



#### **17 February 2023**

Committee Secretary
Senate Standing Committees on Community Affairs
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600

Via Email: community.affairs.sen@aph.gov.au

**Dear Committee Secretary** 

# Rugby Australia – Submission to the inquiry into concussions and repeated head trauma in contact sports

Thank you for the opportunity to make a submission to this inquiry. We make this submission for and on behalf of the game of Rugby Union in Australia and with the support of World Rugby and each of our Member Unions.

Player safety and welfare is and will always be our sport's top priority. We recognise that our game is physically demanding and that injuries (including concussions and head injuries) can unfortunately occur from participating in the full contact version of the game. We also recognise that the science of concussion is extremely complex, contentious and evolving, however, we will not stand still when it comes to making our game safer and will continue to take action to reduce the risk of concussion and head trauma across all levels of our sport.

To this end, our approach is evidence based and centered around five key areas: surveillance, prevention, management, education and research. Of importance, is ensuring we have the most up to date knowledge and using this to inform our approach and practices. We listen to, work and collaborate with all stakeholders, including players, player associations, medical and scientific experts, referees, coaches and members of our rugby community. We are also in the privileged position to directly benefit from the extensive research funded or procured by World Rugby in this area.

We know that rugby can change lives for the better. Rugby improves physical and mental health and overall wellbeing. It builds leadership skills, embodies teamwork and unites







communities. Probably most importantly at this time, is that it builds and strengthens connections and a sense of community after having spent so much time apart due to the COVID-19 pandemic.

We believe the standard of concussion education, recognition and management for players is the best it has ever been. We are committed to using best evidence and research to keep improving the safety of our sport and, as a global sport, continuing to lead the way in this area. This submission provides an overview of our work.

#### 1. RUGBY IN AUSTRALIA

Rugby Australia is the governing body for the sport of Rugby Union in Australia and is recognised as the National Sporting Organisation by the Australian Sports Commission. We are a member of World Rugby, Oceania Rugby and SANZAAR<sup>1</sup> and have a long and proud history of providing opportunities to Australians to engage in our global sport dating back to 1864.

Rugby Union is played in over 120 countries, with over 800 million fans, 10 million players and 128 national member affiliations. In Australia, there are over 240,000 people enjoying rugby, including over 127,000 regular players supported by 6,300 coaches, 1,900 match officials and thousands more volunteers in over 900 clubs. They are supported by our eight Member Unions who run community competitions and pathway programs across all age grades and genders and across three formats; XVs Rugby, Sevens and Touch. Our game is enjoyed by men, women and children of all shapes and sizes, from a vast array of geographical, cultural, social and economic backgrounds. It really is a game for all.

At the elite level, Rugby Australia administers both domestic and international competitions and manages national teams that compete in global events such as the Olympic Games, Commonwealth Games and men's and women's Rugby World Cups. It is a privilege to be able to foster national pride and connect Australians through the participation of our national teams in major global events such as these.

As a sport, we embrace and are driven by our values of respect, integrity, discipline, passion and teamwork in all that we do. We are united in the vision to grow our sport and continue to create a safe, sustainable game, which future generations can enjoy. We

<sup>&</sup>lt;sup>1</sup> SANZAAR is an unincorporated joint venture between the South African Rugby Union, New Zealand Rugby Union Incorporated, Rugby Australia Ltd and Union Argentine de Rugby.







rely on participation across all levels and we want all participants to experience the numerous benefits of engaging in rugby, safely.

#### 2. GLOBAL GOVERNANCE

#### 2.1. World Rugby

World Rugby is the international federation for Rugby Union, established in 1886 and located in Dublin, Ireland. World Rugby's purpose is to grow rugby by making it more relevant and accessible, with a vision of a global sport for all, true to our shared values.

All of World Rugby's revenues are reinvested back into rugby to fulfil its purpose and support the safe growth of the game on a global basis. We work extremely closely with World Rugby and its national member affiliations on all matters affecting our global game, including understanding and addressing issues of health and safety such as concussions.

#### 2.2. The Laws of the Game

World Rugby is responsible for the "Laws of the Game" (the rules and regulations for all variations of the sport)<sup>2</sup>. The Laws are approved by World Rugby's Council (a representative body of Member Unions and Regional Associations, including Rugby Australia) and may be approved by the World Rugby Executive Board in urgent cases, as occurred with the immediate introduction of the Head Contact Process (**HCP**) in 2021 which provides a framework for consistent on and off field sanctioning of high-risk tackle actions.

Many of the changes to the Laws have been for the purpose of improved player safety and have been implemented following "law trials" by a Member Union. Rugby Australia has both initiated and participated in these trials. Many of these trials have involved safety elements such as tackle height trials, reducing line speed or community law flexibility.

World Rugby has intentionally built flexibility into the Laws and Rugby Australia has carefully utilised this flexibility by taking steps to further protect player welfare. An example of this is at the junior level where the Laws are flexible for "age grade" rugby and provide for, amongst other things, a safe way for "contact" to be introduced.



<sup>&</sup>lt;sup>2</sup> https://www.world.rugby/the-game/laws/home





#### 3. THE BENEFITS OF RUGBY

It is well established that sport promotes and assists with improving physical and mental health, education, diversity and inclusivity, amongst other things. Physical activity generally is good for hearts, bodies and minds, and it provides these benefits for people across all ages, genders and backgrounds.<sup>3</sup>

Regular physical activity can:

- Prevent and help manage heart disease, high blood pressure, type-2 diabetes, and many cancers
- Reduce symptoms of depression and anxiety
- Enhance cognitive health such as memory, thinking and learning, and overall wellbeing.<sup>4</sup>

The health benefits of playing rugby are significant and there is no doubt that it provides a platform for a healthier life.

In terms of physical health, studies have associated rugby with directly improving risk factors for heart and metabolic disease such as high blood pressure and type 2 diabetes. This was specifically found to be the case in a study involving participants within an Indigenous Australian population.<sup>5</sup> Further, data from a study involving elite players suggests that compared to less active individuals, they have a healthier gut bacteria profile, which is linked to better immune responses to infectious diseases.<sup>6</sup> A recent social return on investment study conducted by the Irish Rugby Football Union (**IRFU**) found that healthcare savings and value from rugby participation at grassroots level totaled over €341m, of which €39.88m related to savings attributed to an estimated 4,835 prevented incidents of cardiovascular disease and diabetes.<sup>7</sup>

<sup>5</sup> Mendham, et al. 'The acute effects of aerobic exercise and modified rugby on inflammation and glucose homeostasis within Indigenous Australians' *European Journal of Applied Physiology* (Nov 2012) – <a href="https://pubmed.ncbi.nlm.nih.gov/22382669">https://pubmed.ncbi.nlm.nih.gov/22382669</a>

<sup>&</sup>lt;sup>7</sup> IRFU, Social Return on Investment Report, August 2022 - <a href="https://www.irishrugby.ie/running-your-club/sroi/">https://www.irishrugby.ie/running-your-club/sroi/</a>



<sup>&</sup>lt;sup>3</sup> World Health Organization, *2020 Guidelines on Physical Activity and Sedentary Behaviour* <a href="https://www.who.int/publications/i/item/9789240015128">https://www.who.int/publications/i/item/9789240015128</a>

<sup>&</sup>lt;sup>4</sup> See [3] above.

