27 THE INCIDENCE OF CHILDHOOD INJURY FOLLOWING AN 'INLAND TSUNAMI': THE EXPERIENCE OF TOOWOOMBA

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Kaltner Melissa. *Queensland Health, Queensland, Australia*

Background In January of 2011, the area of Toowoomba and Lockyer Valley in Queensland, Australia, experienced unprecedented flash flooding. Witness descriptions of a 'wall' of water reported to be up to 7 m (7.65 yards) in height led to the term 'inland tsunami' being adopted to describe the natural disaster. A large body of evidence highlights the negative psychosocial impact of natural disaster exposure, which has been hypothesised to increase the incidence of both intentional and unintentional childhood injury. Limited evidence suggests peaks in child injury following natural disasters, however further research is necessary to confirm these observations in varied natural disaster contexts.

Aims The study outlined in this presentation examined physical injury incidence in Toowoomba and Lockyer Valley resident children during 12 month periods pre- and post-flash flooding to examine the association between natural disaster and child injury incidence.

Methods Retrospective review of discharge records from two 12-month periods at Toowoomba Base Hospital was utilised to ascertain the incidence of physical injury in Toowoomba and Lockyer Valley resident children aged 0–14 years pre- and post-flash flooding. Differentiation of abusive, accidental and undetermined intent mechanisms of injury was made through ICD coding.

Results Incidence was calculated for each period using a denominator of child population numbers in the geographic area, and a numerator of injury occurrence for each injury type in the

12-month periods pre- and post-natural disaster occurrence. Rates ratios were then used to examine change in incidence for each injury mechanism between pre- and post-flash flood periods.

Contribution to the Field This study provides evidence of increased accidental and inflicted child injury rates following the occurrence of natural disaster, supporting previous international examinations. The study findings highlight areas for injury prevention need to reduce injury burden in children following natural disaster experience.