


Position statement of the Royal Spanish Football Federation for the resumption of football activities after the COVID-19 pandemic (June 2020)

Helena Herrero-Gonzalez,¹ Rafael Martín-Acero,² Juan Del Coso ³,
 Carlos Lalín-Novoa,⁴ Rafel Pol,⁵ Pilar Martín-Escudero,⁶
 Ana Isabel De la Torre,⁷ Christopher Hughes,⁴ Magni Mohr,^{8,9}
 Francisco Biosca,¹⁰ Rafael Ramos⁷

On 11 March 2020, the WHO declared COVID-19, an infection produced by the virus SARS-CoV-2 with a wide range of symptoms ranging from mild symptoms to severe illness, as a pandemic.¹ The health authorities and governments of several countries declared confinement measures to decelerate the propagation of the disease, which resulted in sport training and competition being suspended. Professional athletes have been unable to train as usual during home confinement, and it is thought that they will have to return to sports competition in most countries once the risk of infection has been adequately reduced.

TASK FORCE TO DEVELOP GUIDELINES

On 20 March 2020, the Royal Spanish Football Federation created a task force, composed of sport physicians, sport scientists, and strength and conditioning coaches to constitute guidelines in order to resume football activities after the COVID-19 pandemic. This task force established a framework based on scientific

evidence to reduce health risks on the return to competition while fostering players' fitness levels from the resumption of training activities for the teams prior to the first official competition.

The framework encompasses guidelines at three levels: (1) clinical measures to assess player's health status after the confinement and procedures to reduce the probability of COVID-19 infection during training and competition, (2) training recommendations to develop strategies for injury prevention and physiological readaptation, and (3) proposal for the competition calendar and allowance of changes of in-game regulations. The aim of this editorial is to make these recommendations public since they may contribute to guideline development by other sporting bodies that are also managing players' return to training and competition.

To minimise health risks and to ensure equality of competition, the task force recommends that football training and competition must only be resumed once the pandemic has been controlled and the country stabilised.¹ The clinical initiatives to avoid COVID-19 infection must be applicable to players, staff and all personnel that participate in the organisation of training and competition. Regarding the recommendations for players, football training must be initiated without any associated health-related issues for players to reach their maximum performance. To achieve this objective, on the first day when players are permitted to attend to teams' training facilities, the medical personnel should conduct a medical examination. This should include recording recent medical history and a precompetition medical assessment, including body temperature recording, blood analysis, and respiratory and cardiovascular screening² (online supplementary material 1).

COVID-19 antigen testing is recommended to detect viral RNA by swab testing and polymerase chain reaction (PCR) in all players.³ In the case of a positive COVID-19 test, the players should be quarantined at home and the medical staff should perform a close medical follow-up. Serology testing is also recommended to confirm immune protection for those who were tested positive for COVID-19 or for those who had suspicious symptoms of the disease within the previous 14 days.⁴ A daily monitoring of symptoms related to COVID-19 should be implemented for all players, staff and team personnel, and PCR or serology testing should be repeated on a weekly basis.

After the football players have been satisfactorily assessed by the medical staff, they will be able to resume training routines with the team, following wide-ranging hygiene protocols. Players should be informed that confinement and its detraining outcomes may have reduced their ability to perform high-intensity exertions over time. Moreover, they should pay greater attention than usual to workload, perception of exertion, and signs and symptoms of injury.⁵

The task force recommends a two-phase mesocycle for the first 4 weeks of training: initially, a short retraining phase followed by a football-specific performance phase. The retraining phase should begin with a basic but broad-spectrum assessment of players' physical condition (power, endurance, joint mobility and body composition). The football-specific tests should be the foundation for development of strategies for injury prevention and physical readaptation of players. Due to the large differences in training routines performed during the confinement, this phase should be individualised, particularly for those players who have tested positive for COVID-19 during confinement or for those who have suspicious symptoms.

Once the intended outcomes of the retraining phase have been achieved, players should be advanced towards a football-specific performance phase, including specific objectives of power, endurance, high-intensity intermittent exercise capacity and speed. It is highly important that players are progressively exposed to training games during this phase. Online supplementary material 2 contains the main aims, the organisation and types of exercises recommended for each phase, and references for optimal load management during each training phase.

