



USER GUIDE

Prevent iMG v2.3



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OVERVIEW OF PREVENT SYSTEM



iMG

Instrumented mouthguard (iMG) to collect accurate and real-time head impact data



Team Case

Rugged, lockable team case offers centralised storage and charging for up to 27 solo cases.



Solo Case

Stores and charges each iMG. Includes integrated micro-USB port to connect to a power source (team case or individual cable)



Portal & App

Web-based and iOS app versions of Prevent software used to sync, view, and analyse head impact data



SETTING UP THE PREVENT SYSTEM

CREATING A PREVENT ACCOUNT

To begin using the Prevent system, you must create an account through either the Prevent Portal or App. After your account is created, the same login credentials will grant you access to both platforms.

Please contact Prevent Support to request that your credentials are granted access to your team's data.

PREVENT APP

The iOS Prevent App is used to connect to your iMGs and for data syncing to the cloud. Head impact data collected from iMGs can be viewed and analysed in real-time using this app.

To download, please visit the [iOS App Store](#).



ONLINE PORTAL

The online Portal is a web-based software used to manage your Prevent system. To access the Portal, click [here](#).

This is used to view, analyse, and export all data collected from your iMGs. Learn more [here](#).



For further guidance on getting started with the Prevent System, please visit our online [Help Centre](#).



RUNNING A SESSION

STEP 1: CHARGING

01 > Align iMG

Insert each iMG into a solo case and connect to a power source; either using a team case or individual micro-USB cable. Ensure the iMG is correctly aligned within the solo case. Learn more [here](#).

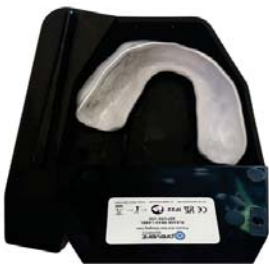


02 > Confirm LED

The solo case LED light will indicate the charging status of the device. Once correctly aligned and charging, a yellow LED light will be displayed.



Correct iMG Alignment



Incorrect iMG Alignment

03 > Charge

Allow 60 minutes for an iMG to fully charge. This will be indicated by a green LED light. Once removed from power, the iMG will have a battery lifespan of 10-12 hours.



QUICK TIP: Is the solo case showing a **red light**?

Make sure the iMG is correctly aligned in the solo case to ensure it charges.



RUNNING A SESSION

STEP 2: IMG DEPLOYMENT

01 > Pre-Session Sync

Open the Prevent App.
Allow 30 seconds for all iMGs to establish a connection.

It is essential to connect each iMG before a session to ensure impact data is recorded with accurate date and time stamps.

iMG not currently connected
No Bluetooth signal

iMG currently connected
Strong Bluetooth signal



02 > Deployment

Disconnect each iMG from power and remove from solo case. These can be distributed to each athlete and worn as normal throughout the session.

> *Note: Once disconnected from power, the iMG is turned on and ready to collect data. The battery duration is 10-12 hours. Use the [manual shutdown feature](#) to preserve battery life.*



03 > Data Collection

To view data during the session, open the Prevent App within close proximity (10-15m) of the iMGs to maintain Bluetooth connection.

Devices without connection to the app will continue to collect and store data on the device until they are fully synced post-session.





RUNNING A SESSION

STEP 3: DATA SYNCING

01

Return iMG

Following a session, return each iMG to it's solo case and connect to power.

>

Note: It is not essential for an iMG to be in a solo case for data syncing, however this step is best practice.



02

Prevent App

Open the Prevent App within close Bluetooth range to the iMGs. Allow 30 seconds for all iMGs to establish a connection.



03

Internet

To fully sync data, the device must have an active internet connection. If offline, data is stored locally and will sync to the cloud and online Portal once the connection is restored.



04

Syncing

The app will automatically initiate the syncing process. Leave the Prevent App open throughout the syncing process. This will take 10 minutes for a full team's data.





iMG SHUTDOWN

Prevent iMGs can be manually shutdown to preserve battery life.

