

0036 **THE USE OF CONSPICUITY AIDS BY CYCLISTS AND RISK OF ACCIDENTS INVOLVING OTHER ROAD USERS: A POPULATION BASED CASE-CONTROL STUDY**

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Background Regular cycling has been shown to improve health and has a role in tackling obesity and inactivity. Cycle collisions, particularly those involving motorised vehicles, can lead to significant mortality and morbidity and are currently a barrier to wider uptake of cycling. There is evidence that the conspicuity of cyclists is a factor in many injury collisions. Low-cost, easy to use retro-reflective and fluorescent clothing and accessories (conspicuity aids) are widely available. Their effectiveness in reducing bicycle collision accidents is unknown. This study investigated the relationship between the use of conspicuity aids and the risk of crashes involving another road user for utility and commuter cyclists.

Methods A matched case-control study was conducted.

Cases Adult commuter and utility cyclists involved in accidents resulting from a collision or attempted evasion of a collision with another road user recruited at a UK emergency department.

Controls Commuter and utility cyclists matched by journey purpose, time and day of travel and geographical area recruited at public and private cycle parking. Data on the use of conspicuity aids, accident circumstances, environmental conditions, demographics, cycling experience, safety equipment use and journey characteristics was collected using self-completed questionnaires and maps. Conditional logistic regression was used to calculate adjusted ORs and 95% CIs of the risk of accidents when using any item of fluorescent or reflective clothing or equipment.

Results Results and supporting analysis will be presented.