

The risk of bunch riding among sport cyclists on public road infrastructure.

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ABSTRACT

In traffic safety a limited knowledge base is available about regular cyclists and the risks of bunch riding [1, 2]. Less is known about the roughly one million sport cyclists in the Netherlands who use the public road system, what their behaviours are and how they get involved in traffic accidents.

In order to find out what factors contribute to accidents with sport cyclists, a questionnaire was developed in cooperation with the NTFU (Dutch Cycling Union). The questionnaire was meant to measure 'risk' for certain types of accidents (single bicycle crashes, crashes involving other road users). Risk was defined as the number of accidents / 1000km, among sport cyclists. This questionnaire was sent to 2625 respondents, with a response rate of 28% (N=744).

Results showed that 48% of accidents involving one sport cyclist and at least one other person, consisted of a collision with another sport cyclist. This raised the question if cyclist bunch riding carries a higher risk.

Analysis showed that risk increased as the size of the group in which the sports cyclists rode increased. Those who cycled alone had an average of 0.04 accidents/1000km (N=204), whereas those in groups had an average of 0.05 accidents / 1000 km (N=540). A Chi² analysis indicated a significant higher accident involvement for bunch riders (Chi²=8,365, p<0.01).

This could in part be caused by the close proximity between cyclists in groups, as well as reduced visibility of the road ahead. Sudden braking or evasive actions in groups could contribute to the observed heightened risk of colliding with another group member. High quality infrastructure, meaning the absence of unexpected objects, sufficient width of cycling lanes as well as a smooth road surface could contribute to the prevention of accidents caused by bunch riding.

Keywords: sport cycling, accidents, bunch riding, risk, prevention.

REFERENCES

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