<sup>&</sup>lt;sup>6</sup> World Rugby Response to Digital, Culture, Media and Sport Committee Inquiry into Concussion in Sport - <a href="https://committees.parliament.uk/writtenevidence/25349/html/">https://committees.parliament.uk/writtenevidence/25349/html/</a>





In terms of mental health and wellbeing, studies have shown that rugby can significantly and positively contribute to participants' mental and social wellbeing.<sup>8</sup> It allows players to enjoy a form of exercise, is fun and helps build social connections, friendships and life skills. Numerous studies across both men's and women's rugby have shown that players report that rugby provides them with a range of benefits, including a 'sense of pride' and 'lifelong friendship and belonging', and confidence.<sup>9</sup> The same IRFU study found that the uplift that rugby provides to adults' wellbeing was valued at €206.37m while school and community-based participation programs for children and young people generated a range of health benefits valued at €88.19m.<sup>10</sup>

#### 4. THE SCIENCE AND RESEARCH

#### 4.1. Resources

We listen to and engage with all sides of the medical and scientific debate and recognise that the area of concussion and long-term cognitive health is extremely complex and as the science evolves, we evolve with it. Our ongoing approach and commitment is to follow the credible science, understand it and use it to make appropriate interventions that improve player welfare. We have and always will work with World Rugby and other stakeholders on research that drives forward player welfare.

Rugby Australia employs Chief Medical Officer, Dr Warren McDonald, to oversee our player welfare initiatives. Dr McDonald is a Sports and Exercise Physician (FACS(E)P 1992) with extensive experience in the medical aspects of elite and community sports. He was the Australian Men's Water Polo team doctor between 1994 and 2000, Australian Olympic Games team doctor in 1996 and 2000, ACT Brumbies team doctor between 1997 and 2009, the Australian Wallabies team doctor between 2005 and 2013 and has been the Chief Medical Officer for Rugby Australia since 2010.

In addition, Dr McDonald has held numerous positions in advisory and governance groups. This includes World Rugby Medical Commission since 2011, Oceania Rugby Sports Science Sports Medicine Advisory Group and Injury Prevention Group since 2013<sup>11</sup> and board member of the ACT Physical Activity Foundation since 2010. He has been an

<sup>10</sup> See [7]

<sup>&</sup>lt;sup>11</sup> Dr McDonald was Chair of the SSSM Advisory Group in 2013-2016, and Member in 2017-2019. He has held the position of Chair of the Injury Prevention Group since 2019.



<sup>&</sup>lt;sup>8</sup> Erwei Dong, et.al. Rugby Union among middle-aged American men: an exploration, *Leisure Studies,* (2013) <a href="https://www.tandfonline.com/doi/abs/10.1080/02614367.2012.748089">https://www.tandfonline.com/doi/abs/10.1080/02614367.2012.748089</a>

<sup>&</sup>lt;sup>9</sup> See [6]





Adjunct Associate Professor in Sports Medicine at the University of Canberra since 2008. He was awarded an Australian Sports Medal in 2000 and an Honorary Doctorate of the University of Canberra in 2020. He has been an educator on World Rugby Immediate Care in Rugby and its equivalent Immediate Care in Sport courses delivered in Australia and overseas since 2014 and an educator on the Australian College of Sport and Exercise Physicians Management of Sports Trauma since 2019, amongst other things. He is also currently a Primary Panel Member of the Australian Sports Drug Medical Advisory Committee.

Dr McDonald has been involved in the writing of numerous peer-reviewed scientific publications, abstracts and textbook chapters in sports medicine.

Rugby Australia also retains a concussion consultant, Associate Professor Andrew Gardner, who is a neuropsychologist and recognised researcher in sports related concussion. Rugby Australia has engaged a concussion consultant since 2014 with Dr Andrew Gardner holding the position since 2016.

A/Professor Gardner is Associate Professor at Sydney School of Health Sciences, Faculty of Medicine and Health at the University of Sydney, Visiting Professor at the Carnegie Applied Rugby Research Centre at Leeds Beckett University in the United Kingdom and Honorary Associate Professor of the School of Medicine and Public Health at the University of Newcastle.

In addition, A/Professor Gardner hold numerous positions in advisory and research groups. This includes Clinical Lead for World Rugby's International Brain Health Services, member of World Rugby's Concussion Working Group, member of the AFL Scientific Committee's Concussion Steering Committee, and member of the Australian Institute of Sport Mental Health Referral Network.

A/Professor Gardner has published 76 peer-reviewed scientific publications on concussions, 6 book chapters, and delivered more than 60 presentations and keynote addresses at national and international conferences. Current Scopus h-index is 24 with 2,663 citations.

World Rugby funds and supports numerous research work across many areas, including concussion and concussion management. Rugby Australia works closely with World Rugby and contributes to its research as part of a worldwide view of, and approach to,







this issue. World Rugby's research priorities can be found on its website<sup>12</sup> with several directly or indirectly related to concussion and head trauma. We also invest in and contribute to science and research in other ways such as through in-kind resourcing, the provision of data and other support in respect of work being conducted here and abroad.

Additionally, Rugby Australia engages in ongoing and informal cross-collaboration with other Australian sports and the players within those sports, primarily through the respective Chief Medical Officers.

#### 4.1.1. Rugby AU Managed Research

Rugby Australia has an ongoing injury surveillance program for male and female elite rugby teams across both Sevens and XVs, which includes funding a PhD student at Edith Cowan University. We also have systems and structures in place to capture injury data, including concussions, at the community level. More detail on these injury surveillance programs is provided below at section 6.3.

We recognise we have an important role to play in sport-related science research. To that end, we also support and collaborate with universities on numerous studies to drive forward research in this area and have a process in place for researchers to apply for support as well as access to our data, players and other resources. Current studies we are supporting include:

- Instrumented Mouthguards in Australian Rugby: a collaboration with the University of Canberra to look at the efficacy of instrumented mouthguards as an objective measure of potential brain injury. To date this has been focused on players in our domestic women's competition (Super W) and our national women's team who have worn the mouthguards over the last twelve or so months. Instrumented mouthguards enable the measurement of forces experienced by players as a result of collisions.
- Injuries and Their Impact; a Cross-sectional Study of Women playing Rugby in Australia (Edith Cowan University) and Concept Mapping Exercise of Factors Associated with Head Injury in Rugby Union (University of Canberra): both these current studies look at attitudes of participants in rugby to inform Rugby Australia and assist us to tailor our education and approach appropriately to our target audience.

https://www.world.rugby/the-game/player-welfare/research/funding-priorities









- **Tackle height study:** a study being conducted by the Queensland University of Technology using 360-degree cameras and AI programming to determine whether there is a correlation between tackle height and reported concussions and whether a change of tackle height may affect the rate of concussion.
- TACKLE Study: A collaboration between Rugby Australia and the Queensland Brain Institute investigating objective measures of brain injury following concussion in school aged male rugby players, including brain scans, and biomarkers.

## 4.1.2. World Rugby Research

World Rugby has led, and continues to lead, cutting-edge research and investigations into numerous aspects of the process of concussion management.

