most common in distance swimming



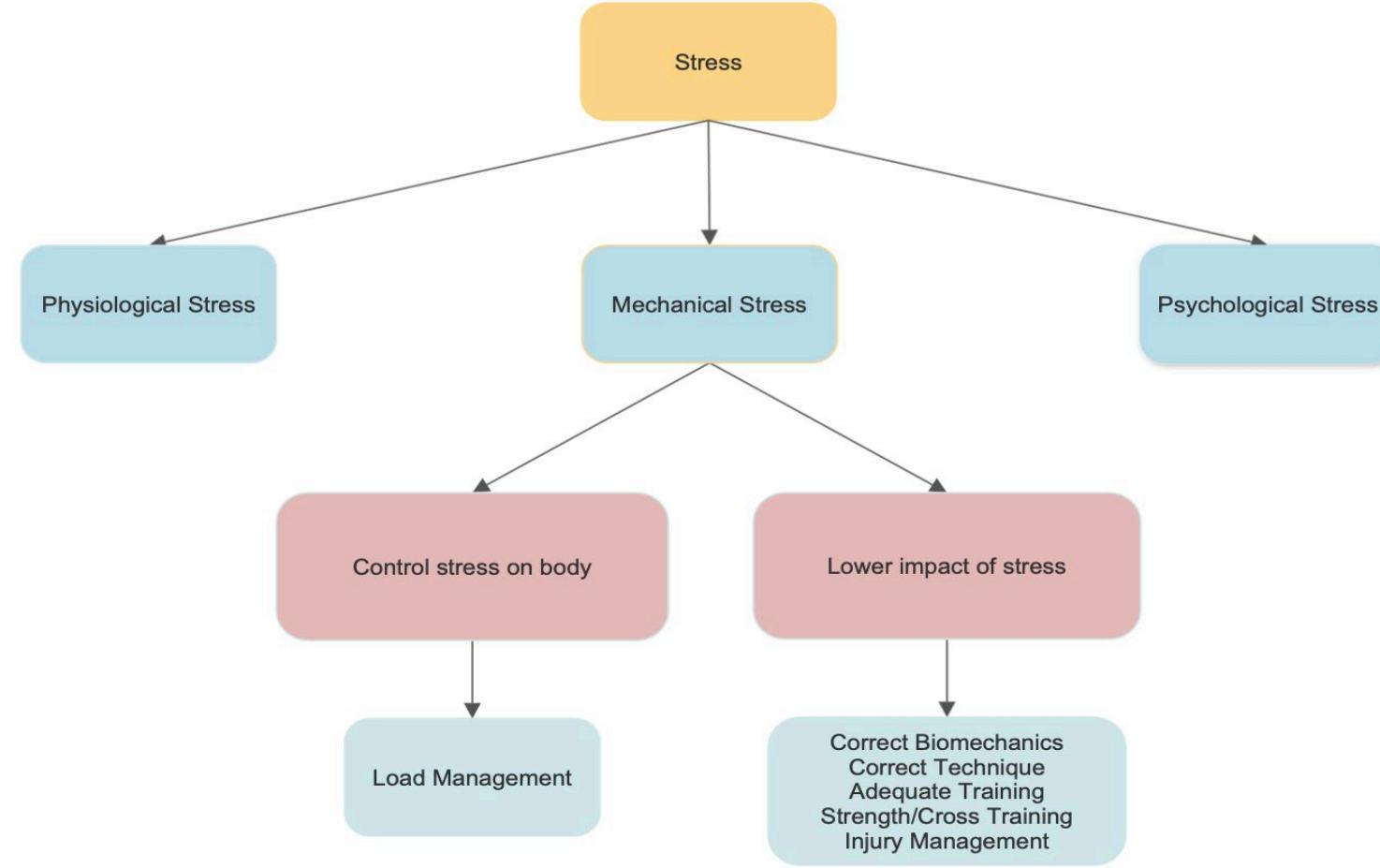
Shoulder Injuries



- Up to 90% of swimmers will suffer shoulder pain
- Shoulder is inherently an unstable joint with complex anatomy
- Most common injury is Swimmer's Shoulder