While the iMG(s) are on charge, open the Prevent App and allow iMG to connect.

Click on the 'Options' menu. Select the 'Shutdown All Monitors' button.

Once the shutdown process is initiated, the iMG(s) will display a blue LED light on the solo case to indicate they are shutdown. Please allow 20 to 30 seconds for each device to complete the shutdown.



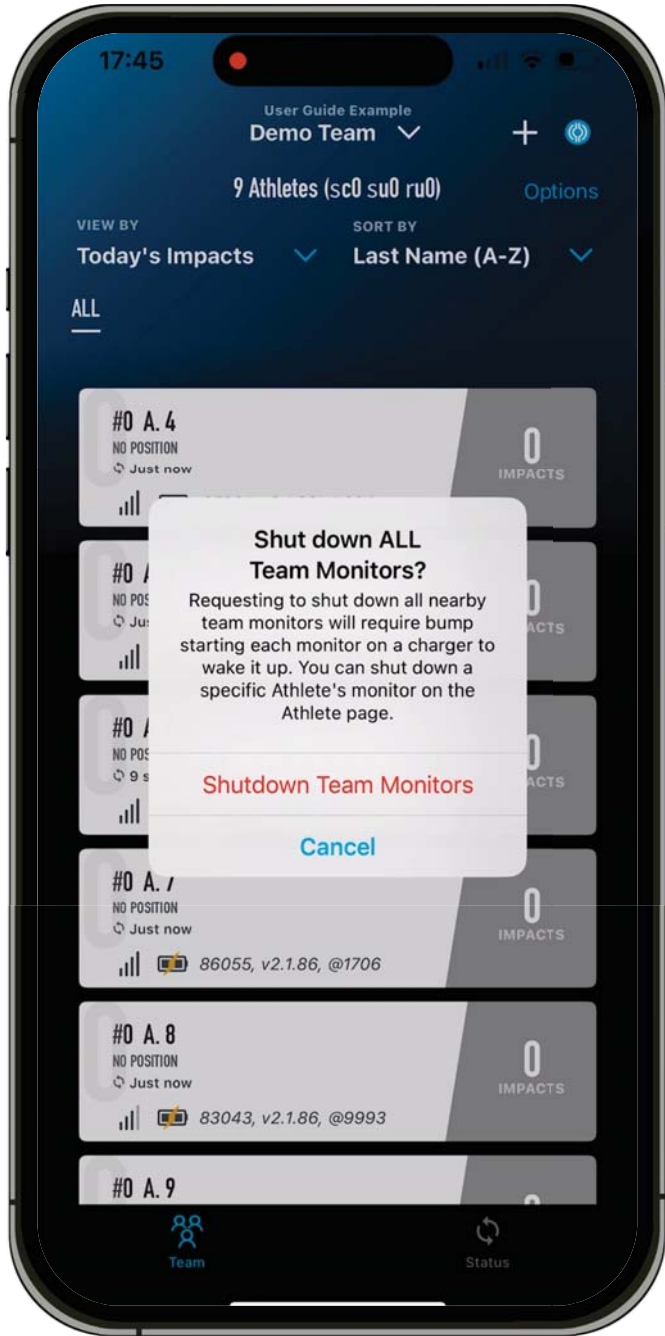
> *Note: An iMG does not need to be within a solo case to be shutdown. Any iMGs within Bluetooth range when the shutdown command is sent will be turned off*

To shutdown a specific iMG, select the athlete's tile you wish to manage. Click the three dots located in the top right corner of the screen. Select the 'Shutdown Monitor' option.

Once shutdown, the iMG(s) can be removed from power. They will remain turned off and preserve their battery life.

> *Caution: During shutdown mode, the iMG device will not collect data. To ensure data is recorded, make sure to power the iMG back on before using it.*

To turn an iMG back on, it must be plugged back into power. The solo case LED will display a yellow or green light.





DATA SYNCING

The online Portal and Prevent App can be used to check if there is any data remaining that requires syncing.

