

# WORLD RUGBY & INTERNATIONAL RUGBY PLAYERS




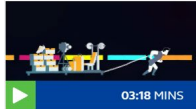



## CONTACT LOAD



# BACKGROUND & PROCESS

- Player load WG developed by IRP & WR in 2017 which included:
  - Video
  - Load management guidance for coaches
  - Infographics

### VIDEOS - PLAYER LOAD

 <p>02:46 MINS</p> <p>13 October, 2020</p> <p><b>Player load - English</b></p>	 <p>02:50 MINS</p> <p>14 October, 2020</p> <p><b>Player Load - FR</b></p>	 <p>03:16 MINS</p> <p>13 October, 2020</p> <p><b>Player load ES</b></p>	 <p>03:18 MINS</p> <p>13 October, 2020</p> <p><b>Player load IT</b></p>
 <p>02:48 MINS</p> <p>13 October, 2020</p> <p><b>Player load JP</b></p>	 <p>02:46 MINS</p> <p>13 October, 2020</p> <p><b>Player load RU</b></p>	 <p>02:46 MINS</p> <p>13 October, 2020</p> <p><b>PLAYER WELFARE</b> <b>World Rugby &amp; IRP innovative player</b></p>	

### LOAD MANAGEMENT GUIDANCE FOR COACHES



WORLD RUGBY  
INTERNATIONAL RUGBY PLAYERS

### PLAYER LOAD: CONTRIBUTORS

**Personal**

- Example: "fit load" e.g. studies, young children or difficult personal circumstances
- It's important to leave time for the batteries to re-charge!

**Training**

- Make-up between 85-90% of a player's workload
- Measure training often and consistently
- Training should be steady and avoid spikes to performance

**Matches**

- Try to make sure the batteries are full, not flat, come matchday!

**Team commitments**

- Team management should avoid "load creep"
- Training should be able to reflect the amount of travel
- Paper workload also includes Media and commercial commitments

All the evidence suggests that poor load management is a major risk factor for injury. Load management is NOT always about playing fewer matches or training less frequently. It's a management system that seeks to get the balance right. Make sure

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### PLAYER LOAD: HOW MUCH IS TOO MUCH?

**Factors in measuring load**

- Frequency:** sessions per week
- Volume:** minutes per session
- Intensity:** rate of perceived exertion (RPE)
- Individual:** player age, injury profile, etc.
- Training:** type of workout

**RPE scale**

10	Max effort
9	Extremely hard
8	Very hard
7	Hard
6	Difficult
5	Somewhat difficult
4	Comfortable
3	Easy
2	Very easy
1	Resting

**RPE definition**

The Rated Perceived Exertion (RPE) scale measures the perceived intensity level of a physical activity. It is used to estimate how hard a task is and what effort that task requires, from resting to max effort.

**How to monitor load**

- Spreadsheets:** Document volume (minutes) and intensity (RPE)
- Technology:** GPS, accelerometers, radio-frequency devices
- Analytics:** Coding of events, performance analysis

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### PLAYER LOAD: RISK FACTORS

**Load variations**

High risk athletes have a lowered tolerance for load and need individualised focus. High risk athletes may be:

- IMMATURE
- VETERANS
- RETURNING FROM INJURY
- IN MULTIPLE TEAMS
- NEW SQUAD MEMBERS
- LACKING TRAINING HISTORY

**Individuality**

High risk athletes have a lowered tolerance for load and need individualised focus. High risk athletes may be:

**Mental fatigue**

STRESS

TRAINING STRESS

PERFORMANCE EXPECTATION

POOR SLEEP

EATING HABITS

Indicates high risk

# BACKGROUND & PROCESS

## THE PROCESS



International Rugby Players & World Rugby undertook a global survey of elite rugby to understand contact training practices

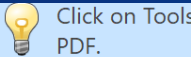


A group of expert coaches, players and medical experts was then consulted to develop contact load guidelines