It has both a Chief Medical Officer (Dr Eanna Falvey) to oversee player welfare initiatives and a Deputy Chief Medical Officer (Dr Martin Raftery, who held the CMO position between 2011 and 2019). Further, World Rugby employs or retains via consultancy arrangements a range of experts including video analysis and research experts who are dedicated to specific projects related to head injury prevention and management of head injury assessment processes. Consultants contribute to research that is commissioned by World Rugby, including the injury surveillance studies of World Rugby tournaments.

World Rugby is a member of the Organising Committee for the quadrennial International Consensus Conference on Concussion in Sport. These meetings commenced in 2001, where a multinational group of subject experts use systematic review to review current evidence relating to head injury in sport. These meetings developed the Sport Concussion Assessment Tool (SCAT), the Child SCAT and the Concussion Recognition Tool. Part of the SCAT is the Graduated Return to Play Process. These tools and guidelines form the basis for concussion diagnosis and management in Rugby and most professional sports including Soccer, AFL, NFL, NHL, Basketball, Hockey and Rugby League.

Every year, World Rugby invites external academic institutions to submit research proposals for funding in line with stated research priorities which currently include concussion, injury surveillance and prevention, and injury trends in the women's game<sup>13</sup>. Further, World Rugby funds and supports research by independent universities and



https://www.world.rugby/the-game/player-welfare/research/funding-priorities





Member Unions on projects that are identified through an application process or upon specific request from a Member Union to World Rugby.

Rugby Australia works closely with World Rugby and is currently supporting World Rugby led research through:

- Providing World Rugby all Head Injury Assessment data for both men's and women's elite rugby teams, across both Sevens and XVs, for analysis and research. World Rugby's research with this data includes continually evaluating the diagnostic performance of the Head Injury Assessment protocols (HIA, outlined below in sections 6 and 7) and submitting the findings for peer-review and subsequent publication in scientific journals.
- Supporting and implementing World Rugby led research projects into the investigation of objective measures of concussion recognition and additional steps in the HIA process within our elite competitions. Rugby Australia and the Super Rugby Clubs therefore allocate time and effort along with incidental cost in managing these programs and their implementation. Examples of such collaboration include:
  - Investigating the use of reaction time tests;<sup>14</sup>
  - o Investigating the use of instrumented mouthguards; and
  - investigating the use of vestibulo-ocular modalities (aka eye tracking technology); two systems are currently being investigated, with Rugby Australia actively involved in one of them.
- Collaborating with other Unions and World Rugby in a study entitled *Injury in Starting and Replacement Players in Five Professional Men's Rugby Unions.* The purpose of this work is to identify whether the risk of player injury changes with replacing players.

Additionally, Rugby Australia is assisting World Rugby in developing the World Rugby Brain Health Initiative<sup>15</sup> and is responsible for developing processes and structures for research into past player health and wellbeing as part of this initiative. Australia is a candidate to be the first country to trial the service.

In addition to conducting studies and implementing research projects, World Rugby has avenues for international collaboration which Rugby Australia is actively involved in. These include:



https://www.jsams.org/article/S1440-2440(21)00146-8/fulltext

<sup>&</sup>lt;sup>15</sup> See also: <a href="https://www.world.rugby/the-game/player-welfare/medical/brain-health">https://www.world.rugby/the-game/player-welfare/medical/brain-health</a>





- World Rugby Concussion Working Group: Australian rugby has a presence on
  the World Rugby Concussion Working Group through Dr Sharron Flahive<sup>16</sup>
  (Wallabies Doctor) and Dr Andrew Gardner. The working group, is comprised of
  an external pool of field experts including medical doctors, researchers, and
  international player representatives, who assess the information procured from
  around the world and advise World Rugby with the view to develop sound
  updated policies in this area.
- Player Welfare and Laws Symposium: Since 2019, Rugby Australia has been involved in the World Rugby Player Welfare and Laws Symposium which collates injury data from around the world, including on concussion, and provides an opportunity for collaboration on management and assessment processes and on potential law changes focused on player welfare.
- World Rugby Medical Commission: In 2011, World Rugby established a Medical Commission, in which Rugby Australia's Chief Medical Officer has been involved since its inception. The Medical Commission comprises the Chief Medical Officers from the National Unions and has an annual conference to discuss player welfare issues and bring together research from World Rugby. The conference also provides the opportunity to discuss and disseminate ideas and thoughts around proposed changes or new processes arising out of workshops. Concussion is a significant part of the work of the Commission and in 2022 the agenda included the use of object measures of concussion (such as instrumented mouthguards) and changes to the Laws of the Game with player welfare as the focus.<sup>17</sup>

#### 5. EDUCATION

## 5.1. Medical staff training

Education and raising awareness around preventing, recognising and managing concussion is a crucial part of our approach to player welfare. Within Australian Rugby this is aimed at all levels of our game and all persons who have a role to play, including professional and community players, professional staff, medical teams, and non-playing community members and volunteers.

In the elite game, concussion education is mandatory at all World Rugby competitions and in any competition running the HIA process, while all on-field and sideline medical



<sup>&</sup>lt;sup>16</sup> Dr Flahive also holds roles in other sports, including as the Chief Medical Officer at the NRL.

<sup>17</sup> https://www.world.rugby/the-game/player-welfare/conferences/medical/MCC-2022





staff (team appointed and independent doctors and physiotherapists) need to achieve strict accreditation standards to be able to operate the HIA.

The World Rugby Immediate Care in Rugby course<sup>18</sup> (or equivalent) is required for elite medical staff and highly recommended for community level medical teams and includes training on the recognition and subsequent management of concussion. These courses have a very practical focus and provide a hands-on approach to management of on-field incidents including concussion. Rugby Australia has been running this course multiple times per year since 2014, and in 2023 will run at least ten courses across the country to ensure staff are trained and are current in their training. This is required as part of the player welfare standards for the HIA and has been mandatory since 1 January 2017.

Although the above course is not mandated at the community level, it is made available and promoted amongst community and school rugby with extensive take-up. This interest and adoption of the course has led Rugby Australia to a position where most of the premier level community matches in Brisbane, Sydney and Canberra, have at least one member of medical staff who has completed the training.

World Rugby has also introduced a match-day doctor course which, although not currently mandated, is being rolled out in Australia in 2023 with concussion recognition being a significant component.

#### 5.2. Other training

We promote and invest in training and education for a wide range of game stakeholders, whether as players, coaches, match officials or administrators. Our education programs and materials currently include:

• Player education: World Rugby has mandated active professional player education as part of the HIA approval process. It has recently introduced an active player education video which all professional players must watch as part of their education<sup>19</sup>. That education focuses on four things: always listen to the medical advice; concussion is a brain injury; honesty is the best policy; and always look out for your teammates. Players also have access to all World Rugby and Rugby Australia education, some of which is mandated, as described below.