ONLINE PORTAL

Navigate to the ‘System Status’ tab within the online Portal. This page offers an overview of the data that still needs to be synced from the app to the cloud.

The Events, Raw Data, and Logs to Sync columns provide this information. If numbers are displayed in these columns, that indicates that the syncing process is not yet complete.

IMPACTS WORKLOADS ATHLETES SYSTEM STATUS SCHEDULE EDIT TEAM										
TEAM SYSTEM STATUS										
as of Fri May 09 2025 15:46:01 GMT+0100 (British Summer Time)										
DOWNLOAD										
#	PLAYER NAME	CURRENT MONITOR	LAST SEEN	LAST USED	BATTERY	EVENTS TO SYNC	RAW DATA TO SYNC	LOGS TO SYNC	DAYS USED	MONITOR COUNT
1	Athlete	88078	2 hours ago	-	17%	-	-	No	-	2
2	Athlete	89142	2 hours ago	-	30%	-	-	No	1	1
3	Athlete	96364	2 hours ago	-	100%	-	-	No	-	3
4	Athlete	97801	2 hours ago	-	100%	-	-	No	-	2
5	Athlete	88989	2 hours ago	-	50%	-	-	No	-	2
6	Athlete	98074	2 hours ago	-	43%	-	-	No	-	1
7	Athlete	86055	2 hours ago	-	43%	-	-	No	-	1
8	Athlete	83043	2 hours ago	-	37%	-	-	No	-	1
9	Athlete	97146	2 hours ago	-	41%	-	-	No	-	1
										Self-Test failed

PREVENT APP

Navigate to the ‘Status’ tab within the app.

This page will display information for all devices that currently have a Bluetooth connection to the app. If any data requires syncing, this will display in the columns for each athlete. Please refer to the image below.





VIEWING DATA: PREVENT APP

The Prevent App displays accurate head impact data in real-time.



Once summary data from an iMG has synced, the Prevent app will display the total number of impacts collected for each athlete.

Use the 'View By' dropdown to change the timeframe: Today, Week, Season. You can also choose to display total impacts or workload.

Use the 'Sort By' dropdown to customise your view: Highest, Jersey Number, Last Name, Monitor Id, Least Recently Seen Monitor, and Most Recently Seen Monitor.



From the 'Team' tab select an individual athlete's tile to display more detail information.

The top half of the page displays an overview of the number of impacts, workload, and alerts.

The bar chart shows the Peak Linear Acceleration (g) and Work (J) for each event collected that day.

Further details on the PAA, timestamp, and location of impact can be found below.

Scroll and click through the bar chart to view data for each event.

For full guidance on viewing data in the Prevent App, please see [here](#).

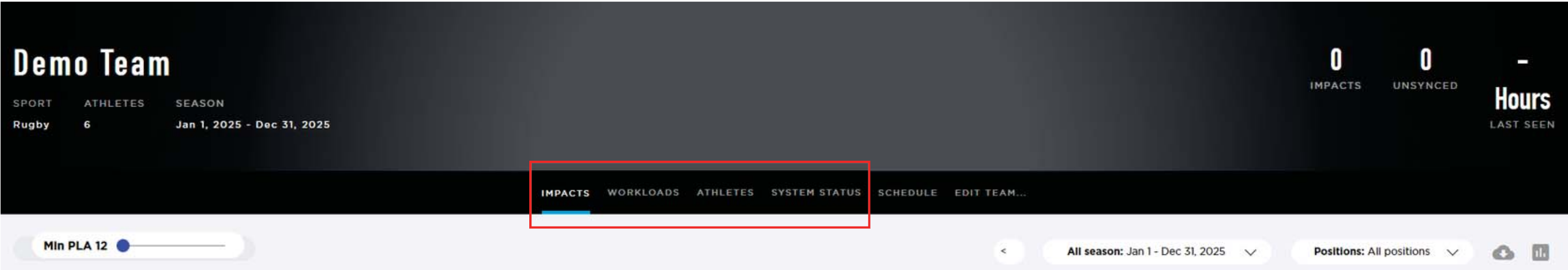


VIEWING DATA - ONLINE PORTAL

NAVIGATING THE PREVENT PORTAL

During the syncing process, data is uploaded to the online Portal in real-time from the Prevent App. This is available to view immediately for any user, at any location.

