



The UPLOADS National Incident Dataset
Annual Report: 1st June 2015 to 31st May 2016

Authors

Dr Amanda Clacy

Dr Michelle van Mulken

Dr Natassia Goode

Professor Paul Salmon



EXECUTIVE SUMMARY

The aim of this report is to present the findings from the UPLOADS National Incident Dataset for the period between the 1st of June 2015 and the 31st May 2016. Nineteen (19) organisations from across Australia contributed incident and participation data using the UPLOADS Software Tool and UPLOADS Lite during this period. The qualitative sections of the incident reports, describing the contributing factors involved in incidents, were coded using the UPLOADS Accident Analysis Method by the research team.

In total, 485 incidents were reported over the 12-month period including: 351 injury-related incidents; 74 illness-related incidents; 34 near miss incidents; 13 incidents involving social or psychological outcomes; and 13 reports of equipment damage. This report presents the findings from analyses of the injury, illness, and near miss incidents.

Injury-related incidents

Incidence rate

The mean injury incidence rate for all activities was 2.1 per 1000 participants. This means that approximately two injury-related incidents were reported for every thousand people who participated in led outdoor activities. This injury-incidence rate has remained consistent since the first annual UPLOADS report (1st of June 2014 and the 31st May 2015). While this incidence rate may underestimate the actual incidence of injuries due to potential underreporting and the small sample of organisations that participated in the trial, the low rate of injury-related reports suggests that the risks associated with led outdoor activities are reasonably well managed in the sample of organisations that contributed data.

Activities

Wheel sport activities had the highest injury incidence rate (8.8 incidents per 1000 participants) followed by trampolining (7.1 incidents per 1000 participants) and walking/running in the outdoors (5.7 incidents per 1000 participants). In comparison with the first annual report, walking/running in the outdoors, campcraft, and snow sports had the highest injury incidence rates (8.2, 5.7, and 5.3 incidents per 1000 participants, respectively). As with the first annual report, over half (55%) of all activities had an injury incidence rate of less than 1 per 1000 participants. This suggests that the risks associated with these particular activities are reasonably well managed in the sample of organisations that contributed data.

People injured

Approximately equal numbers of males and females were injured (male = 46%; female = 41%; missing data = 13%). The majority (86%) of injured people were activity participants (50% male) with a median age of 15 years (range: 7-18; 56% missing data). These demographics are similar to those reported in the first annual report, which also identified activity participants as the most frequently injured actors. However, a larger percentage of males were reported as injured in this dataset (46%) compared to the first report (34%).

There was substantial demographic data missing from the injury data reported during this period; only 44% of injury reports included complete demographic information. As such, caution is urged when interpreting the demographic data.

Contributing factors

Almost all of the reports associated with injuries (96%) had sufficient detail to support further analysis with the UPLOADS Accident Analysis Method. A median of two (2) contributing factor was identified per injury-related incident report (range: 1-7). The most frequently identified contributing factors were 'Infrastructure and Terrain' and 'Activity Participant Experience and Competence' (identified in 35% and 26% of injury incidents, respectively). There was noteworthy absence of detail regarding the relationships between factors in the injury-related incident reports, especially between the categories at the levels of Local Area Government and Higher Level Management, and Supervision and Management Decisions. Contributing factors were identified at the following levels of the UPLOADS Accident Analysis Framework: 'Equipment, Environment and Meteorological Conditions'; 'Decisions and Actions of Leaders', 'Participants and other Actors at the Scene'; 'Supervisory and Management Decisions and Actions'; and 'Local Area Government, Schools, Parents & Carers, Higher Level Management'.

These findings are consistent with the first annual report. There are two key implications of this finding: firstly, it again provides evidence that led outdoor activity injuries represent a systemic issue; and secondly, the UPLOADS accident analysis method allows reporters to identify specific contributing factors within the led outdoor system.

Illness-related incidents

Incidence rate

The mean illness incidence rate across all activities was 0.4 reported incidents per 1000 participants. This means that less than 1 incident associated with an illness was reported for every

thousand participants involved in a led outdoor activity. This rate is lower compared to the first annual UPLOADS report (0.6 per 1000 participants).

Activities

Camping in tents had the highest illness-related incidence rate (2.7 incidents per 1000 participants), followed by free time outdoors (1.6 incidents per 1000 participants) and walking/running in the outdoors (1.5 incidents per 1000 participants). In addition, the majority of activities (55%) were not associated with any illness-related incidents. Overall, these findings are consistent with the first annual report.