Causes of Injury





Areas of Injury Prevention

1. Load management
2. Correcting biomechanics
3. Correcting technique
4. Adequate training
5. Strength/cross training
6. Injury management



1 Load Management

Slowly and progressively increase our load as to not overload the body

Acute/Chronic Workload Ratio
=

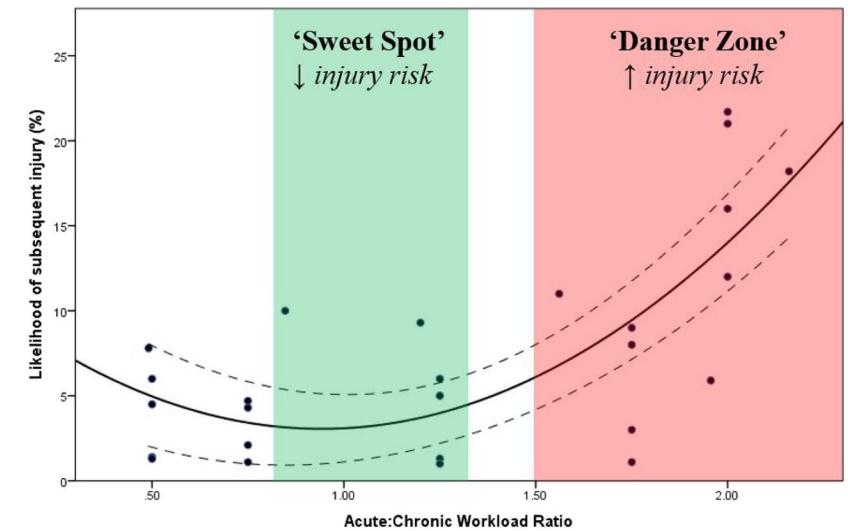
Acute Training Load / Chronic Training Load

<0.8 = deconditioning

$0.8 - 1$ = rest

$1 - 1.3$ = 'sweet spot'

>1.5 = overload



Gabbett TJ. The training—*injury prevention paradox*: should athletes be training smarter *and* harder?
British Journal of Sports Medicine 2016



1 Load Management

Example:

Acute training load 12km (week 5)

Chronic training load 6km (week 1-4)

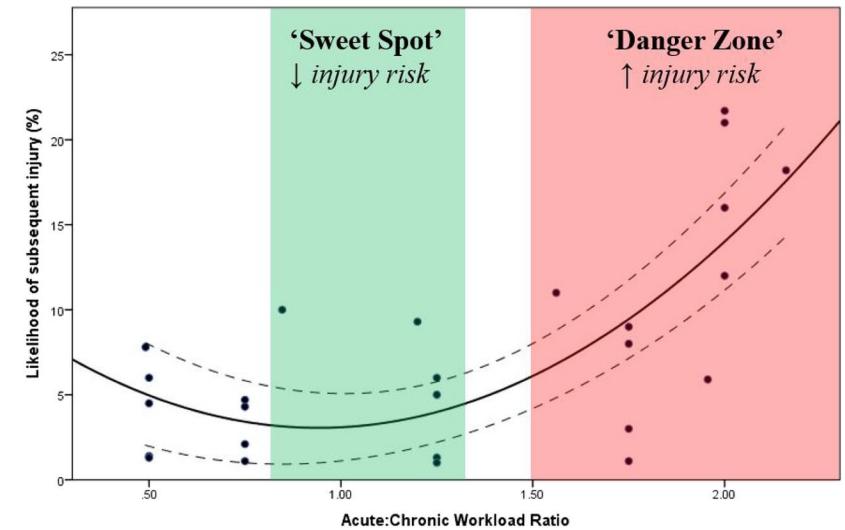
$$12 / 6 = 2 \text{ (ACWR)}$$

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2 Correct Biomechanics

- Biomechanics is how our body functions
- Issues we may encounter as swimmers:
 - Loss of range of motion
 - Instability, hypermobility, laxity
 - Scapular position
 - Altered muscle patterns (tightness/weakness)
 - Strength imbalance
 - Limited thoracic mobility
- See your medical professional





3. Correct Technique

- Importance of good technique:
 - 45 strokes per 50m, 15 breaths
 - Average training session (4km) = 3600 strokes, 1200 breaths
 - Event day (19.7km) = 17 730 strokes, 5 910 breaths



