

Study into the type and number of contacts made by players during a 45-minute tchoukball match

Brief

This report assesses the time players spend in physical contact with each other and the time they spend within one metre of each other during a 45-minute tchoukball match. The evidence and recommendations from this report will be used to assess the safety of those playing as part of an overall 'return to sport' plan for tchoukball.

Methodology

All calculations have been taken as an average from three matches.

The matches are:

- ⇒ Men's top-level international match – Italy v Taiwan National Final 2018
- ⇒ Women's top-level international match – Switzerland v Italy – Nations Cup 2017
- ⇒ Lower-level men's match – Germany v Belgium - Euro Cup 2010 (chosen due to different style of play in both attack and defence)

The decision to take an average was made due to the very different formations and set-ups, in particular defensive line-ups, of teams across different levels and within men's and women's tchoukball.

It is also important to note the different number of shots faced in different competitions. For example, elite women catch far more shots than elite men or low-level men, therefore the ball is in play for longer and more shots are defended by elite women's teams over the duration of a match.

It is when players are in the defence that they are closest to each other and also most likely to come into physical contact.



Key figures for contact times, both direct and within one metre

Physical Contact

Across the three matches there were an average of 12.3 contacts per 15-minute period, 40 per match. These contacts are fleeting, nearly always less than a second and nearly always side-to-side per 45-minute match.

Type of player	Number of times physical contact is made between one or more players in 45 minutes
Elite men	30
Elite women	45
Lower level men	36

Players within one metre of each other

Just as important is the time spent between two or more players where their distance is within one metre.

In certain matches, players being within one metre of each other takes place in almost every attack. At least two defensive players are within one metre in the majority of attacks in both the elite women's and lower-level men's match.

However, this is seen considerably less in top level men's matches. This appears to be due to the different shot types used. Here defences are more spread out to cover the larger shot range faced.

Elite Women, when playing, catch more shots and spend more time with the ball in play leading to more contact time between players.

Type of player	Number of times one or more players are within one metre of each other per match
Elite men	120
Elite women	375
Lower-level men	225

It must be recognised that the above figures represent fleeting instances of players coming within one metre of each other during a match of 45 minutes. Due to the fast pace of the sport and the limitation of 3 seconds before the ball must be passed these instances will be very brief.

Time per match for various forms of contact between players

Within tchoukball the longest time any player can be in possession of the ball is three seconds. The tables below highlight the various forms of contact using a 3 second, 2 second and 1 second standard per instance.

Physical contact

	Total time			
Group standard	3 seconds	2 seconds	1 second	Average
Men's elite	1m 30s	1m	30s	1m
Women's elite	2m 15s	1m 30s	45s	1m30s
Men's lower level	1m 42s	1m 12s	36s	1m 10s

Time spent less than one metre from at least one other player

	Total time			
Group standard	3 seconds	2 seconds	1 second	Average
Men's elite	6mins	4 mins	2 mins	4mins
Women's elite	18mins 45secs	12 mins 30secs	6mins 15secs	12mins 26secs
Men's lower level	11mins 15secs	7mins 30secs	3mins 45secs	7mins 26secs

Total of both physical contact and distance less than one metre

Group standard	Combined Total average time
Men's elite	5m
Women's elite	13m 56s
Men's lower level	8m 36s

Explanation of the above figures

The time spent within one metre is usually fleeting.

In the lower level men's matches the lack of contact time was in part caused by the formation employed by the teams.

The 3-1-3 set-up provided more space in defence - three defenders in a defensive line-up rather than up to four.

In all cases there are more occasions when players are within one metre of each other when in a defence of four rather than three. One suggestion would be to enforce maximum defences of three in training and the use of 3-1-3 formations in training matches rather than the more commonly found 4-3.

There are contacts, which have not been counted in the figures. These were deliberate actions, such as 'high five' celebrations and handshaking between teams. These must be forbidden

It should be noted that there are very few contacts between opposing team players. The majority of contact is between teammates.

Conclusion

It is clear that tchoukball, in terms of its safety during the current pandemic, clearly benefits from being a non-contact sport.

This core rule removes almost any contact between opposing teams and leaves only minimal and fleeting physical contact between players on the same side.

Men's, Women's and lower level matches do carry different levels of risk, due to the differing tactics employed and different tactical and physical skillsets of the respective players. In particular, there is greater variation in the amount of time players spend within one metre of each other. However, these are again fleeting instances and almost exclusively between teammates.

Again, tchoukball benefits from its rules, which ensure players are never in possession of the ball, or rarely in one place, for more than three seconds.

Taking an average of any form of contact for a 45-minute elite women's match, there is a total of 13 minutes 56 seconds of contact time.

In reality, most contacts are less than one second and therefore this time is considered as a worst-case scenario.

It is the view of Tchoukball UK that the sport is safe and, with adequate measures to reduce any further contact, should be allowed to return when indoor sport is approved.