### World Rugby Advisory Group on Contact Load

- International Rugby Players:
  - Sene Naoupu - Head of Strategic Projects & Research and Ireland international
  - Conrad Smith - Head of Player Welfare and ex All Black International
  - Dr Sharron Flahive - Medical Advisor and current Wallaby Dr
- Calvin Morris - Senior High Performance Consultant for World Rugby, ex British Cycling, EIS, RFU, GRU, UKA, GB Basketball
- Ken Quarrie - Chief Scientist for NZ Rugby
- Stuart Lancaster - Coach Leinster, ex England Head Coach and Head of elite player development
- Prof Steve Mellalieu - Professor at Cardiff Met University and Ospreys Sports Psychologist
- Prof Ross Tucker - Science & Research Consultant for World Rugby, Professor of Exercise Physiology
- Ortaith Curran - Athletic Performance Coach, IRFU. Ex UCD, Hockey Ireland, Leinster Rugby, Leinster GAA and Taranaki RFU
- Nic Gill - Head Strength & Conditioning Coach for the All Blacks, Associate Professor at University of Waikato
- Wes Clarke - Assistant Coach for Black Ferns and Manawatu Sevens
- World Rugby:
  - Éanna Falvey - Chief Medical Officer and ex Ireland and Lions Dr
  - Joe Schmidt - Rugby & High Performance Director and ex Ireland Coach
  - Mark Harrington - Head of Technical Services



# Player Load Survey – May 2021

**Data in summary and per Competition**

*Analysis of results, prepared 16 September 2021*



# Global survey, contact load

The elite player survey was sent to all professional competitions, with responses received from those named below

Sevens

Sevens



A total of 594 responses were received across **13 men's competitions** and **five women's competitions**

## Men

23	Currie Cup
180	Heineken Cup
40	Mitre 10 Cup
31	No competition listed
1	Pacific Nations
145	Pro 14
63	Pro D2
9	RFU Championship
65	RFU Premiership
11	Sevens
49	Super Rugby Aotearoa
19	Super Rugby AU
42	Top 14
41	Top League (JRFU)