The task force proposal for the competition calendar and allowance of alterations of in-game regulations includes a minimum

¹Medical Department, Real Federación Española de Fútbol, Madrid, Spain

²Faculty of Sport Science and Physical Education, University of A Coruña, Oleiros, A Coruña, Spain

³Centre for Sport Studies, Rey Juan Carlos University, Fuenlabrada, Spain

⁴First Team Performance, Tottenham Hotspur Football Club, London, UK

⁵Complex Systems in Sport Research Group, Institut Nacional d'Educació Física de Catalunya (INEFC), University of Lleida, Lleida, Catalunya, Spain

⁶Faculty of Medicine, Complutense University of Madrid, Madrid, Spain

⁷Board of Directors, Spanish Association of Football Teams Physicians, Madrid, Spain

⁸Faculty of Health Sciences, University of Southern Denmark, Odense, Denmark

⁹Centre of Health Science, Faculty of Health, University of the Faroe Islands, Torshavn, Faroe Islands

¹⁰Medical Services, Chelsea FC, London, UK

Correspondence to Dr Juan Del Coso, Centre for Sport Studies, Rey Juan Carlos University, Fuenlabrada 28943, Madrid, Spain; juan.delcoso@urjc.es

training period of 4–6 weeks between the first day of training in the team’s facilities to the first official match. This period is recommended for confinement periods longer than 30 days, which is the current scenario for most football leagues, as an appropriate number of preseason training sessions might entail a ‘healthier’ ending of the football competitions.⁶ Furthermore, the task force recommends resuming competition with a distribution of official matches that secure at least 72 hours between matches.⁷ This measure will produce a less congested football calendar that would potentially lead to a decreased injury rate.⁸ Other recommendations are the inclusion of two exceptional players’ substitutions (for a total of five substitutions per match), the mandatory use of refreshment pauses at minutes 30 and 75 of the match to allow in-game recovery and the use of match schedules with low solar radiation and the lowest possible ambient temperatures, particularly in the games played at zones with moderate-to-high relative humidity.

Twitter Rafael Martín-Acero @RMartinAcero, Juan Del Coso @jdelcoso and Pilar Martín-Escudero @pmartinescudero

Contributors All authors have equally contributed to the final manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; internally peer reviewed.

This article is made freely available for use in accordance with BMJ’s website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

© Author(s) (or their employer(s)) 2020. No commercial re-use. See rights and permissions. Published by BMJ.

► Additional material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/bjsports-2020-102640>).



To cite Herrero-Gonzalez H, Martín-Acero R, Del Coso J, et al. *Br J Sports Med* Epub ahead of print: [please include Day Month Year]. doi:10.1136/bjsports-2020-102640

Accepted 8 June 2020

Br J Sports Med 2020;**0**:1–2.
doi:10.1136/bjsports-2020-102640

ORCID iD

Juan Del Coso <http://orcid.org/0000-0002-5785-984X>

REFERENCES

- 1 Corsini A, Bisciotti GN, Eirale C, et al. Football cannot restart soon during the COVID-19 emergency! A critical perspective from the Italian experience and a call for action. *Br J Sports Med* 2020. doi:10.1136/bjsports-2020-102306. [Epub ahead of print: 24 Mar 2020].
- 2 Rodriguez-Morales AJ, Cardona-Ospina JA, Gutiérrez-Ocampo E, et al. Clinical, laboratory and imaging features of COVID-19: a systematic review and meta-analysis. *Travel Med. Infect. Dis* 2020.
- 3 Toresdahl BG, Asif IM, Disease C. COVID-19): considerations for the competitive athlete. *Sports Health* 2019;2020.
- 4 Halabchi F, Ahmadinejad Z, Selk-Ghaffari M. COVID-19 epidemic: exercise or not to exercise. *That is the Question! Asian J Sports Med* 2020;11.
- 5 Pol R, Hristovski R, Medina D, et al. From microscopic to macroscopic sports injuries. applying the complex dynamic systems approach to sports medicine: a narrative review. *Br J Sports Med* 2019;53:1214–20.
- 6 Ekstrand J, Sprevco A, Windt J, et al. Are Elite Soccer Teams’ Preseason Training Sessions Associated With Fewer In-Season Injuries? A 15-Year Analysis From the Union of European Football Associations (UEFA) Elite Club Injury Study. *Am J Sports Med* 2020;363546519899359.
- 7 Mohr M, Draganidis D, Chatziniolaou A, et al. Muscle damage, inflammatory, immune and performance responses to three football games in 1 week in competitive male players. *Eur J Appl Physiol* 2016;116:179–93.
- 8 Bengtsson H, Ekstrand J, Waldén M, et al. Muscle injury rates in professional football increase with fixture congestion: an 11-year follow-up of the UEFA champions League injury study. *Br J Sports Med* 2014;48:566.2–7.