Find out how to navigate the Prevent Portal to easily filter the impact data available to view.



Export Data or
Download Reports

Minimum PLA Slider
Use this slider to only display impacts exceeding the chosen value (10g to 100g)



Date Filter
Choose to view data across the entire season, a custom date range, or the default weekly period

Position Filter
Choose to view data only for specified positions. Set individual's positions using the 'Athletes' tab

To access the online Prevent Portal, click [here](#).



VIEWING DATA - ONLINE PORTAL

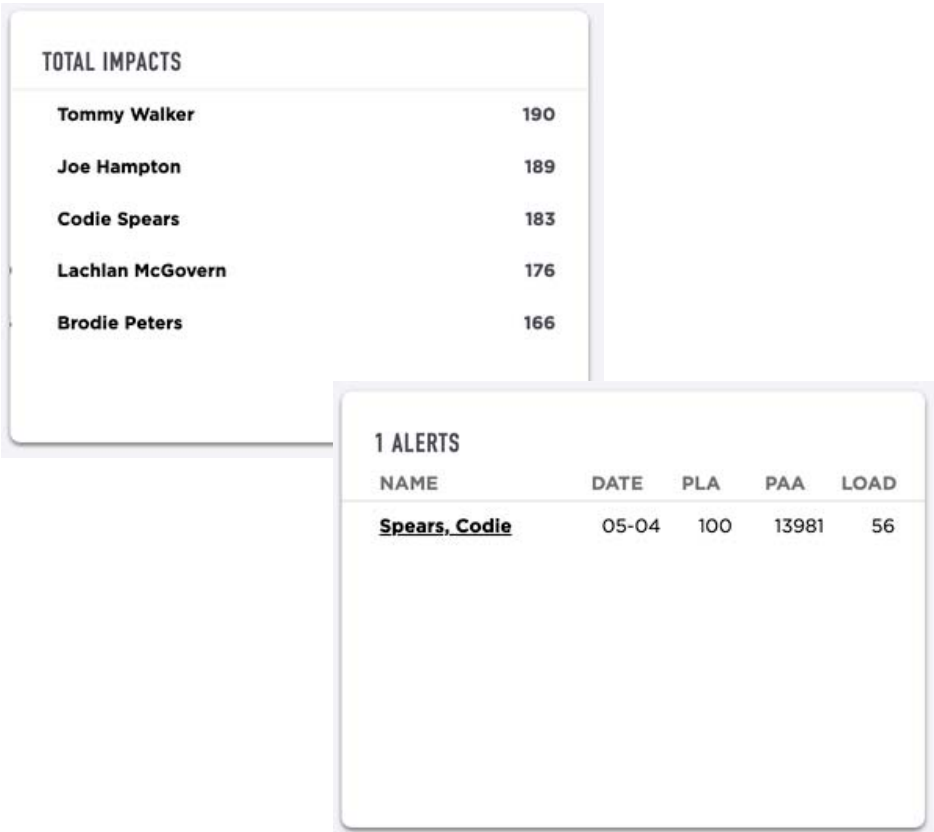
IMPACTS DASHBOARD

This dashboard offers an overview of impacts (Head Acceleration Events) for all athletes on your team.

You can easily filter the displayed data by using the dropdown menu to select the date ranges required. Additionally, the Minimum PLA slider on the left can be utilised to only display impacts exceeding the chosen value.