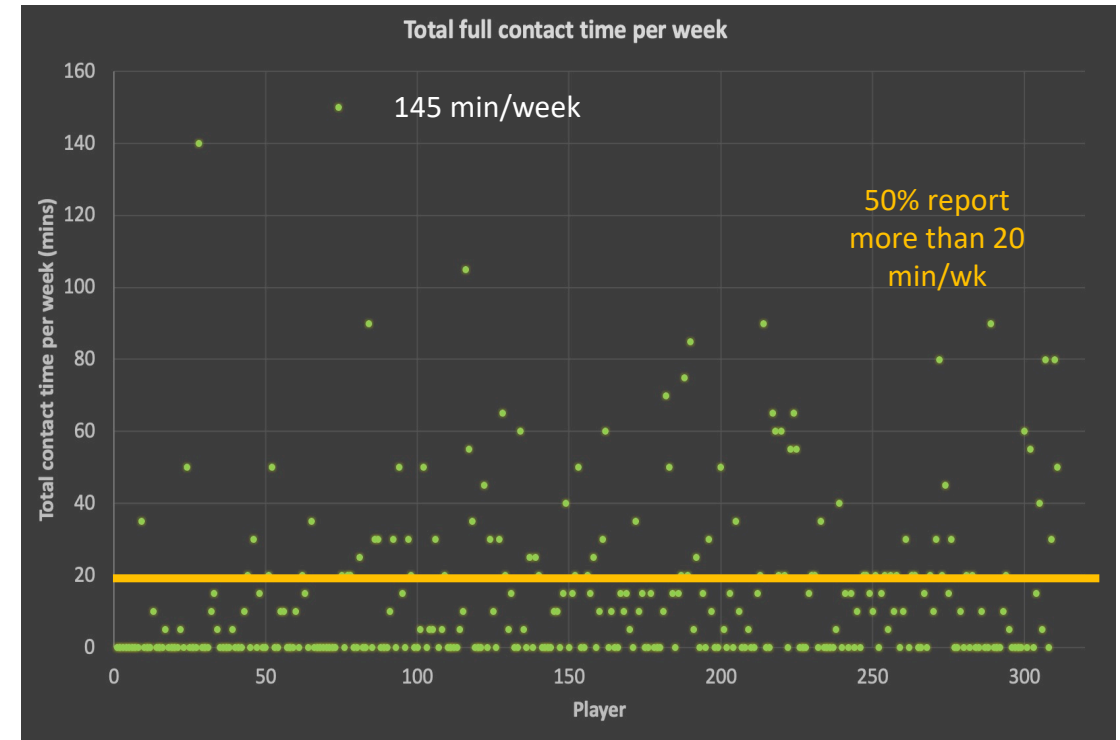
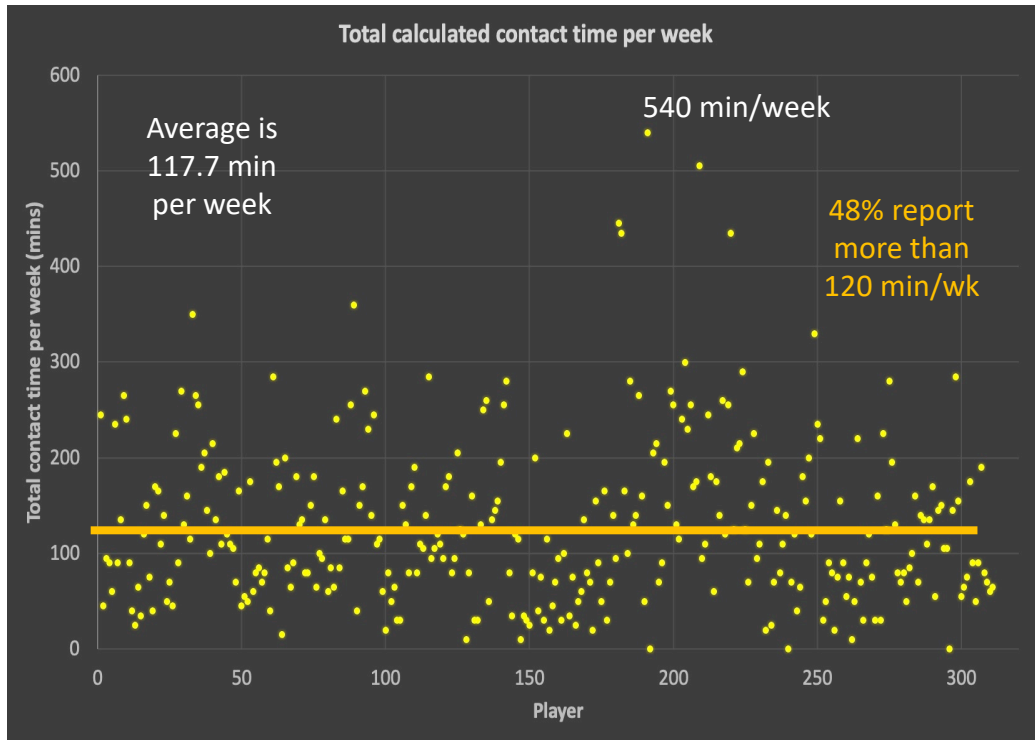
## Women

14	Allianz Premiership
12	Farah Palmer Cup
18	French Elite League 1
12	No competition listed
10	Sevens
2	Super W

We need to be cautious about over-interpreting the findings from competitions with fewer than ~ 30 players because those players may all come from one or two teams

## Key findings

Because the specific competition response numbers varied widely (from n=1 to n=145), the results are largely analyzed collectively, to portray an overall picture of reported contact load