3. Correct Technique

Some areas to focus on include:

- Hand entry (neutral, not crossing midline)
- Elbow position on pull (high elbow)
- Head position (not too high, not too low)
- Pull phase (incomplete pull reduces efficiency, increases stroke rate)
- Body rotation (body roll to ensure less pressure on shoulders)
- Breathing (bilateral breathing to share load on neck and shoulders)



4. Adequate Training

- Ensure you train in all conditions
- Ocean vs pool
- Poor conditions place very different stress on the body





5. Strength/ Gross Training

Benefits of strength/cross training:

- Active recovery
- Fitness
- Mental health
- Rehabilitation





5. Strength/ Gross Training

Ideas:

- Water walking/running/different strokes
- Gym/strength-based workouts
- Running
- Yoga
- Pilates



6. Injury Management

- Please ensure you seek help if you have an injury or pain.
- The faster you seek help when pain or injury occurs, the better the prognosis
- Talk to me after if you need to be pointed in the right direction



Summary

1. Load management

Increase load appropriately and factor in recovery. Have a plan but listen to your body

2. Correct body biomechanics

How our body functions, have an assessment by a medical professional

3. Stroke correction

Bilateral breathing, correct hand entry, adequate body roll, complete pull

4. Adequate training

Train in all weather conditions and temperatures to ensure you are both mentally and physically prepared

5. Strength/cross training

Active recovery, fitness, mental status, rehabilitation

6. Injury management

Have injury assessed and managed by professional



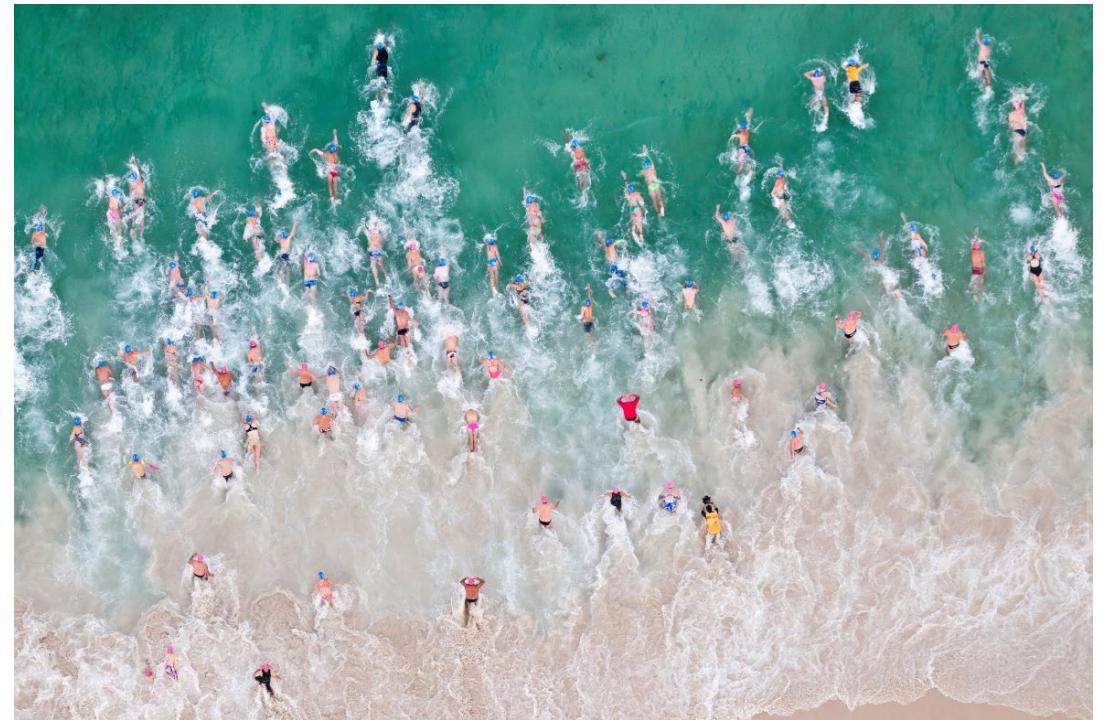


Thank You

Questions?

Any further questions, email me:

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