



# Colour Blindness in Sport

## Supporting Colour Blind Fans

### What is colour blindness?

We see colour through 3 types of cone cells in our eyes, which absorb red, green or blue light. With colour blindness (colour vision deficiency, CVD) one type doesn't operate normally. Most types of colour blindness involve defects in red or green cones, meaning **many** colour combinations can be confusing.

### Why is it an issue in sport?

Almost 33 million people in Europe have some form of inherited CVD. Many are undiagnosed or unaware they have it. For people with no deficiency, it can be difficult to understand the problems this can cause but in sport colour blindness can be a challenge for fans, players and club staff. Clubs rely on colour in websites and digital platforms to sell tickets and merchandise.



Normal vision



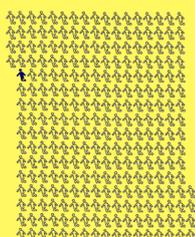
Colour blind simulation

Colour blindness is one of the world's most common inherited conditions. Statistically it affects...

1 in 12 men



1 in 200 women



Approximately 300 million people



worldwide

Colour blindness is a particularly important issue in sport as colour is key to distinguishing between players and athletes, in seeing kit, equipment, wayfinding and emergency signage etc.

On a matchday, for example, CVD can affect up to 6% of people in a football stadium including:

- **Players**
- **Coaches**
- **Fans**
- **Staff e.g. stewards**
- **Media**
- **Emergency services**

### Relevance for those working in fan support

Clubs officers can work with both fans and clubs to raise awareness of CVD to ensure the fans' matchday experience is not compromised.

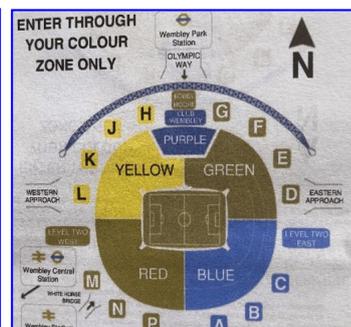
Addressing colour blindness means applying some basic principles to the way clubs consider how they use colour in kits and information because

- Information given in colour alone may not be accessible
- Solutions are usually simple and common sense, such as adding text, symbols, shapes and patterns
- Certain kit colour combinations can result in a significant number of fans being unable to follow a match.
- Club colours don't need to change, being accessible is about how colours are used

Normal vision



Colour blind simulation

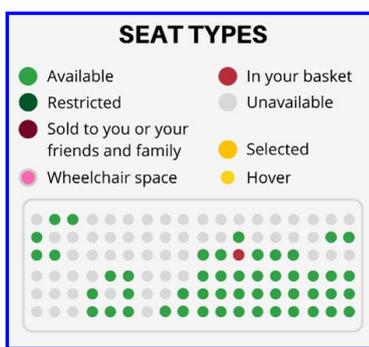


**Above images** – good practice example of stadium plans for wayfinding and matchday tickets. The colours of different stadium zones are given in strongly contrasting text to avoid confusion, using different font colours to maximise contrast.

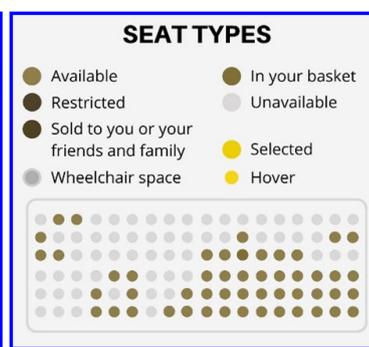


Normal vision

Colour blind simulation



Normal vision



Colour blind simulation

### Club website/publications/communications

Clubs can ensure:

- Information about the Club, including merchandise, is accessible
- Fans with CVD can easily select and purchase tickets independently
- Public transport and directional/wayfinding information is not provided using colour alone
- Clear product information is provided for all merchandise using simple colour names



Normal vision



Colour blind simulation

### Venues

Clubs can also ensure information is legible and prominent, including:

- Wayfinding signs and stadium plans
- Stand, block, row and seating information
- Signage for amenities
- Emergency and first aid signage and information
- Merchandise/concession/allergen information
- Information in matchday programs and club apps



Normal vision



Colour blind simulation

### On the pitch

Fans and players with CVD need to easily be able to distinguish between:

- The kit colours of both teams
- Outfield and goalkeeper kits
- Team kits and match officials
- Players' kit and the colour of the pitch
- Understand information on substitution boards
- Read information on big screens

### What can fan liaison officers do to help?

- Organise training on colour blindness to raise awareness amongst club staff and to support colour blind employees
- Arrange a stadium audit to identify safety and security issues
- Involve the club's community and academy to raise awareness of CVD amongst fans/players/coaches/parents and employees and to ensure any colour blind players will receive adequate support from the club.

### Where can fans go for help?

If fans experience problems such as difficulty purchasing tickets or distinguishing between kit colours in a match they should contact the club (or tournament) fan liaison officer and explain the problem.

Where tickets have been purchased for a 'colour blind kit clash' match, fans should request a refund of their tickets from the organisation they purchased the tickets from.

For TV coverage issues fans should consider raising a complaint directly with the broadcaster.

For more information refer to the TACBIS factsheets and resources, in particular players, Coaches, Venues, Advice When Selecting Kit Colours, Ticketing and Marketing, Communications and Commercial Implications.

Visit [www.colourblindawareness.org](http://www.colourblindawareness.org), [SD Europe](http://SD Europe) and [CAFE](http://CAFE).