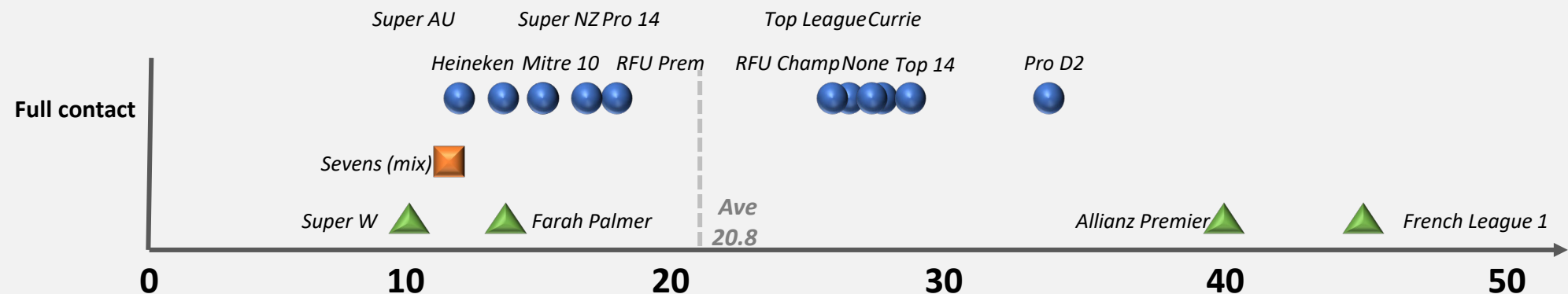
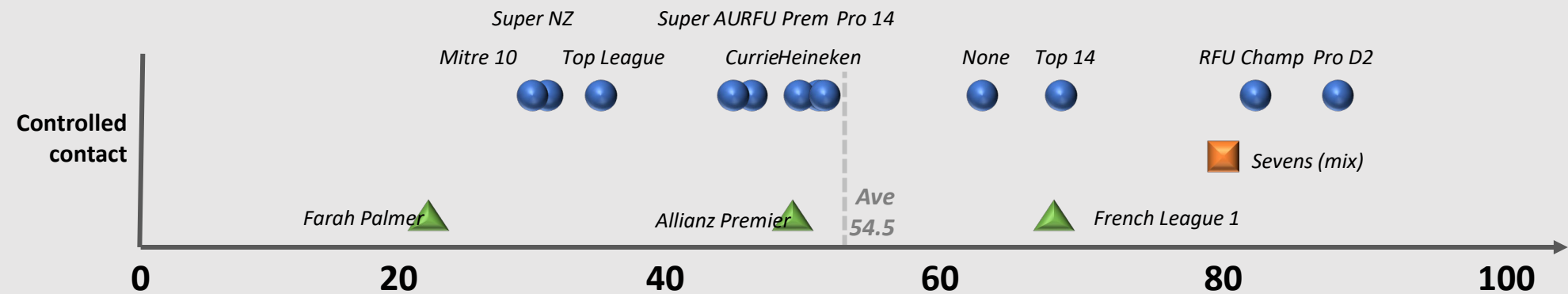
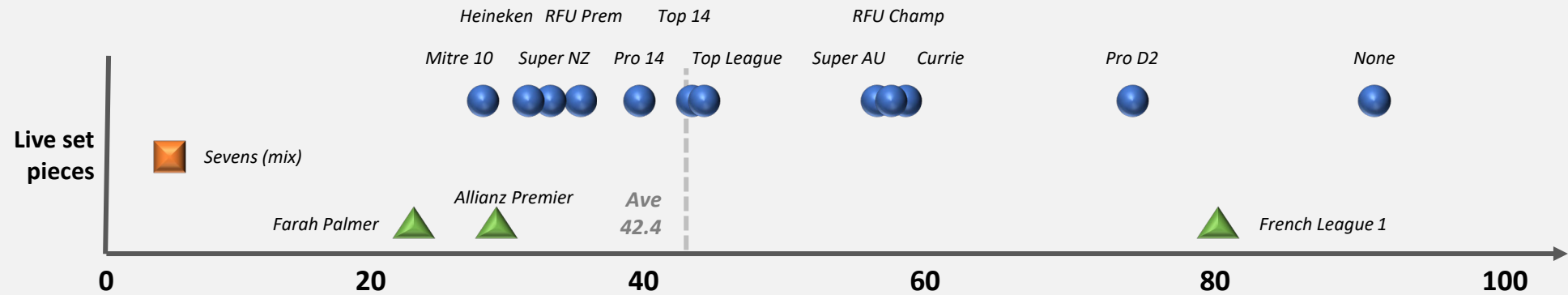
**Total contact time** comprises:

- Full contact
- Controlled contact
- Live set piece play

Average is 118 min per week, with large variation within the respondent sample

- **Full contact time** average of 21 minutes per week
- Note the large variation, from zero to 145 min per week – this may reflect different interpretations of full contact, requiring a definition for standardization purposes

# Reported minutes spent in contact training of three different types, all competitions

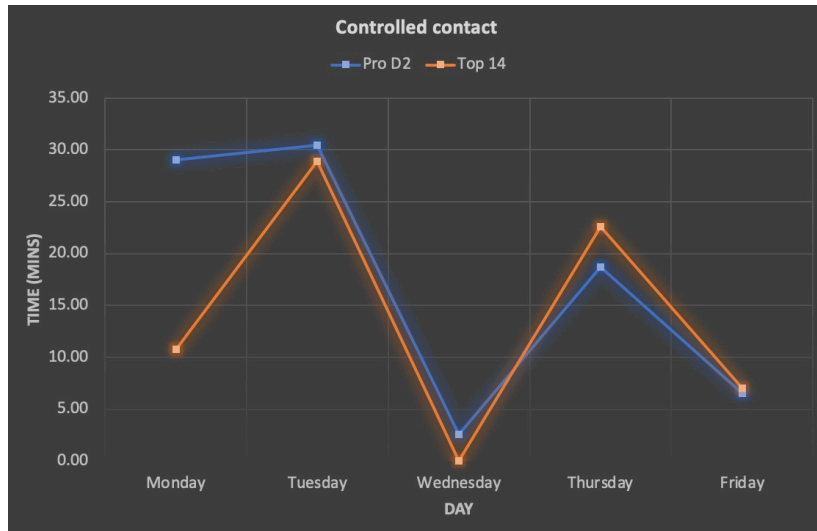


Second-tier competitions generally reported more contact, of all types, than the top tier competitions



# Characteristic patterns of contact load during a week

## Top 14 and Pro D2



Within competitions where more than 30 responses were received, the patterns of contact load were explored

The figures to the left show the contact load in minutes for Controlled Contact (top panel) and Full Contact (bottom panel) in the French competitions, Top 14 and Pro D2

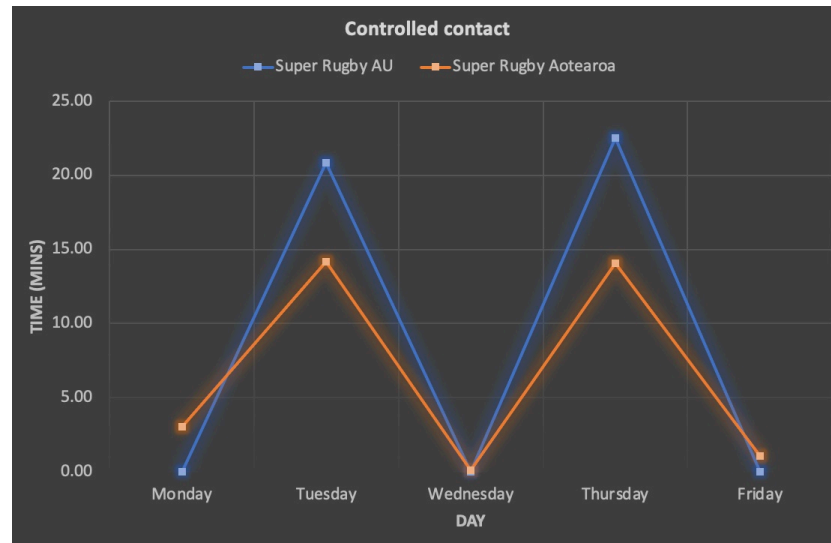
A characteristic pattern is evident, where peak contact load occurs on Tuesdays, with a second peak on Thursdays, and very low contact volumes on Mondays, Wednesdays and Fridays



This pattern was also evident in other European competitions and the Currie Cup (SA)

