

# BRAIN HEALTH

# AND CONCUSSION

## SUMMARY



# OUR VISION IS:

Everyone in rugby is doing all they can to keep every player as safe as possible from the risks of concussion.

## INTRODUCTION

Rugby is a sport that brings excitement and camaraderie to players and fans alike. However, like any contact sport, it carries risks, particularly concerning brain health and concussions. New Zealand Rugby (NZR), the New Zealand Rugby Players Association (NZRPA), and the New Zealand Rugby Foundation (NZRF) are working together to make rugby as safe as possible for all participants.

This guide outlines key initiatives and developments in brain health and concussion risk management that you might not be aware of. Our vision is that everyone in rugby is doing all they can to keep every player as safe as possible from the risks of concussion.

## INJURY PREVENTION

Preventing head injuries, especially concussions, is our top priority. While you may be familiar with some of our existing programmes like RugbySmart (our coach and referee education programme) we're constantly developing new initiatives to make the game safer.

### New initiatives include:

- Introducing instrumented mouthguards in Super Rugby and our Teams in Black: These high-tech, smart mouthguards provide insight into head acceleration events (forces on the head) during training and games. The mouthguards can alert us to strong head impacts that might cause concussions, which would then warrant an off-field Head Injury Assessment (HIA).
- Expanding warm-up programmes: We're developing new warm-up routines specifically designed for female players, which will include exercises aimed at preventing concussions.
- Enhancing tackle training for females: The 'Contact Ready' on-ramping programme for women and girls, with clear guidelines and coach resources, bridges the step from non-contact to contact rugby by providing safety skills education for those entering at different ages. It aims to build confidence and competence, improving injury prevention and overall experience.

We're also exploring game innovations, including new formats and law changes, to reduce concussion risks while maintaining the essence of rugby.

## EDUCATION & TRAINING

Knowledge is power when it comes to preventing and managing concussions. We're developing new educational programmes to ensure everyone in the rugby community understands the risks and knows how to respond to potential concussions.

### Key developments include:

- Professional player education: We're creating a standardised education programme for professional players about concussion and brain health, helping them understand the risks they face and what they can do to protect themselves and their teammates.
- Retired player support: We're supporting retired players who may have concerns about their brain health with education and resources to support them as they transition out of professional rugby.
- Community education enhancement: We're improving our concussion education for the community game, ensuring that players, coaches, referees, and parents all understand their roles and responsibilities when it comes to concussion safety.

These programmes will complement our existing educational initiatives like Small Blacks, RugbySmart, Tackle Clinic, and Scrum Factory.

## INJURY MANAGEMENT

Despite our best prevention efforts, concussions can still occur. When they do, it's crucial that they're managed properly to protect players' long-term health.

### New injury management initiatives include:

- Clear clinical guidelines: We're developing comprehensive concussion management pathways to ensure our medical staff have clear protocols to follow.
- Exit brain health assessments: We're trialing a program to assess the brain health of players as they leave professional rugby, establishing a baseline for their post-career health.
- Expanded role for other health professionals in concussion management: We're lobbying ACC to approve additional health professionals like physiotherapists to work alongside doctors for concussion diagnosis and clearance, making it easier for players to access care as quickly as possible to guide their recovery.
- Support network for retired players: We're establishing a network of healthcare practitioners specifically to support retired players with concussion-related concerns.

These new initiatives will work alongside our existing programmes like the Graduated Return to Play protocol, the Head Injury Assessment (HIA) protocol in professional rugby and the Blue Card system in community rugby.



## RESEARCH AND MONITORING

To stay at the forefront of player welfare, we're committed to ongoing research and monitoring. This helps us understand any effects of the game on brain health and informs our strategies for making rugby safer.

### Exciting research initiatives include:

- Instrumented mouthguard studies: We conducted research using these in the Farah Palmer Cup and Super Rugby Pacific in 2023 and continue to gather data on the head impacts players experience during matches and training.
- Concussion diagnosis research: In 2023 we conducted studies including a modified version of the Head Injury Assessment (HIA) protocol using physiotherapists, a saliva study looking at markers for concussion to help with concussion diagnosis, and a more comprehensive concussion assessment to determine whether there were any other issues that are not picked up in the current clinical examination to clear a player to return to contact training.
- Longitudinal brain health studies: We are consulting with stakeholders on how we could implement long-term research projects to track players' brain health before, during, and after their rugby careers.

We're also establishing a formal process to review research findings and apply them to our policies and practices, ensuring that our approach to brain health is always informed by the latest science.



## COMMUNICATION

Open, honest, and clear communication about brain health and concussion is crucial. We want everyone in the rugby community to be well-informed and able to make good decisions about their health and safety.

### New communication initiatives include:

- Comprehensive communication strategy: We're developing a unified approach to create open, honest communication about concussion in rugby.
- Improved stakeholder engagement: We're enhancing our education efforts for all participants, including parents, coaches, and staff.
- Media education: We're working to educate key storytellers in the media on the correct use of language and messaging around concussions, to ensure accurate and responsible reporting.
- Behaviour change campaigns: We're delivering annual community rugby campaigns to reinforce the importance of 'recognise, remove, recover and return' using the latest research to inform the priority of messaging and audiences.

These efforts will complement our ongoing communication about research findings, law changes, and game innovations.

# CONCLUSION

Rugby is evolving to prioritise players' welfare, particularly when it comes to brain health and concussion management. While we've made significant strides, we recognise that this is an ongoing process. We're committed to staying at the forefront of player safety, continually reviewing and updating our approach based on the latest research and best practices.

By working together - players, coaches, officials, parents, and fans - we can ensure that rugby remains a thrilling, competitive sport while also being as safe as possible for all who play it. Your awareness and support of these initiatives play a crucial role in creating a safer game for everyone.

Remember, if you have any concerns about concussion or brain health in rugby, don't hesitate to reach out to your local rugby organisation or medical professional. Together, we can protect the players and the game we love.



