# Infographics. Football-specific strategies to reduce COVID-19 transmission

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Football stakeholders have been advised to exercise caution when determining when to reintroduce professional football due to the risks of COVID-19 overburdening health services and also concerns regarding potential negative health sequelae for players who contract the disease. There are considerable economic. social and wider incentives attached to resuming professional football. Should this occur prematurely it would present significant ethical and medical challenges to medical teams. Robust risk assessment and mitigation procedures would facilitate professional football to return in some format despite the ongoing pandemic,<sup>2</sup> but they will not eliminate risk completely. This article considers the evolving science pertinent to professional footballers in the context of COVID-19, with the overarching purpose to ensure the health and safety of players, staff, their families and the general public. The primary focus of this article is on strategies to reduce the risk of human-to-human transmission during football activity, aspects of which will be relevant to other sports.

# REDUCING RISK OF COVID-19 TRANSMISSION DURING FOOTBALL ACTIVITY

Specific risk factors including the contact nature of football and travel demands can increase transmission of COVID-19. Medical teams will be expected to implement interventions which mitigate this risk. The following coreprinciples (figures 1 and 2) should be considered.

# **RISK ASSESSMENT**

- ▶ Detailed risk assessments should be undertaken prior to all activity,<sup>2</sup> including training, match play, travel and hotel stays.
- ► Risk assessments should consider risks to the individual and their household members (eg, underlying health conditions) and the collective group (eg, travel, matches).
- Where the risk is deemed to be unacceptably high, timely proactive measures should be taken to reduce or remove the risk.

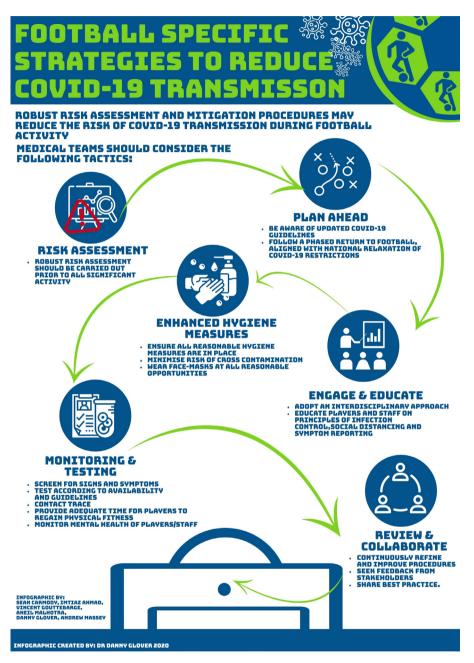


Figure 1 Football-specific strategies to reduce COVID-19 transmission.

### **PLAN AHEAD**

- ► Team physicians must be aware of the updated local, national and international health authority guidelines.<sup>3 4</sup>
- ► A 'fluid' phased return to training and match-play should be implemented, and this should reflect the stepwise
- relaxation of COVID-19 restrictions of the country in which you reside.
- Limit numbers of players and staff in the initial stages of training (and preparation for training) by implementing staggered timetables. Training drills should initially encourage social



Figure 2 The 4-4-2 of COVID-19 transmission.

distancing and limit shared contact with equipment. 5 6

#### **ENGAGE AND EDUCATE**

- ► Educate all players and staff on COVID-19, the principles of infection control, social distancing and how/ when to report symptoms.
- ▶ Engage various departments within your club (eg, human resources, facilities, transport and management) to coordinate a safe and effective environment to train and play. Only essential staff should be present during training and match activity.

# **ENHANCED HYGIENE MEASURES**

- ► Ensure all reasonable hygiene measures are in place, such as handwashing stations, open doors and wide availability of sealed bins.
- Working alongside facilities management, ensure surfaces are regularly disinfected.
- ▶ Players should refrain from sharing water bottles, food, communal indoor facilities and so on.
- ► Face-masks should be worn at all reasonable times, especially where social distancing is not possible.

# **MONITORING AND TESTING**

► The presence of fever (>37.8°C), new persistent cough, shortness of breath, undue fatigue, myalgia or anosmia should be monitored daily by the medical team, and a temperature

- taken. This can be performed remotely by the player on days off.
- ▶ Any players or staff presenting with clinical signs or symptoms must remain isolated at home, and testing carried out. Anyone who had close contact with the symptomatic person (within 1–2 m) in the preceding 14 days should isolate. These players should continue to be monitored remotely by the medical team.
- ► Contact tracing following confirmed cases should be undertaken.<sup>7</sup>
- ► The extent of testing should be proportionate to that recommended by your governing body, and which fairly reflects resources available to your club, other clubs in your league, and the country in which you reside. Tests should not be taken from a health service with limited testing availability.
- ▶ Sufficient time for players to regain physical fitness in a training environment to prepare for match play, to reduce the risk of injury by progressive reloading must be provided. Mental health of players and staff should also be monitored. 8

#### **REVIEW AND COLLABORATE**

- ► The risk mitigation interventions implemented and their appropriateness should continue to be reflected on and reviewed. Feedback from players and staff should be sought.
- ► Seamless communication with colleagues at other clubs should be

facilitated to ensured shared learning and continuous improvement of procedures. Practitioners should be encouraged to learn from other sports with similar risk profiles and also from the same sport in those countries who suffered the pandemic in its earlier stages (ie, early in 2020).

#### CONCLUSION

Given the detrimental health and socioeconomic impact globally of the COVID-19 pandemic, the resumption of football is a secondary concern. Premature return risks overburdening the health services and exposing players and staff to unacceptable risk. A comprehensive risk assessment and appropriate mitigation strategies may allow professional football to return in some conceivable format. This article outlines key interventions which could be implemented by medical teams to protect the health of players during the COVID-19 pandemic.

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