

## Adults' experience of safety issues when riding with children

Julie Hatfield<sup>a</sup>, Roslyn Poulos<sup>b</sup>, Susanne Murphy<sup>b</sup>, Chris Rissel<sup>c</sup>

<sup>a</sup>Transport and Road Safety Research Centre, University of New South Wales, Sydney, Australia, <sup>b</sup>School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia, <sup>c</sup>Sydney School of Public Health, The University of Sydney, Sydney, Australia

### Abstract

Supporting children to develop a habit of bicycle riding helps to protect them against a range of diseases associated with inactivity. An online survey of adult bicycle riders was conducted to advance understanding about safety issues of riding with children. A large majority of respondents who reported riding with children specified risks particular to riding carrying, or riding with, children. Many respondents highlighted risks associated with riding on footpaths but reported that they avoid riding on roads with children. Among crashes with a child on the bicycle, most were falls, and “tagalong” carriers appeared to be overrepresented. Findings suggest the importance of communicating with parents about safety issues that they may encounter when riding with children, and highlight the importance of providing environments which can safely accommodate the characteristics of bicycles carrying children (in terms of stability and handling) and bicycles ridden by children (with their developing capacities).

### Background:

Supporting children to develop a habit of bicycle riding helps to protect them against a range of diseases associated with inactivity (including obesity and cardiovascular disease). Children often begin by riding with their parents - in a carrier on the adults' bicycle (e.g. child carrier seat, trailer, tagalong, cargo box) and/or, later, on their own bicycle accompanied by an adult.

### Objective:

To extend the relatively small body of information about safety issues of riding with children.

### Methods:

The Safer Cycling Study involved 2038 adult bicycle riders from New South Wales Australia reporting on aspects of their riding over one year. One of their on-line surveys included questions about riding with children.

### Findings:

Among the 184 participants who had ridden with children on their bicycle, 80% specified risks particular to riding carrying children; including instability associated with child seats, changed handling due to increased weight, and reduced manoeuvrability due to increased width and/or length. Among crashes with a child on the bicycle, most were falls, and “tagalong” carriers appeared to be overrepresented. Among the 345 participants who had ridden to accompany a child on a bicycle, 75% specified risks particular to accompanying children, such as managing the child's limited skill, awareness, and predictability. Many respondents reported that they avoid riding on roads with children (including carried on the adult bicycle), but also highlighted risks associated with riding on footpaths (e.g. driveways, poor surface condition).

**Conclusion and policy implications:**

Findings highlight safety issues that parents may encounter when riding with children, and suggest that communication about these issues and strategies to address them may improve safety. Findings also highlight the importance of providing environments which can safely accommodate the characteristics of bicycles carrying children (in terms of stability and handling) and bicycles ridden by children (with their developing capacities).