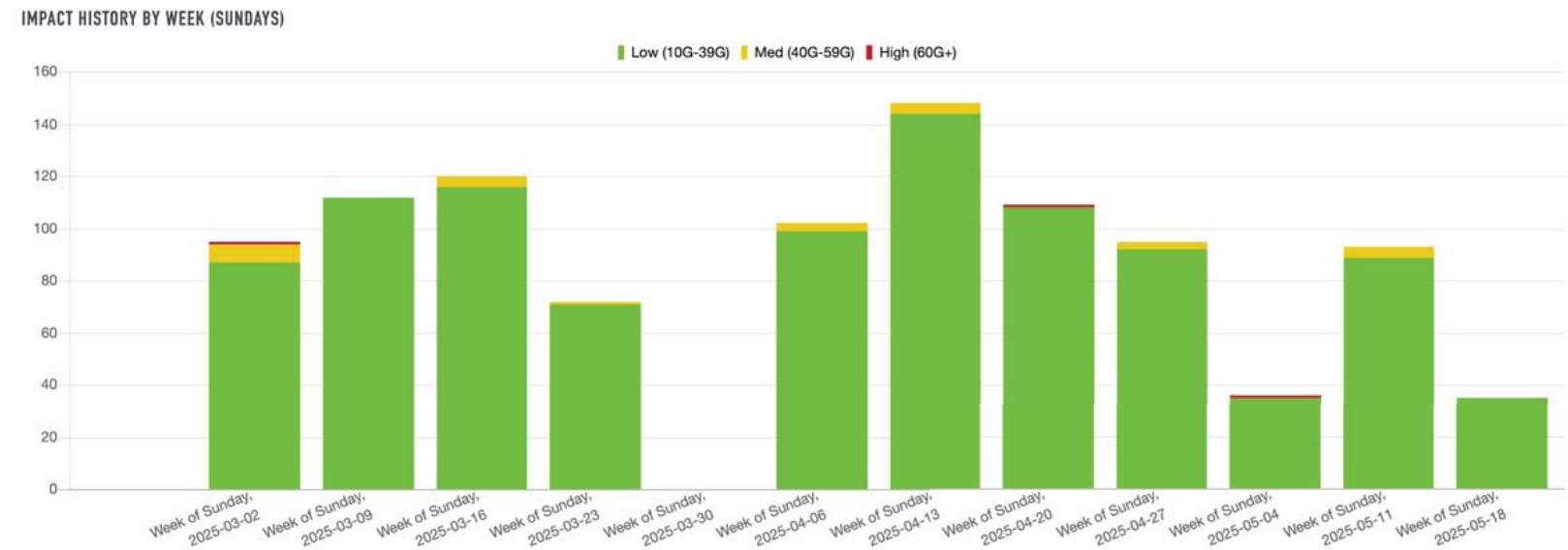
Total Impacts - Shows the total number of impacts for each athlete within the team.

Alerts - This highlights high-magnitude head impacts that exceed the alert threshold set on the device.



Impact Summary - Shows the distribution of low, medium, and high magnitude impacts across the team - i.e. 10-19g, 20-29g etc.

Impact History By Week/Day - A stacked bar chart that displays the number of impacts categorised as low, medium, and high for each day or week within the chosen date range. By clicking on any bar, you can access a more detailed view of the data for that specific period.



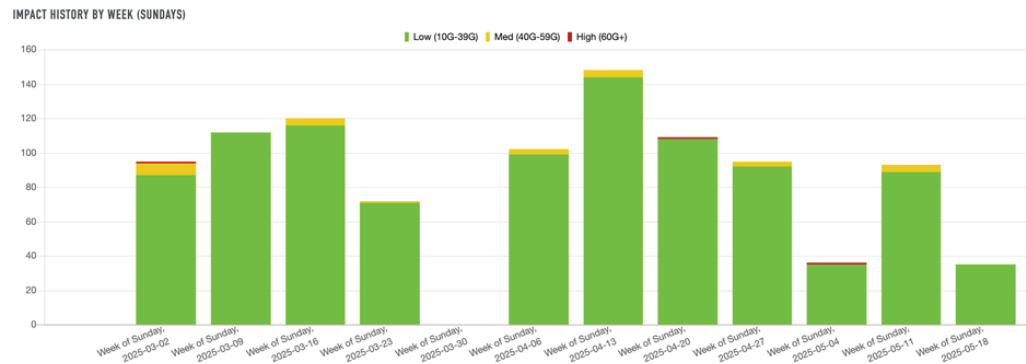


VIEWING DATA - ONLINE PORTAL

HOW TO VIEW DETAILED METRICS ON EACH HEAD IMPACT?