# Characteristic patterns of contact load during a week

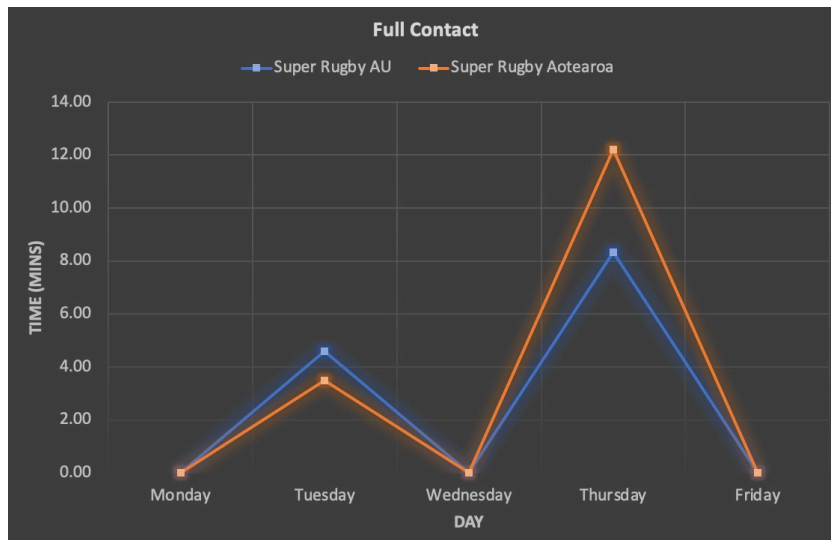
## Super NZ and Super AU



In contrast, there was a notable difference in contact load pattern in the Super Rugby competitions of NZL and AUS, as shown on the left

The peak contact day was on Thursdays, with the second contact day the Tuesday

As was the case for European and SA competition, Mondays, Wednesdays and Fridays had very low reported contact load of any kind

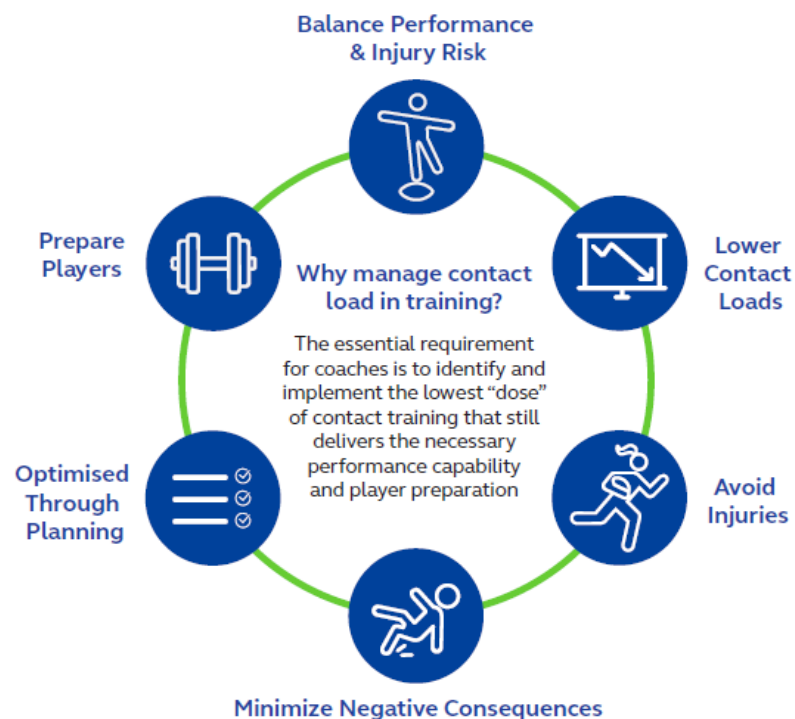


**A common feature of both these patterns is the double-peak, with the remaining three days per week displaying very low contact load volumes.**

# CONTACT LOAD

## WHY IS CONTACT LOAD IMPORTANT?

Contact during training must be carefully managed. Doing enough contact at the right intensity to prepare players for performance should be balanced against avoiding excessive contact, which leads to a greater risk of injuries. Training injuries caused by contact and the accumulation of too much contact can both be minimized through good planning and monitoring of contact. The Contact Load Guidelines are based on a survey of elite players, include input from an expert panel and can be applied at the elite and non-elite levels of the game.