<sup>19</sup> https://www.world.rugby/the-game/player-welfare/medical/brain-health/active-player-education



https://www.world.rugby/the-game/training-education/elearning





- **Medical policy training:** Online integrity education that covers Rugby Australia's Medical Policy, including information recognising the signs and symptoms of concussion and outlining the HIA/Recognise & Remove processes, Blue Card (the Blue Card is outlined in section 7.2) and the graduated return to play process. This education is mandatory for National Teams, and professional and semi-professional teams and is publicly available for others to complete.
- **Smart Rugby:** A mandatory national program of online community rugby education, 'Smart Rugby', for every coach and match official participating in rugby where there is a tackling competition. Relevant Smart Rugby content includes the duty of care to provide a safe training and playing environment, the safety and participation policies, the importance of preparation and coaching for the prevention of injury, serious injury reporting protocols, teaching appropriate techniques for tackling (and other skills) to minimise the risk of injury, and the Blue Card and concussion management procedure.
- **Coaching education:** A national program of online and face-to-face coaching education recommended for all coaches. These programs are tailored to coaching of different age groups to ensure that appropriate technique is taught correctly and therefore the risk of injury is minimised. These programs also require completion of Smart Rugby and therefore the education relevant to concussion management. All programs are supplemented with online resources to further support ongoing education. ACTIVATE, a physical preparation tool that can be implemented by coaches as part of training or match warm-ups, is one such resource specifically designed to enhance player welfare and safety that has been shown to reduce both soft tissue injuries and concussion.<sup>20</sup>
- Match official education: A national program of online and face-to-face match
  official education which includes Smart Rugby, Game Management Guidelines
  and annual education on the head contact process and identifying and
  sanctioning tackles appropriately. These programs are recommended for all
  match officials.
- Concussion management online education: Publicly available online education for associations, clubs, team administrators and parents, covering the signs and symptoms of concussion, the Blue Card process, and concussion management procedures including returning to play. <sup>21</sup> This education is recommended to be completed by the appointed responsible person in each club and competition and is publicly available for anyone to complete.

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<sup>20 &</sup>lt;u>https://passport.world.rugby/injury-prevention-and-risk-management/activate-injury-prevention-exercise-programme/</u>

<sup>&</sup>lt;sup>21</sup> https://australia.rugby/about/codes-and-policies/safety-and-welfare/concussion-management





**Serious injury and first aid:** Availability of other online education targeted to players, administrators, coaches, and referees covering concussion & serious injury management, and first aid.

In addition to the above, World Rugby delivers a seven-strand mixed learning portfolio of 28 face-to-face courses and 32 online learning modules, the latter being available to anyone free of charge and which can be taken as stand-alone modules. There is a range of modules available depending on the person's role in the game and which focus on Injury Prevention & Risk Management, First Aid in Rugby and Immediate Care, all of which include concussion management education.<sup>22</sup> It also has a free app on concussion management and education which, as at 2021, had been downloaded approximately 50,000 times.<sup>23</sup>

Rugby Australia is in the process of developing and making available posters for every club and school across the country that can be placed in changerooms to enhance awareness of the concussion protocols. These will be available in time for the 2023 season.

We know that education is key, particularly at the community level where participants are generally volunteers without medical training, and we are committed to continuing to strengthen our work in this area. To that end, further awareness initiatives are in the early stages of planning and will be aimed at players, coaches and match officials and the role they all need to play in implementing the Concussion Management Procedure, amongst other things.

# 6. THE PREVALENCE, MONITORING AND REPORTING OF CONCUSSION

## 6.1. The definition of 'concussion'

We recognise that the proper identification of concussions is the first and arguably most critical step in effective concussion management. In 2012, World Rugby introduced a pitch side assessment process, now called the HIA. As part of this process, it developed

<sup>&</sup>lt;sup>23</sup> See [6]





https://www.world.rugby/the-game/training-education/elearning





and implemented an operational definition of concussion for world-wide application with the aim of increasing recognition and sensitivity of diagnosis<sup>24</sup>.

This process availed of existing research but specifically adapted to rugby and was designed to provide clear guidance to those responsible for diagnoses and management of concussion. The definition (contained in the British Journal of Sports Medicine, March 2016<sup>25</sup>) itself is clear, specific, operational and objectively conservative. The definition outlines a three stage process of assessment for concussion, and an abnormal assessment confirms a concussion diagnosis unless the treating doctors provide clinical confirmation that the abnormal finds are not related to a concussion. Further, exclusion of a concussion cannot occur immediately after the event but only after a re-evaluation of the player 36-48 hours post injury.<sup>26</sup>

The definition has been adopted throughout the National Unions and by Rugby Australia for rugby throughout Australia, including through the Concussion Procedure applicable at the community level.27

There are numerous and obvious benefits of a single operational definition of concussion that has world-wide application. It allows us to have consistency and improved accuracy in our research and surveillance studies. It also helps ensure that concussive events are identified and therefore treated consistently around the world, meaning that Australian players are managed the same regardless of where in the world they are playing and we as an organisation can have comfort and confidence that their health and safety is being managed appropriately. We outline below in sections 6.2 and 6.3 the approach to surveillance in the elite and community levels of the game in Australia.

#### 6.2. Elite Rugby

As noted above, Rugby Australia has an ongoing injury surveillance program (which is a pre-requisite to be granted approval from World Rugby to use the HIA process) and collects data from the following teams:

<sup>27</sup> https://d26phqdbpt0w91.cloudfront.net/NonVideo/1ec5a184-03eb-4dc2-83d7-1b44e698cb6f.pdf



<sup>&</sup>lt;sup>24</sup> Raftery, M., et al, 'It is time to give concussion an operational definition: a 3-step process to diagnose (or rule out) concussion within 48 h of injury: World Rugby guideline' BJSM Online First (2017) https://bjsm.bmj.com/content/50/11/642

<sup>&</sup>lt;sup>25</sup> Described at [24]

<sup>&</sup>lt;sup>26</sup> See [4]





- Men's XVs teams National (Wallabies, Under 20s), Super Rugby Pacific
- Women's XVs teams National (Wallaroos), Super W
- Sevens Men's and Women's National teams

The injury surveillance data is collected by entry of injuries into the national injury recording system (Smartabase) which is provided by Rugby Australia to all elite teams. It is collated and analysed anonymously and independently via a partnership with Edith Cowan University.

This data is provided to Rugby Australia and is used to internally inform teams around injuries and injury patterns including concussion. Anonymised data is shared with World Rugby and collated with anonymised data from other teams and competitions around the world. World Rugby produces an annual report on the incidence and severity of injuries including concussion which informs its Player Welfare and Laws Symposium<sup>28</sup>.

The recognition (and hence the reporting) of concussion is based on both subjective reports of symptoms from players, and objective signs (observed by medical staff and video footage) and assessments (such as cognitive and balance testing). The HIA Protocol utilised in elite rugby (outlined in detail below) incorporates both subjective and objective testing to allow for the recognition of concussion.

Data from World Rugby confirms that the process recognises more than 90% of concussions<sup>29</sup>. Whilst very positive, the process is continually being re-assessed and refined to improve its ability to recognise concussion.<sup>30</sup>

All assessments of concussion (whether they result in a diagnosis of concussion or not) are recorded allowing for Rugby Australia oversight of the management of individual cases and management of concussions generally.

## 6.3. Community Rugby

It has been acknowledged that injury surveillance programs at the community level are different to the elite level due to disseminated nature of community rugby. However,

https://www.world.rugby/news/627598/world-rugby-exploring-latest-eye-tracking-technology-assist-with-identification-and-management-concussion, https://www.world.rugby/news/637408/innovative-eye-tracking-technology-trial-starts-in-super-rugby-trans-tasman-to-advance-concussion-identification



https://www.world.rugby/the-game/player-welfare/conferences/player-welfare

<sup>&</sup>lt;sup>29</sup> Fuller et al. 'The performance of the World Rugby Head Injury Assessment Screening Tool: a diagnostic accuracy study' *Sports Medicine – Open* (2020) <a href="https://doi.org/10.1186/s40798-019-0231-y">https://doi.org/10.1186/s40798-019-0231-y</a>





Rugby Australia has systems and structures in place to capture Blue Card data (data related to community players who have been removed from a match or training due to confirmed or suspected concussion), serious injury data (being an injury that requires hospital or emergency department treatment or admission) and non-serious injury (any other injury that prevents a player from participating in a match or training) data.

