^{1,2}RQ Ivers, ^{1,2}L De Rome, ¹S Boufous, ¹T Senserrick, ³D Richardson. ¹*The George Institute for Global Health, Australia;* ²*School of Public Health, University of Sydney, Australia;* ³*Medical School, Australian National University, Australia*

Background Despite increasing popularity of off-road cycling, data on injury in off-road riders are rarely reported. This study aimed to describe characteristics of a sample of injured off-road cyclists.

Aims/Objectives/Purpose Phone interviews were conducted with adults presenting to Canberra or Calvary Hospitals in Canberra with a cycle related injury between November 2009 and May 2010; medical records were accessed to verify patient data.

Results Of 372 eligible cyclists, 84.1% (n=313) participated; 111 (35.5%) were riding off-road. Of off-road riders, most were riding mountain bikes (76%), 93 (84%) were male, compared to 74% overall and more were aged 17–25 (28% vs 22%). Most (63%) were riding on designated off-road trails, 22% in BMX- or skate-parks; 33% of cyclists involved in off-road crashes reported 'riding for thrills' compared to 5% in other cyclists, with the most common risk behaviour being downhill speeding. More off-road incidents involved a fall (93% vs 65% of all riders) but fewer involved collisions (6% vs 25%); more off-road riders were recreational riders (73% vs 43%) and more reported previous crashes (72% vs 60%). Most common injuries were bruises, abrasions and sprains; 36% had fractures. Most common injury sites were shoulder, elbow and hand. Helmet usage was higher for off-road riders (89%) compared to those riding on footpaths (71%) or cycle lanes (68%).

Significance/Contribution to the Field A high proportion of injured cyclists were recreational, off-road riders. Although more research is needed, injury prevention programmes for off-road riders might focus on management of risky riding behaviours and hazards in the riding environment.