SCHEDULE 13: DUAL-ENERGY X-RAY ABSORPTIOMETRY (DXA)

DOCUMENT CONTROL

Name:	CA Guidelines for the Use of Dual-Energy X-ray Absorptiometry (DXA) in Australian Cricket
Status:	Active
Last Updated:	5 July 2026
Owner:	Lead Sports Performance Dietitian & Chief Medical Officer
Location:	AMS and AC Performance Services ZenDesk
Version Release:	7.0
Next Review Date:	30 June 2027
Document type (& enforceability):	Guidelines (recommendations)
Responsible parties:	Dietitians and Medical Officers
Beneficiaries:	Players contracted to a CA or S/T programs
Applicable setting:	National and S/T High Performance Environments

RELATED DOCUMENTS & LINKS

Document Name	Location
Vitorian Department of Health- Requirements for Assessment of Body Composition with DXA	*Vic Department of Health- Requirements for Assessment of Body Composition with DXA*
AIS What to Expect During Your DXA Assessment (video)	*AIS What to Expect During Your DXA Assessment*
AC DXA Body Composition Consent Form	*DXA Body Composition Consent Form*
AIS How to Prepare for Your Upcoming DXA Scan	*AIS How to Prepare for Your Upcoming DXA Scan*
AIS Practitioner Best Practice Guidelines for DXA Assessment of Body Composition	*AIS Practitioner Best Practice Guidelines for DXA Assessment of Body Composition*

1. PURPOSE

Cricket Australia (**CA**) intends for these guidelines to comply with the regulations set by the Victorian Department of Health and Human Services pertaining to the use of DXA Assessment of Body Composition.

2. SCOPE

2.1 This Policy applies to the following players (collectively referred to as **Participants**):

a) All male and female CA and State contracted players;

b) All male and female players contracted to a male /female Big Bash League (W/BBL) Club

c) All male and female pathway players selected in state and national age-group squads to participate in national championships (under 15 age-group squads or older). Any male, female or pathway player who joins a State or CA training squad.

3. APPROVAL FOR USE

3.1 Any use of DXA must always be approved by an Australian Cricket (**AC**) Medical Officer (**MO**) (State Medical Officer, CA Chief Medical Officer or Australian Team doctors) responsible for the players medical needs. Each player's suitability for DXA should be assessed medically individually.

3.2 A DXA should only be considered if:

a) The potential benefit to the individual, resulting from the scan informing the clinical management of the individual, outweighs the risk arising from the radiation exposure.

b) The benefit cannot be obtained using alternate techniques with less or no exposure to ionising radiation.

4. AUSTRALIAN CRICKET CONSIDERATIONS FOR USE

4.1 Providing the above conditions are met, DXA can be considered for use in the following players:

a) players with recurrent/long term injuries (to help better inform rehabilitation programs) that are considered to have a relevant body composition, bone mineral density (BMD) or energy availability component;

b) players at high risk of low energy availability or relative energy deficiency;

c) players with endocrine disturbances;

d) players at high risk of bone stress injuries; or

e) research purposes with university level ethics approval.

4.2 When requesting a DXA scan, detail regarding the body part(s) requiring assessment must be clearly outlined (e.g.: DXA for whole body composition, or DEXA for lumbar spine bone density etc.)

5. AVOIDANCE OF DXA

5.1 The following list indicates when DXA should not be used:

a) As a standard body composition screening tool where surface anthropometry (skinfolds and girth measures) and body weight measures will suffice.

b) For players under the age of 18, unless absolutely required (justified in the notes section of the Athlete Management System (AMS) by the AC Sports Dietitian and/or Medical Officer). Parental consent is required after explaining the benefits, process and risks.

c) For players who are pregnant, are a chance of being pregnant or are breastfeeding.

d) In players with diagnosed, suspected or at risk of eating disorders/disordered eating or body image concerns without appropriate support from a health professional.

e) If a player doesn't have access to appropriate support systems, including an AC Sports Dietitian and an AC MO.

f) If there is a failure to provide a thorough explanation of the protocol to the player/ guardian, including pre-scan preparation and individual player feedback.

g) When a scan(s) will result in radiation exposure in excess of annual limits If the player has had exposure to nuclear medicine examinations/ radiographic agents in the previous 48 hours (IV agents) to two weeks (oral agents).

h) If the player weighs more than the machine's weight capacity.