In addition to collecting Blue Card data, Rugby Australia investigates relevant incidents and how they are reported. Rugby Australia has a centralised registration and competition management system called Rugby Xplorer. This system is used by all affiliated competitions across the country<sup>31</sup> and plays a vital role in monitoring suspected concussion at community level. Where a player suffers a confirmed or suspected concussion, a Blue Card is recorded against their name (where the concussion was sustained in a match) or a case is created against their name (where it occurred during training or another rugby-event). That recording in the system prevents that player from being selected for future matches until they have completed the Concussion Procedure (explained below).

Rugby Australia is currently undertaking detailed analysis of the first five years of this data, with the aim of publishing the data in a peer-reviewed scientific journal. Rugby Australia would be prepared to share the preliminary analysis of that data with the Committee on a confidential basis (given the data has not been peer-reviewed at this time) should the Committee require it and consider it helpful.

The advent of the Blue Card process in 2017 has served to enhance Rugby Australia's awareness of the incidence of concussion as well as enhancing the rugby community's awareness of concussion and concussive events generally. Ongoing education on the need for appropriate reporting and management of concussion is imperative. Rugby AU are the first union to study the data that the Blue Card process provides.

## 7. GUIDELINES, POLICIES AND PRACTICES

## 7.1. The elite game and head injury rules

#### 7.1.1. HIA Protocols

In a contact sport likely rugby, even with the best research, education and prevention protocols in place to minimize risk, injuries will still unfortunately happen. No sport is



<sup>31</sup> With the exception of two competitions in NSW





completely safe. It is therefore critical that an appropriate evidence-based management program is in place for when they do.

In the late 1990s, World Rugby approved the first concussion regulations which mandated a three-week minimum stand-down period for an adult before they could return to play (unless cleared by a neurologist). In the two decades since then, concussion management has continued to evolve significantly. The HIA Protocol<sup>32</sup> was first trialed in 2012 and subsequently implemented into elite adult rugby in mid-2015 with the Laws of the Game amended to allow for a temporary substitution for head injury assessment.

By way of summary, the HIA protocol is a three-point in time process to assist with the identification, diagnosis and management of head impact events where there is the potential for a concussion. It involves either an immediate and permanent replacement of a player or an off-field assessment of a player suspected of a head impact event in conjunction with the use of a temporary substitution to assist with the flow and safety of the game.

The HIA Protocol consists of the following three stages:

- Stage 1 in game assessment using the HIA 1 process
- Stage 2 post-game, same day assessment using the HIA 2 process
- Stage 3 36-48 hour post injury assessment using the HIA 3 process

Importantly, the protocols extend beyond what occurs on the field and uses neurocognitive assessment tools utilised to ensure that all components have returned to baseline or within a normative range of baseline level of cognitive function.

Identification by team doctors, independent match day doctors and/or match officials of an event with the potential for a concussion triggers the Stage 1 process. The Stage 1 process incorporates a comprehensive assessment of:

recognition of the 12 immediate and permanent removal criteria (Criteria 1 indicators);



<sup>32 &</sup>lt;a href="https://www.world.rugby/the-game/player-welfare/medical/concussion/hia-protocol">https://www.world.rugby/the-game/player-welfare/medical/concussion/hia-protocol</a>, The suite of mandatory player welfare standards is at:

https://resources.world.rugby/worldrugby/document/2022/10/12/0affa202-4723-4f45-9a11-009103f5a809/Application-for-use-of-HIA-and-use-of-temporary-substitutions-2022.pdf





- an off-field multi-modal assessment tool;
- pitch-side video review; and
- a clinical evaluation by a doctor.

Players displaying obvious on-pitch signs of concussion are immediately and permanently removed from play. Any other cases, where players have the potential for concussion, but without clear on-pitch symptoms or signs, undergo an off-field assessment consisting of a medical room clinical evaluation by an attending doctor supported by the multi-modal assessment tool, and video review.

The off-field assessment tool is a re-formatted Sports Concussion Assessment Tool (**SCAT5**) and is multi-modal, and includes a check of symptoms, cognition and balance evaluation compared to a previously conducted baseline assessment. The final decision of whether a player undertaking a HIA 1 returns to the field during that game ultimately lies with the independent match day doctor.

Every player entered into the HIA Protocol undergoes an early post-game medical evaluation (the HIA 2 clinical assessment) within three hours of completing the match, to assess clinical progress and identify an *early* diagnosis of concussion.

In stage 3, further medical testing is performed after 36-48 hours post-head impact event to further assess clinical progress and identify a *late* diagnosis of concussion (the HIA 3 clinical assessment). Players presenting with delayed symptoms or signs suspicious for concussion, but who are not identified with a head impact event during the game, can enter the HIA protocol at a later stage and undergo the clinical assessments as appropriate. In Australian rugby, the HIA 3 assessment also includes a cognitive assessment using Cognigram, a commercial neurocognitive tool provided to all teams by Rugby Australia. Results are compared to a baseline assessment.

A definitive diagnosis of concussion is made if a player demonstrates observable signs of concussion requiring immediate and permanent removal from play or a clinical diagnosis of concussion is made supported by the clinical assessment. The HIA Protocol allows for a diagnosis of concussion to be made immediately following a head impact event but diagnosis cannot be excluded following head impact event until all stages and clinical assessments are completed and normal.

Important to the HIA process is the World Rugby and Rugby Australia philosophy that the approach described above is not designed to only diagnose concussion, but to exclude concussion, reflective of the cautious attitude that underpins rugby's protocols.







If concussion cannot be excluded at any time in the HIA process, then the player is diagnosed as having suffered a concussion (using the World Rugby operational definition). This is reflective of Rugby Australia's overall progressive approach to the issue.

The HIA process is enhanced by all teams and tournaments around the world having the same tool to assess and manage concussion. In 2022, World Rugby introduced the Specialised Concussion Rugby (Player) Management (**SCRM**) app which it makes available at no extra charge to all teams and tournaments (this replaced the previous commercial CSx tool which had been in place since 2015). SCRM is a comprehensive and rugby-specific system that incorporates risk stratification more efficiently and effectively. The app allows the assessment of HIA1, 2 and 3 and also highlights risk stratification for each player. This enables decision-making to be tailored to each individual.

## 7.1.2. Approval for the implementation of the HIA Protocol

To use the HIA Protocol in a match or competition, World Rugby's approval must be obtained, a prerequisite for which is the demonstration that the relevant teams are meeting specific player welfare standards.<sup>33</sup>

These player welfare standards are very high and practically only able to be met at the elite level. They include education of players, coaches and administrators of the HIA Protocols and concussion generally, suitable equipment and staffing to run the HIA Protocols at matches, and mandatory levels of education for all medical staff involved in the matches. Further, players must have access to these trained medical staff outside of game day for appropriate management of a concussion and every match and competition is to have an independent match day doctor with the primary objective of player welfare.