To view detailed metrics for each head impact, navigate to the 'Impact History By Day' bar graph.

Click on the bar that corresponds to your desired time period . A pop-up window will appear, displaying the metrics for all impact events recorded and synced on that specific day.



Here you can access a range of detailed metrics for each impact event associated with every athlete. This information includes the precise time of the impact, as well as the peak values for linear and angular acceleration and velocity, and the location where the impact occurred.

QUICK TIP: Use the search bar to filter impacts for a specific player.

Use the Minimum PLA slider to easily view impacts above a specific magnitude

IMPACTS FOR 2025-04-19

Demo Team

132 impacts between 7:34PM and 9:57PM CST (-06:00)

Filter

Min PLA 5

IMPACT TIME	#	PLAYER NAME	POSITION	DEVICE	IMPACT	PLA	PAA	PAV	PLV	VORK	LOCATION
7:34:38 PM	50	Lachlan McGovern		101701	10356	12	179	1.0	1.1	3.0	Bottom Rear
7:34:41 PM	36	Tommy Walker		98566	10522	13	287	4.0	1.1	2.9	Front High
7:34:45 PM	11	Codie Spears		99485	10971	20	2,374	4.0	0.6	1.0	Bottom Rear
7:35:15 PM	01	Joe Hampton		98885	10855	10	157	2.0	0.9	2.0	Front High
7:37:33 PM	50	Lachlan McGovern		101701	10357	11	314	2.0	0.6	0.7	Top Rear
7:41:40 PM	01	Joe Hampton		98885	10856	10	575	9.0	1.0	3.0	Front Low
7:41:44 PM	36	Tommy Walker		98566	10523	13	1,807	5.0	0.6	1.0	Front Low
7:45:22 PM	01	Joe Hampton		98885	10857	13	926	9.0	1.2	4.1	Left Low
8:07:00 PM	46	Brodie Peters		99571	10735	30	1,133	4.0	2.1	10.5	Right High
8:07:15 PM	50	Lachlan McGovern		101701	10360	30	2,500	12.0	1.4	5.9	Top Front
8:07:15 PM	50	Lachlan McGovern		101701	10361	9	686	13.0	1.0	3.9	Front High
8:07:16 PM	50	Lachlan McGovern		101701	10362	11	854	9.0	1.1	3.4	Bottom Rear
8:07:21 PM	01	Joe Hampton		98885	10859	10	489	4.0	1.0	2.4	Rear Low
8:07:27 PM	50	Lachlan McGovern		101701	10363	22	449	5.0	1.3	4.2	Front High
8:07:31 PM	01	Joe Hampton		98885	10860	9	137	4.0	1.1	2.7	Bottom Rear
8:08:41 PM	11	Codie Spears		99485	10972	22	1,198	12.0	1.6	7.8	Front High
8:08:50 PM	36	Tommy Walker		98566	10525	28	1,653	7.0	1.6	6.3	Right Low
8:08:50 PM	36	Tommy Walker		98566	10527	24	1,632	7.0	1.9	9.0	Front Low
8:11:29 PM	01	Joe Hampton		98885	10862	11	813	10.0	1.0	3.5	Front Low



VIEWING DATA

UNDERSTANDING DATA FROM THE PREVENT IMG

When viewing your team's data on the Prevent App or Online Portal, there are 4 key metrics available for every head impact event. Here's a description of which each metric means:

Peak Linear Acceleration (PLA)

- Measured as G force (e.g. 24g). This measures how hard the head moves in a straight line during an impact. It represents the highest level of linear acceleration.

