

Bicycling under the influence of alcohol

Author(s)

de Waard D, Houwing S, Lewis-Evans B et al.

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Abstract

Objective: According to international data estimates the proportion bicyclists with a positive Blood Alcohol Concentration (BAC) who are involved in accidents ranges from 15 to 57%. This large variance, and the fact that the reliance on accident statistics means that only the BAC of injured bicyclists is being collected, shows that we do not really know what the average and variation in BAC of bicyclists is, particularly on nights out.

Method: On a total of four nights between 5 PM and 8 AM BAC levels of bicyclists were collected with a Breathalyser (N=687). Samples were collected in two Dutch cities, one with a high (Groningen), and one with a modest, student population (The Hague).

Results: The results showed that the percentage of bicyclists who had alcohol in their blood rose over the night from 7.7% at 6 PM to over 89% after 1 AM.

Furthermore, the percentage of bicyclists with an illegal BAC above 0.5 g/l rose from zero percent at 6 PM to 68% at 1 AM. The average BAC of bicyclists with a BAC above zero was 0.79 g/l. Differences between the two cities were limited.

Conclusion: Cycling with illegal levels of blood alcohol turns out to be very common on nights out in the Netherlands.

Web link

http://www.rug.nl/research/portal/files/19436003/Paper_BAC_cycling_TRF_final.pdf

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