The Australian matches and competitions that meet the standards and utilise the HIA Protocol are:

Super Rugby Pacific (Australia and New Zealand's elite professional men's XV competition)



<sup>&</sup>lt;sup>33</sup> https://resources.world.rugby/worldrugby/document/2022/10/12/0affa202-4723-4f45-9a11-009103f5a809/Application-for-use-of-HIA-and-use-of-temporary-substitutions-2022.pdf





- Elite professional matches where the Wallabies (National Men's XV Team), Wallaroos (National Women's XV Team) and National Australian Sevens Teams (Men's and Women's) are participating
- Super W (Australia's national Women's XV competition)
- Under 20s Men's National Team (the Junior Wallabies) when competing at approved international competitions including the annual Junior World Cup

All other matches and competitions run in Australia follow the community head impact protocols as outlined below in section 7.2.

The fact that there are extra resources at the elite level means that there is greater certainty in the diagnosis and exclusion of concussion. Elite players have effective and easy access to Rugby Australia's concussion consultant for neuropsychological assessment in cases where there have been multiple or complex concussions. Use of the concussion consultant in this way is conservatively guided by team doctors and Rugby Australia's Chief Medical Officer.

Players 18 years of age and under playing in any of the above matches or competitions are not eligible to utilise the HIA 1 protocol and are managed more conservatively, consistent with international consensus.

## 7.1.3. Graduated Return to Play

If a player does suffer a concussion, return-to-play protocols must be adhered to. World Rugby has mandated a graduated return to play process<sup>34</sup>, comprising of six-stages. This process commences only when the player is symptom free at rest. Consistent with the evolution of World Rugby protocols with the evolution of scientific evidence, the Graduated Return to Play was updated on 1 July 2022, emphasising the individualisation of the rehabilitation process as informed by each individual's risk profile.

Individualised Rehabilitation is based on a player's previous concussion history and their symptoms and cognitive burden and concussion diagnosis. From 1 July 2022, doctors must use a player's concussion history and any symptoms, balance or cognitive abnormalities, relative to their baseline at concussion diagnosis to risk stratify players



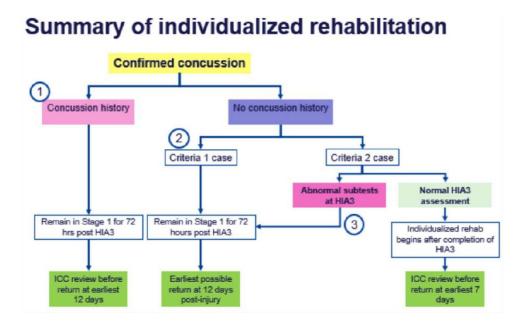
<sup>&</sup>lt;sup>34</sup> https://www.world.rugby/the-game/player-welfare/medical/concussion/hia-protocol#RETURNTOPLAYRECOMMENDATIONSFORTHEELITEADULTPLAYER2022RISKSTRATIFICATION





who require more conservative concussion rehabilitation.<sup>35</sup> This update takes a more conservative approach when assessing a player's suitability to begin the return to play process.

The following sets out the Individualised Rehabilitation pathway:



The Individualised Rehabilitation process requires the use of a World Rugby appointed Independent Concussion Consultant (**ICC**)<sup>36</sup> who assesses the player independently of the team doctor. ICCs are medical practitioners recognised as having significant and appropriate knowledge and experience in the management of concussions and have undergone formal training on their role. Independence is an important aspect of the process and their role, as the focus is on player welfare. The Individualised Rehabilitation process is facilitated through the use of SCRM.

The risk stratification and Individualised Rehabilitation process reflects an individualised and wholistic assessment of the person and their suitability to return to play and overall health management. It treats those with the following characteristics more conservatively:



<sup>&</sup>lt;sup>35</sup>https://resources.world.rugby/worldrugby/document/2022/07/01/c82445bc-a481-418f-be1e-bae74df2ade9/2022-Changes-to-Return-to-Play-Guidelines-Following-Concussion-Explained.pdf

<sup>36</sup> https://www.world.rugby/the-game/player-welfare/medical/concussion/ICC





- Players who have had two concussions within three months
- Players who have had three concussions within the previous 12 months
- Players who have had five concussions in their lifetime
- Players who have experienced prolonged recovery from concussion in the past
- Players with unusual symptoms, including issues with mental health

Players who require a more conservative rehabilitation will pause at Stage 1b for 72 hours after the HIA 3. If they complete their individualised rehabilitation without issue and see an ICC (if needed) they will be available for selection at the earliest on day 12 (having successfully completed all other stages of the process). Those players who do not require more conservative rehabilitation may commence stage 1b after the HIA 3, and therefore will not be eligible to return to play earlier than day 7. This Individualised Rehabilitation process means that the majority of players will not return to play before day 12.

The Graduated Return to Play process graduates a player through increasing effort whilst being monitored for the return of any signs or symptoms of concussion. The player is graduated through light aerobic drills, non-contact aerobic training, non-contact skills training, then to full contact training and finally match play. Each stage takes a minimum of 24 hours to complete (except where increased minimum periods are specified by the Individualised Rehabilitation process) and a player can only progress to the next stage if they are symptom free. If symptoms re-occur at any stage of the process, the player will drop back to the previous stage and the rehabilitation process is therefore lengthened.

World Rugby has this year introduced a formal HIA 4 process that requires players to undergo a final medical check prior to commencing full contact training.

#### 7.1.4. The women's game

The growth of the women's game has been one of the most exciting developments in recent years in rugby, with data indicating that women's rugby is the fastest growing segment within our sport. We are therefore particularly mindful of the potential increased risk of concussion (among other injuries) to women that has been documented in other sports.

This, however, has not been observed in our sport by World Rugby based on all of its published data. World Rugby has applied injury surveillance research methods to women's rugby, as for men's and compared injury data for the previous three Rugby World Cups. A year on year comparison (2014 vs 2015) saw a concussion incidence of 6







per 1000 hours for women vs 12.5 per 1000 for men. 2017 vs 2019 the incidence was slightly higher for women than for men (14.2 vs 12.1 concussions per 1000 hours).<sup>37</sup> The data from the most recent Women's Rugby World Cup (held in New Zealand in September-October 2022) has not yet been completely analysed.

We are cognisant that there are unique aspects to women's rugby and health, and are committed to the women's game receiving the same standard of research, concern and attention as the men's. World Rugby has published some of the largest ever analyses of baseline concussion data in women. We are confident that with this and the growing number of women playing the sport, Rugby Australia and World Rugby are well placed to strengthen existing evidence-based risk mechanisms and concussion management for the benefit of women players.

## 7.2. The community game and head injury rules

Rugby Australia has always implemented a concussion framework, for our community game that is in line with World Rugby's Concussion Guidance<sup>38</sup>. The key aspects of the Rugby Australia framework<sup>39</sup> are:

- the most important consideration in the management of concussion or a potential concussion is the welfare and safety of the player
- it treats concussion and suspected concussion in the same way
- it makes concussion identification and management, the responsibility of everyone within the rugby community
- it directs people into the medical system for appropriate management and care
- it provides guidance for medical practitioners on how concussion must be managed in rugby players
- it mandates minimum stand down periods after a concussion or suspected concussion
- it adopts a more conservative approach towards children and adolescents in the management of concussion

Research studies show that the rate of concussions in the community game is lower than at the elite level.