Peak Angular Acceleration (PAA)

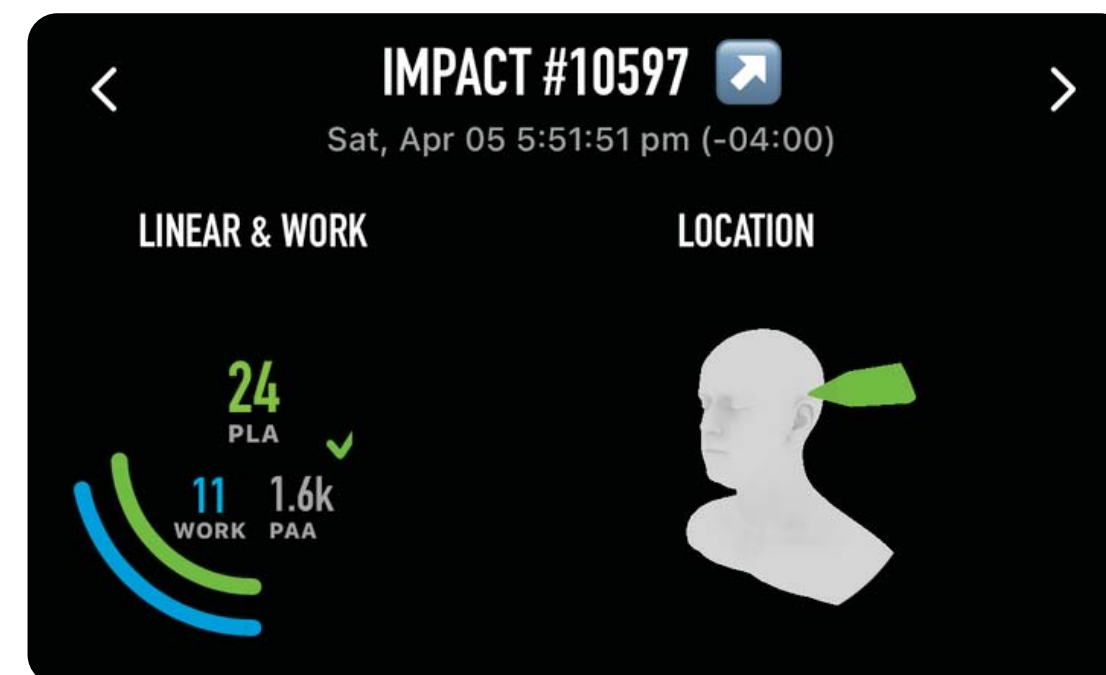
- This measures how quickly the head rotates during an impact. Measured as radians per second squared (e.g. 1600 rad/s/s).

Location of Impact

- A visual representation of where a force was applied to the head and the direction it came from (e.g. from the top right or top left of the head).

Work

- This estimates the total energy transferred to the head during an impact, combining both straight-line and rotational movement. It is measured in Joules (J).



QUICK TIP: For a more detailed understanding, please view our comprehensive [Data Guide](#).

If you have any questions, please contact Prevent Customer Support.



CUSTOMER SUPPORT

NEED HELP? CONTACT PREVENT



**Submit a
Support Ticket**

Scan the QR
code or click
[here](#)

Got questions?

**Message us on
WhatsApp!**

Scan the QR or
click [here](#)





REGULATORY INFORMATION

Instrumented Mouthguard

FCC ID: 2AUV5-IMM3

IC: 30680-IMM3

Solo Charging Case

FCC ID: 2AUV5-SOLOCASE2

IC: 30680-SOLOCASE2



Prevent Impact Monitor Mouthguard v2.3

FCC ID: 2AUV5-IMM3 IC: 30680-IMM3 Model: 0023-HBPXFERG

**PLEASE READ LABEL
BEFORE USE**

COMPLETE MOUTHGUARD MANUAL CAN BE FOUND HERE: →

