

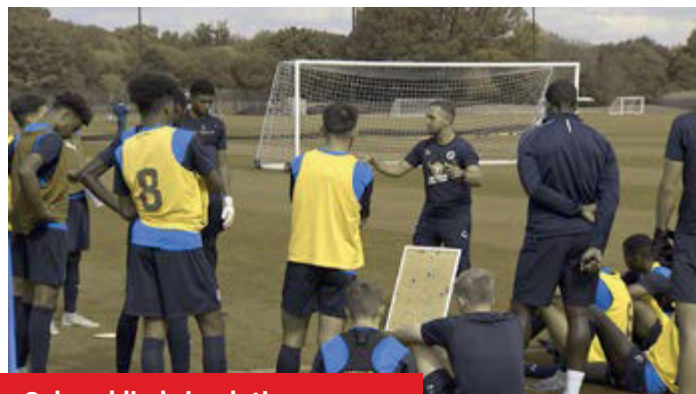
# Colour blindness

## guidance for

# coaches



Normal colour vision



Colour-blind simulation

### What is colour blindness?

We see colour through three types of cone cells in our eyes. These absorb red, green or blue light respectively. In colour blindness, one of the cone cells doesn't operate normally – usually the red or green cones. This makes many colour combinations confusing to people with these defective cones. Colour blindness is also known as colour-vision deficiency or CVD. Most people think colour-blind people only confuse red and green. Not true. Many different colour combinations cause confusion as the pics in this fact sheet show.

### Impact of CVD on players

The greatest problems for colour-blind players are in:

#### Training

- Distinguishing between bib colours.
- Distinguishing equipment from the pitch/other equipment, e.g.
  - balls
  - cones
  - line markings
  - corner flags.
- Tactical training – distinguishing between team colours on magnetic boards.
- Classroom training
  - Distinguishing between pen colours on whiteboards e.g. between red and green or red and black.
  - Distinguishing information in graphics e.g. following a specific player in TV footage replays.

Colour blindness (colour-vision deficiency, CVD) is one of the world's most common inherited conditions and affects:

1 in 12  1 in 200 

Statistically, one player in every male squad is colour blind.  
300+ million people worldwide are colour blind.



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## Matches

- Distinguishing between kit colours of:
  - the outfield players
  - outfield players and goalkeeper(s)
  - outfield players and match officials.
- Players' kit 'disappearing' against the colour of the pitch.
- Following the ball against the pitch/stands.
- Different types of lighting e.g. moving from shade into sunlight, floodlighting.

## Issues for coaches

- Identifying colour-blind players because most hide their condition and many are unaware of it.
- Selecting appropriate equipment for colour-blind players.

## Instances which may indicate a player has CVD

- Players/parents may tell you (although many may be unaware).
- Certain activities may cause a change in behaviour. Signs to look out for may include:
  - certain bib colour combinations causing uncharacteristic confusion to the player
  - players stopping the ball before passing/ demonstrating undue hesitation on the ball.
- Players may inadvertently pass to the opposition, particularly in training where team compositions are constantly changing.
- Players may take the ball beyond the playing area without realising when, for example, red lines/cones are used on grass.

## Effective strategies when coaching players with CVD

- Ensure kit colours for matches are not 'colour blind' kit clashes\*.
- In training use blue vs yellow or white bibs as first choice.
- Ensure line markings are white or yellow as first choice.
- Avoid using red and orange cones on grass.
- In tactical training use blue vs white or yellow magnets for outfield players.
- If using coloured pens on flip charts/whiteboards, use different shapes to distinguish between opposing teams as well as colour e.g. red triangles, blue circles.

## For more information:

- see the FA/UEFA Guidance Notes: Colour Blindness in Football [here](#)
- watch the FA's mini-documentary [The Colourful Game](#)
- visit the [Colour Blind Awareness website](#)
- \*see [Advice When Selecting Kit Colours.](#)



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“ Being able to distinguish between the two teams, see the ball clearly and recognise where the pitch boundaries lie is fundamental to the experience enjoyed by everyone involved in our wonderful game. ”

**Ryan Davies**

ENGLAND FOOTBALL LEARNING PHYSICAL EDUCATION OFFICER

Ryan is colour blind – you can read about his experience of coaching football [here](#).



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