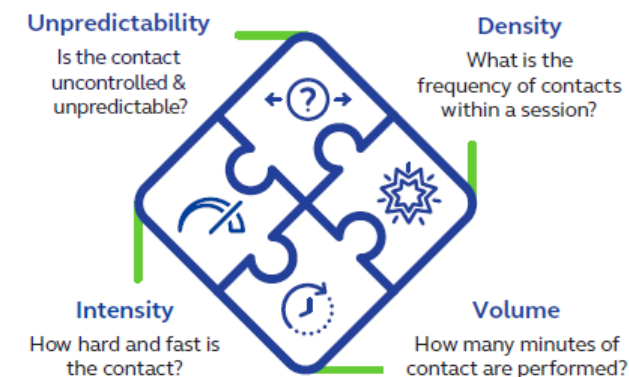


# CONTACT LOAD

## THE PROCESS



## WHAT ARE THE ELEMENTS?



# CONTACT LOAD

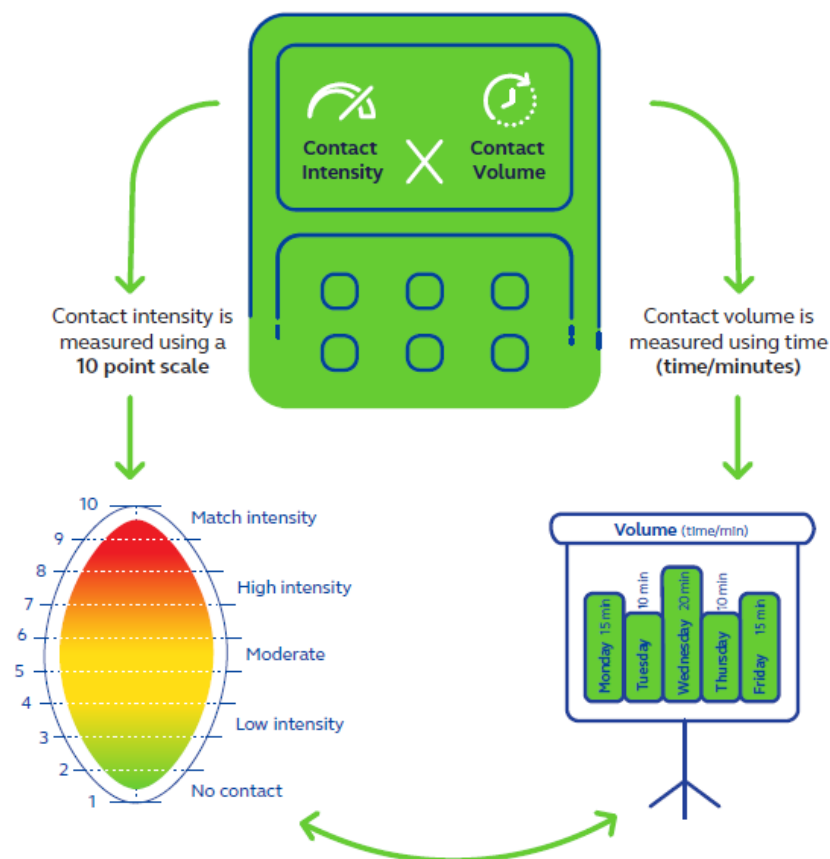
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PLAYERS



## INTRODUCING CONTACT INDEX

How to calculate the *Contact Index*?

Contact load should be managed primarily using *contact intensity* and *contact volume*, to calculate a Contact Index



# CONTACT LOAD

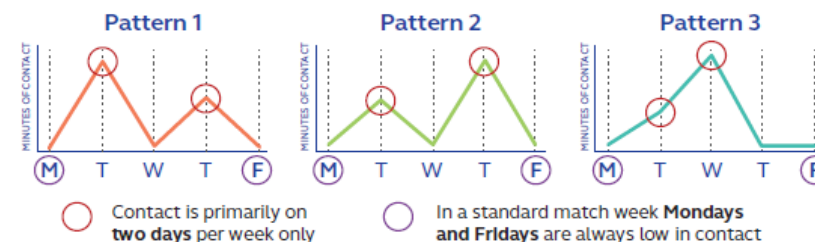
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## HOW SHOULD CONTACT TRAINING BE SPREAD OUT IN A WEEK?