<sup>39</sup> https://australia.rugby/about/codes-and-policies/safety-and-welfare/concussion-management



<sup>&</sup>lt;sup>37</sup> See [6]

<sup>38</sup> https://www.world.rugby/the-game/player-welfare/medical/concussion/concussion-guidelines





The ability to adopt the same guidelines and policies as the elite level at the community level is impractical, due to the type and amount of resources required to effectively implement them. Rugby takes a highly conservative approach and view of concussions at the community level across all participant groups.

Rugby Australia's Concussion Management Procedure can be found on the Rugby Australia website<sup>40</sup>. It provides a strict and clear pathway for the management of concussions and graduated return to play pathway at the community level.

#### In summary it provides:

- The responsibility of players, parents/guardians, team officials, match officials, first aid attendants and medical staff is to, at all times, act in the best interests of a players' safety and welfare by:
  - Taking responsibility for the recognition of potential concussion, removal of the player from matches or trainings and referral to an independent medical practitioner
  - Ensuring concussion is appropriately managed as per the Concussion Management Policy.
- Minimum exclusion periods from playing of 12 days for adults aged 19 years and over, and 19 days for children aged 18 years and under (in line with World Rugby)
- An eight-step process for the management of concussion (or suspected concussion) split into those conducted on the day of the injury and those conducted on the days following the injury. Each step must be completed before moving to the next. This is a summary of these steps:
  - 1. **Recognise** (on day of injury) signs and symptoms of concussion or potential concussion
  - Remove (on day of injury) any player with signs or symptoms of a
    potential concussion must be removed from play and must not take
    further part on this day. Once a player has been removed no-one can
    over-ride the decision.
  - Record (on day of injury) the injury is entered into Rugby Australia's competition management system which prevents/blocks the player from being selected/nominated on future team sheets until the Concussion Management Policy process has been completed (i.e. the player has effectively received a 'green light' to return to the field of play).

<sup>&</sup>lt;sup>40</sup> https://australia.rugby/about/codes-and-policies/safety-and-welfare/concussion-management









- 4. **Refer** (on day of injury) players must be referred to an independent medical doctor or emergency department
- 5. **Rest** (days following the injury) players must completely rest for a minimum of 24 hours after injury to reduce signs and symptoms. Following an initial period of complete rest, children (18 years and under) must undertake relative rest for another 13 days and adults (19 years and older) must undertake relative rest for another 6 days.
- 6. **Recover & Return to exercise** (days following the injury) follow the stipulated graduated return to process
- 7. **Record** (days following the injury) the player must complete the Concussion Referral & Return Form before the competition management system is updated to allow the player to be selected
- 8. **Return to Play** (days following the injury)
- A graduated return to play process for a gradual re-introduction of exercise in a step-wise progression. Following the mandatory rest period, players complete 5 additional stages each over a minimum 24-hour period and can only progress to the next stage if they are symptom free. If symptoms reoccur, an additional further period of rest is required by returning to the previous stage.
- Processes for complex concussion scenarios (being those where a player has had two or more concussions over a 12 month period, multiple concussions over their playing career, concussion occurring with less collision force or concussion symptoms lasting longer than expected) where players must see an independent medical doctor experienced in sports concussion management to follow an individualised management plan. Players having suffered three concussions in any season or over a 12 month period are strongly encouraged to not return for the remainder of that season.
- A process for the review of a recorded concussion for the rare occurrences where
  they are incorrectly recorded. Upon application the Competition or Member
  Unions appointed Concussion consultant will review all material (including the
  proposed alternative diagnosis for abnormal assessment submitted by the
  player's doctor) and either uphold or overturn the concussion decision.
- Sanctions for non-compliance.

Another key aspect of the Concussion Management Procedure is the 'Blue Card' system. In matches of U13 and older, when a player displays signs or symptoms of concussion or suspected concussion, the referee will show the player a Blue Card. This card is a visual cue for team staff, for the players and for spectators that a player is being removed due to a suspected concussion and therefore will not be able to return to play that day. The







blue card must be recorded by team officials, and it triggers the off-field concussion management process outlined above.

In rugby, the referee is, and always has been, the final arbiter as to who is allowed on/to remain on the field. The Concussion Management Procedure and Blue Card process reinforces this function and instils further confidence in referees to make the call to have a player removed from the field for a suspected concussion.

This is a robust and thorough process that has been developed in recognition of the fact that the people employing the process generally do not have any medical training. Additionally the process allows for the central recording of suspected concussion/concussion/blue card incidents.

#### 7.2.1. The children's game

As has been outlined in the above protocols, children (those 18 years and under) are managed more conservatively to adults (those 19 years and older) with longer minimum rest periods and longer mandatory exclusion periods before returning to play.

In addition to the more conservative concussion management approach, Rugby Australia has implemented a phased approach to introducing aspects of the game to children players and law modifications for the purpose of increased player safety and welfare, including:

- No contact (tackling) is introduced until Under 8s meaning that Under 6/7 is contact free and all tackle laws apply from Under 8s.<sup>41</sup>
- Kicking only introduced in Under 10s.
- Variations to lineouts and scrums including playing uncontested until Under 10s.
- Reduced number of players per team, reduced playing areas and reduced playing time up until Under 12s.
- No lifts until Under 12s with phased restrictions on the way players are lifted and how they bind until Under 15s.
- Variations to substitutions numbers.

Rugby Australia acknowledges that there is a push by some groups not to start tackling until the 12/13/14 age group. We take the view that this carries a greater risk to players

<sup>&</sup>lt;sup>41</sup> This is in line with the contact start ages around the world. New Zealand, USA, and Ireland are also Under 8, Wales, Scotland and England are Under 9.







as it means that players would be learning to tackle too late and at a time when there is a greater variation across players in size and strength. Rugby Australia is aligned with the Australian Sports Commission and their Physical Literacy, and Foundations, Talent, Elite and Mastery resources which highlight the importance and benefit of children developing skills and movement techniques at an age younger than this.<sup>42</sup>

Rugby Australia's coaching principles build on this and highlight that fundamental movement and sport specific skills (such as tackling techniques) should begin early so that participants develop the correct movement patterns that are used within the sport and develop the necessary sport IQ requirements imperative for safety. Get into Rugby is an introductory program that has been designed for children between 5 and 8 years of age to develop skills in a fun and safe environment. An additional measure that has been implemented in select competitions to support coaches is the Front Row Passport. This program enables accredited coaches to assess junior players wanting to play in the front row to determine if they possess the physical, skill and motor competencies to take on the role.

Following extensive research, in 2017 Rugby Australia introduced Size for Age guidelines and an Age Grade Dispensation procedure to ensure participants with broadly compatible physical development in conjunction with ability and/or experience were able to play with and against each other. These policies are also supported by the Rugby Australia Safety Policy, which sets out that the safety of all participants must be the primary consideration in all participation decisions, overriding all other considerations.

# 7.3. Head Contact Process (HCP)

Head contact in rugby is not permitted under the Laws of the Game, although of course we recognise that it does occur.

