Should you listen to music through earphones whilst cycling?

Citation for published version:

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Peer reviewed version

Published In:
British Journal of Sports Medicine Blog

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
Should you listen to music through earphones whilst cycling?

22 Dec, 16 | by BJSM

By Chris Oliver @cyclingsurgeon

Whilst banning wearing headphones whilst cycling may seem obvious for safety reasons, this behaviour restriction could be unfounded. In the United Kingdom it is currently not illegal to wear headphones whilst cycling on public roads or cycle paths. One would think that listening to music may distract you from your surroundings. It may also prevent you from hearing other vehicles approach and thus jeopardise your own safety.

When cycling, there is a dynamic environment and a dependency on balance, speed, vision and hearing. All are required with many other factors such as wind and ice to ride safely.

Despite the common perspective that a greater ability to hear external sounds is safer and therefore better cycling practice, credible scientific evidence about cycling and wearing headphones is very limited. One Dutch paper by de Waard [2] from 2011 studied a small series of 25 subjects who wore headphones. An auditory beep was used to alert of a hazard whilst listening to music. When the headphones were worn on both ears only 68% of cyclists heard the audible stop. When just one headphone was used all audible stops were heard. The researchers also found negative effects of high volume and fast tempo on auditory perception. The problem with this study is that no consideration was given to any visual warnings. Generally cyclists will use both visual and auditory information to stay safe. Stop signals are not auditory. There are red lights, white lines, and so on. All visual. Unfortunately there is really little evidence about how cycling with headphones affects concentration.

There must also be a consideration for hearing impaired and deaf cyclists. Being deaf and driving any vehicle, being in an enclosed vehicle or riding a bicycle is also not illegal in the United Kingdom. If one was to argue that the loss of ability to hear sounds was in itself sufficient reason to prohibit cycling with headphones, one would also have to argue that deaf and partially deaf people would have to be banned from cycling. [1] Cars have music systems and therefore, logically, if one was to argue that loss of concentration through listening to
music or speech was in itself sufficient reason to prohibit cycling with headphones, one would also have to argue that car stereos would have to be banned. With large numbers of pedestrians using smartphones and listening to music whilst walking one might also have to argue that this habit might have to be considered illegal?

A BBC poll conducted in 2014 resulted in almost 90 per cent questioned being in favour of a blanket ban of cycling and wearing headphones. Many respondents perceived that cyclists would be more unaware and unresponsive to dangers, and therefore more likely to be involved in incidents. One study showed that listening to your favourite artists can increase your endurance by up to 15 per cent while lowering your perception of effort [3]. Competitive cyclists often use radio earphones often just in one ear to communicate with team cars to set speed and their own power output.

Cycling and headphones causes much emotion and controversial debate, especially in the media. [4]. Victim blaming can be very upsetting in some accident situations. The facts of cycling accidents have to be absolutely established. Before anyone can come to any strong conclusions, we need further research to build up the evidence base on the use of headphones while cycling.

References

- Cycling with headphones may have contributed to mother’s death. Daily Telegraph. 5th December 2016 http://www.telegraph.co.uk/news/2016/12/05/cycling-headphones-kills-mother-coroner-says-caused-death/ [Accessed 16/12/16]

*************************

Professor Chris Oliver, Physical Activity for Health Research Centre, University of Edinburgh
Consultant Trauma Orthopaedic Hand Surgeon, Royal Infirmary Edinburgh
c.w.oliver@ed.ac.uk
http://tinyurl.com/ntpmtar/
Twitter: @cyclingsurgeon