6. CONSENT

6.1 If the MO is satisfied there is a clinical indication for a DXA scan, players must be provided with sufficient information about the procedure to make a truly informed decision on whether to proceed prior to the scan being scheduled. This should include:

a) information about the DXA procedure;

b) the amount of radiation exposure;

c) information on pregnancy for female players;

d) why the DXA scan has been requested;

e) how their data will be managed;

f) the opportunity to ask questions about DXA; and

g) be made aware that they are able to withdraw their consent at any time prior to the scan.

6.2 The AIS Best Practice Protocols for DXA Assessment of Body Composition educational video 'What to Expect During Your DXA Assessment' could be used as part of this education process.

6.3 The *AC DXA Body Composition Consent Form* must be signed by both the player and the practitioner referring them (AC MO or AC Sports Dietitian) and stored on the AMS prior to the DXA scan being scheduled.

7. PRE-SCAN PROCEDURES

7.1 To help ensure the highest quality data players should be advised to present for their body composition scan:

a) In an overnight fasted state (no food or fluid for at least 8 hours). In a rested state with no exercise on the morning of the scan, and no intense exercise undertaken since lunchtime the day prior.

b) In an euhydrated state (well hydrated).

7.2 The AIS Best Practice Protocols for DXA Assessment of Body Composition educational video 'How to Prepare for Your Upcoming DXA Scan' could be used to ensure a player is fully prepared for their scan.

8. DXA SCREENING PROCESS

8.1 To minimise measurement error the following is recommended:

a) using the same device for repeated measures;

b) using standardised positioning during measurement;

c) players \empty their bladder prior to the screen;

d) using the same reference population to generate data (Hologic Horizon is recommended for athletic populations).

9. FREQUENCY

9.1 Players should not exceed four (4) DXA scans in a 12-month period (with at least 8 weeks between scans) unless clinically indicated and with AC Medical Officer approval.

10. REPORTING AND RECORD KEEPING

10.1 DXA scan reports should be treated as confidential health data (sensitive health information). Data must be collected, stored, used, shared and managed accordingly (see *Schedule 2: HP Data Governance*).

10.2 An electronic DXA body composition report from the Technician should be emailed to the referring person within 24 hrs of a scan.

10.3 Players should not be provided with verbal or written results from the Technician. As such, a follow-up consultation should be scheduled with individual players to provide feedback on results, and any subsequent implications of the data.

10.4 All DXA referrals/requests, and approvals (including who is the person referring the player, the rationale for referral and AC MO sign off) to be recorded on the AMS.

10.5 A record of the DXA scan must be entered into the players AMS medical dashboard and a copy of the scan results uploaded as an attachment) (with AC MO and AC Sports Dietitian access only restrictions applied).

11. INTERPRETATION OF RESULTS

11.1 Body composition assessments by DXA should only be interpreted by an appropriately trained AC MO or AC Sports Dietitian. The AIS 'Australian High Performance Sport System - Practitioner Best Practice Guidelines for DXA' (page 16) can be referred to for DXA scan report interpretation guidance.

REVISIONS

DATE	BY
30 June 2020	CA Chief Medical Officer, CA Deputy CMO, CA Lead Sports Performance Dietitian
24 June 2021	CA Chief Medical Officer, CA Lead Sports Performance Dietitian
30 June 2022	CA Chief Medical Officer, CA Lead Sports Performance Dietitian
13 July 2023	CA Chief Medical Officer, CA Lead Sports Performance Dietitian
9 July 2024	CA Chief Medical Officer, CA Lead Sports Performance Dietitian
3 July 2025	CA Chief Medical Officer, CA Lead Sports Performance Dietitian
30 June 2026	CA Chief Medical Officer, CA Lead Sports Performance Dietitian