Why are Dutch cyclists more likely to be injured if they wear helmets?

Although the Netherlands is probably the safest country in the world for cycling, helmet wearing among Dutch cyclists is rare. It has been estimated that only about 0.5 percent of cyclists in the Netherlands are helmeted.

However, according to Dutch Government data (Rijkswaterstaat, 2008), 13.3 percent of cyclists admitted to hospital were wearing helmets when they were injured. Why does wearing a helmet appear to increase the risk of being injured so substantially?

The answer is probably related to another statistic. Of the injured cyclists wearing helmets, 50 percent were riding mountain bikes and 46 percent were riding racing bikes (Rijkswaterstaat, 2008). In other words, most helmeted cyclists in the Netherlands are engaged in a competitive activity, with very few making utility trips on the traditional style of Dutch bicycle.

Crashing is much more likely when racing than when making ordinary trips about town. Because they are moving at substantially higher speeds almost all the time, racing cyclists are more likely to be in collisions requiring hospital treatment. Similarly, mountain bike riders often undertake tricky manoeuvres on rough ground, and are therefore more prone to falls than is the case for commuters, shoppers and school children riding on ordinary streets.

Helmet wearers in the Netherlands are doing something different from normal everyday cyclists when they are wearing their helmets, which greatly increases their chances of being hospitalised. Helmet wearing is implicated in behaviour which is far more likely to end up in hospital than the cycling done when not wearing a helmet. However, in a country such as the Netherlands, where cycling is a commonplace everyday way of getting around, it is likely that most of the helmeted leisure time mountain and racing bike riders also ride utility bikes for their everyday journeys and they probably then ride unhelmeted. They choose to wear helmets only when they want to face a higher exposure to risk.

Although the desire to take heightened risk probably comes before the decision to wear a helmet, it is likely that the act of wearing a helmet reinforces the acceptability of taking risks, leading to the taking of even greater risks. In professional sport, people may use helmets, their skill in bike handling and the protection from immediately available specialist medical care in order to facilitate the highest levels of risk taking.

Sports cyclists wear helmets in an attempt to limit the consequences of the risks they want to take. However, the much greater representation of these cyclists in the hospital statistics suggests that their attempts to limit risks are inadequate for the risks involved. Indeed, putting their faith in 'technical fixes' such as cycle helmets may encourage many people to take greater risks than they should. In cycle sport internationally, the number of deaths in races has increased markedly since helmet use became mandatory (BHRF, 1213).

References

BHRF, 1213

Fatalities in cycle sport.

http://www.cyclehelmets.org/1213.html

Rijkswaterstaat, 2008

Ormel W, Wolt KK, den Hertog P, . Enkelvoudige fietsongevallen. Ministerie van Verkeer en Waterstaat, 2008.

The Bicycle Helmet Research Foundation (BHRF), an incorporated body with an international membership, exists to undertake, encourage and spread the scientific study of the use of bicycle helmets. Also to consider the effect of the promotion and use of helmets on the perception

of cycling in terms of risk and the achievement of wider public health and societal goals.

BHRF strives to provide a resource of best-available factual information to assist the understanding of a complex subject, and one where some of the reasoning may conflict with received opinion. In particular BHRF seeks to provide access to a wider range of information than is commonly made available by those that take a strong helmet promotion stance. It is hoped that this will assist informed judgements about the pros and cons of cycle helmets.

For more information, please visit www.cyclehelmets.org.

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