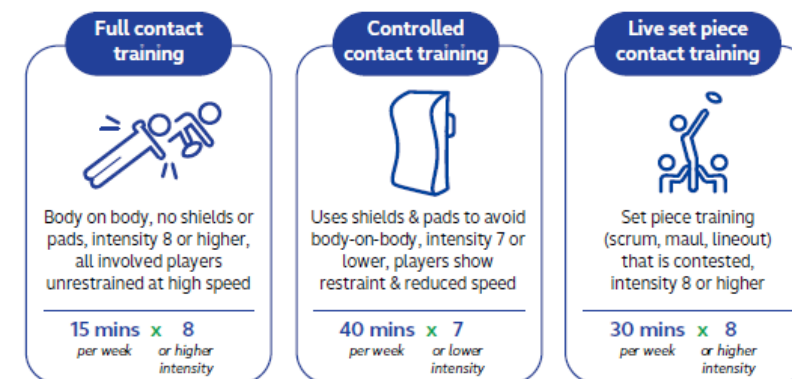
The expert group has identified three patterns of contact load which satisfy best-practice principles for load management.

Contact load must be spread out during a training week to ensure adequate recovery from matches and training sessions



## HOW MUCH CONTACT TRAINING SHOULD BE PERFORMED EACH WEEK?

Some upper limits for guidance are detailed below, but the contact load may often be less



These guidelines are for the professional game but the principles & upper limits are applicable to levels below the elite game

# CONTACT LOAD

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## THE COACH'S CHECKLIST



1

Are players recovered from matches or training prior to the upcoming session?

2

What is the specific goal or purpose of the contact in the session?

3

Identify and plan the four contact elements: Volume, Intensity, Density and Unpredictability

4

What is the progression of activities to ensure players are well prepared for the contact session?

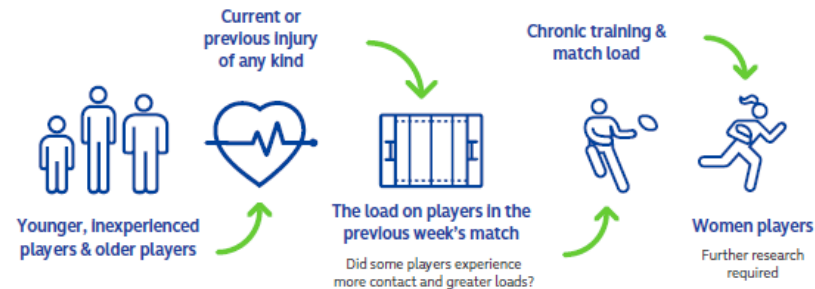
5

What is the expected Contact Index of the session?

6

Are all players 'fit for contact'? If not, what are the modifications?

## SPECIAL GROUPS: PLAYERS WHO MAY NEED SPECIFIC CONTACT LOAD MANAGEMENT



Further details on these concepts and principles can be read in the full Contact Load Guidance document.



# IRP/ WR CONTACT LOAD GUIDELINES

## IRP SURVEY & EXPERT WORKING GROUP

600 Players across men's & women's professional leagues  
Reach consensus and produce guideline & infographic

## PRE-BRIEF RUGBY STAKEHOLDERS & PUBLIC LAUNCH

- EXCO & HP RYC – via DC memo
- DoR's – via JS
- Major competitions – 8<sup>th</sup> September
- IRP briefing of National PA's
- Public launch - 23rd September

## VALIDATION IN PROFESSIONAL TEAMS

- IMG's & Video analysis in 10 professional teams
- 4 games & 8 training sessions
- 5 men's & 5 women's teams

## UNIONS/ COMPS DETERMINE OWN POLICIES