To better prevent head contact (and thus concussions) and protect players, World Rugby introduced the High Tackle Sanction Framework in May 2019. The Framework's aim was to improve consistency in sanction decisions by providing referees, citing commissioners and disciplinary panels a systematic tool to guide them as to the appropriate sanction for potential acts of foul play.



<sup>&</sup>lt;sup>42</sup> https://www.sportaus.gov.au/ data/assets/pdf\_file/0019/710173/35455\_Physical-Literacy-Framework access.pdf & https://www.ais.gov.au/ftem/foundations





The Framework was developed on the back of research from approximately 1,500 matches which demonstrated that: (1) 76% of head injuries occur in the tackle; (2) 72% of concussions in the tackle occur to the tackler; (3) illegal head contact tackles are 36 times more likely to cause injury than legal tackles; (4) higher contact tackles (above sternum) are four times more likely to injure players; and (5) upright tacklers are 44% more likely to suffer a head injury.<sup>43</sup>

The Framework led to an increase in sanctions for high tackles and had an immediate effect. This ultimately led to the 2019 Rugby World Cup having a concussion rate which was 28% lower than the 2018 elite competition comparisons.<sup>44</sup>

The Framework has evolved into the Head Contact Process<sup>45</sup> which was introduced in 2021 after extensive collaboration and consultation with current and former players, coaches, referees and medical experts, including former Wallabies coach, Dave Rennie. The HCP reflects the seriousness with which dangerous tackles and other acts of foul play will be treated by governing the behaviour of players and expanding the types of acts for which a sanction may be imposed.

The HCP is a key part of our sport's efforts to reduce the risk of head injury through strong and consistent on and off field sanctioning and encouraging a positive change in player behaviour and coaching strategies and methods alike.

#### 8. PLAYER SUPPORT

#### 8.1. Elite level

Rugby Australia and The Rugby Union Players' Association (**RUPA**) work together to provide short and long term support to current and past professional players who experience concussion or head injury.

RUPA was established in 1995 in direct response to the professionalism of Rugby Union in Australia and operates to provide industrial representation and player advocacy. In collaboration with Rugby Australia and professional clubs, RUPA provide player education and wellbeing support as well as to help members prepare to transition into



<sup>&</sup>lt;sup>43</sup> World Rugby Submission

<sup>&</sup>lt;sup>44</sup> World Rugby Submission

<sup>&</sup>lt;sup>45</sup> Law Application Guidelines, Head Contact Process, March 2021 - <a href="https://resources.world.rugby/worldrugby/document/2021/03/10/e597c9c8-e852-4e19-875f-18e02e7f7e24/Head Contact Process EN v1.pdf">https://resources.world.rugby/worldrugby/document/2021/03/10/e597c9c8-e852-4e19-875f-18e02e7f7e24/Head Contact Process EN v1.pdf</a>





the next phase of their life post-Rugby. Currently 100% of Australia's full time professional players are members.

Together Rugby Australia and RUPA provides short and long term support services on an individual needs basis aimed at assisting players in many aspects of their lives. This includes day-to-day assistance and education, and access to support services including into retirement. Many of the supports are entrenched entitlements under the professional players' Collective Bargaining Agreement.

Players are supported through the employment of Player Development Managers who are embedded in each professional club as a full-time resource, working with the club and Rugby Australia to support players, whilst also maintaining a level of independence to allow for confidentiality when necessary and appropriate. Their primary function is to deliver the Player Development Program which centers around six pillars: wellbeing, financial management, personal toolkit, integrity and obligations, cultural awareness, and career and education. They also coordinate Mental Health and Wellbeing education in each Super Rugby Club and national Sevens program where players are provided with the necessary tools to look after their own mental health and that of others.

For players who require medical support, the Club doctor and Player Development Managers work together and consult with external health professionals to ensure comprehensive and wholistic care, including utilisation of mental health and medical specialist referral networks, is provided while still maintaining confidentiality. Access to these services is available, at no initial cost to the player. In consultation with the Club doctor, Chief Medical Officer and Player Development Manager, players can elect their own qualified health practitioners or be referred to clinicians as required.

Further, it is recognised that sometimes players have other areas of their life which may be impacted by concussion and in which they require support, such as tertiary studies, vocational training, trade certification and life administration in general. Support is also made available to partners as we recognise the important role they have in the players recovery and that they may require assistance as well.

Rugby Australia, in partnership with Benestar,<sup>46</sup> provides a free Employee Assistance Program that is available to players, members and volunteers and their eligible family members. Individuals can access free personal, confidential support, guidance and



<sup>46</sup> Benestar - https://www.benestar.com/





counsel for physical, mental and social wellbeing support as well as online resources, blogs, podcasts and learning modules 24/7.

In addition to these supports, professional players have insurance coverage pursuant to their Player Contract. This includes a career-ending injury insurance policy which provides 2 years at 75%, capped at \$300k per year (\$600k total) for a single, sudden, one-off, career-ending injury.

#### 8.2. Community level

We take concussions and their potential impacts seriously and are committed to providing the necessary and appropriate support to all players within our rugby family who are affected based on their individual needs. We know that not every person is the same or needs the same support and care, and this is why our support systems ensure that the support provided is individualised.

In addition to the policies and procedures provided through the Concussion Management Framework that mandate the player to rest, recover and return to play safely and the strong level of care within our club communities, there are various supports available to our players at the community level who have experienced concussion or head trauma.

We employ a Serious Incident Coordinator to provide a welfare service and first line of support for players who suffer serious injuries. Through this service, players are quickly connected with the right professionals who can assist in their treatment and recovery, such as medical practitioners, specialists and counselling services at an individual or club/team level, based on their personal needs (the latter provided at no cost).

This support service extends beyond serious injuries to players on the field. It is available to persons who are seriously injured through non-rugby or off-field incidents (for example, motor vehicle accidents) and to persons who may not have been physically injured but may be suffering from trauma or psychological harm as a result of the incident (for example, a witness). Further, there is much emphasis on the support available to the injured player, however, we also recognise that the person who caused or contributed to another player's injury may find the incident traumatic and in need of support and this service is available to them also.







Long-term support is also available to players affected by injuries with life-changing consequences. We employ a Peer Support Officer to provide tailored welfare support to help them adjust to their new 'normal' life.

Rugby Australia's Employee Assistance Program, Benestar, is also available to players, members and volunteers and their eligible family members at the community level.

In addition to these supports, registered players in affiliated club competitions and programs at community level are covered under Rugby Australia's National Risk Management and Insurance Program. This Program encompasses four key areas of protection which are designed for members and affiliate members. These include:

- 1. Personal Injury Policy
- 2. Professional Indemnity Policy
- 3. Public and Products Liability Policy
- 4. Club Management Liability Policy

Under this Program, eligible players affected by concussion would have access to financial support to help with their treatment costs. The level of financial support would vary with the nature and extent of the injury.

## In closing

Rugby Australia is committed to ensuring that player welfare and safety remains at the forefront for our sport and how we manage it at all levels of our global game so that our players are safe and free to enjoy the many benefits it provides for years to come. We thank you for the opportunity to make submissions on this important issue. Should the Committee have any questions in relation to this submission or require any further information from Rugby Australia, please contact Director, External Relations, Anthony French –

Sincerely,

## **Andy Marinos**

Chief Executive Officer