People reported as ill

The majority (89%) of people reporting illnesses were Activity Participants, 53% of which were female and 39% were male (8% were missing data). The median age of ill activity participants was 15 years old (range: 10 to 16 years), which is slightly younger than the median age of 16 years that was reported in the first annual report.

Contributing factors

Almost all of the reports associated with illnesses (92%) had sufficient detail to support further analysis with the UPLOADS Accident Analysis Method. A median of one (1) contributing factor was identified per illness incident report (range: 1-4). The most frequently identified factors were: 'Activity Participant Mental and Physical Condition' and 'Food and Drink' (identified in 77% and 32% of illness related incidents, respectively). Factors at the following three levels of the UPLOADS Accident Analysis Framework were identified: 'Equipment, Environment and Meteorological Conditions'; 'Decisions and Actions of Leaders, Participants and other Actors at the Scene'; 'Supervisory and Management Decisions and Actions'.

These findings are consistent with the first annual report. This once again illustrates that illnesses during outdoor activities are a systemic issue. In addition, it indicates that the issues that the sector faces are relatively stable across times.

Near miss incidents

Incidence rate

The mean near miss incidence rate for all activities was 0.2 incidents per 1000 participants. This is consistent with the first annual report.

Overall, 65% of near miss incidents were reported to have a potential severity rating of 3 or above, which are incidents with potentially serious to fatal consequences. This suggests that there is

underreporting of near miss incidents associated with less severe outcomes, which may provide valuable information about potential hazards. The focus on potentially high severity near misses has increased since the first report, where only 51% of near miss incidents had a potential severity rating of 3 or above.

Activities

Wheel sports had the highest near miss incidence rate (0.7 incidents per 1000 participants), followed by campcraft (i.e., cooking, campfires; 0.6 incidents per 1000 participants) and river activities (0.4 incidents per 1000 participants). Campcraft was also noted as an activity with a relatively high near miss incidence rate in the first annual report, with a recorded incidence rate of 0.8 near miss incidents per 1000 participants. However, it should be noted that these rates all represent less than 1 reported near miss per 1000 participants.

Contributing factors

Almost all of the near miss reports (97%) had sufficient detail to support further analysis with the UPLOADS Accident Analysis Method. A median of two (2) contributing factors were identified per near miss report (range: 1-7). The most frequently identified factors were 'Activity Participant Communication and Following Instructions' (36%), 'Activity Participant Situation Awareness' (27%), and 'Activity Participant Judgement and Decision-making' (21%). Factors were identified at the following levels of the framework: 'Equipment, Environment and Meteorological Conditions'; 'Decisions and Actions of Leaders', 'Participants and other Actors at the Scene'; and 'Supervisory and Management Decisions and Actions'; and 'Government departments'. These findings indicate that near miss reports provide important information about the factors at the higher levels of the led outdoor activity system that contribute to incidents, that are not necessarily captured in the more frequent reports of injuries or illnesses.

Conclusions

This report presents the findings from the UPLOADS National Incident Dataset in the period between the 1st of June 2015 and the 31st May 2016. There are a number of important conclusions from this analysis for the Australian led outdoor activity sector, pertaining to incidents and incident causation in led outdoor activities, and also to incident reporting within the sector.

First, the analysis shows that there are a range of issues across the led outdoor activity (LOA) system in Australia that are contributing to injury, illness, and near miss incidents. Therefore, incident prevention strategies should focus on addressing the broader network of contributing factors driving adverse events, as opposed to focusing on the issues associated with instructors, participants, equipment and the activity environment in isolation.

Second, compared to other sport and active recreation pursuits, the injury-incidence rate associated with led outdoor activities in Australia appears to be low (2.1 per 1000 participants). While it is acknowledged that this rate may underestimate the actual incidence of injuries due to potential underreporting and the small sample of organisations that participated in the trial, it is consistent with the first annual UPLOADS report. This suggests that the rate is reasonably stable, despite changes in the sample, and therefore reasonably representative of the sector as a whole. Therefore, based on the two years of data from the UPLOADS National Incident Dataset, it is concluded that the rate of injuries during led outdoor activities is considerably lower than in other organised sports.

Third, the low percentage of near miss incident reports is a significant issue that may be limiting the sector's opportunities to prevent future incidents. The near miss reports contained important information about factors at the higher levels of the led outdoor activity sector that are contributing to incidents. Further education around the importance of reporting near miss incidents is therefore recommended.

As a final note, we would like to acknowledge the sector's critical role in producing the UPLOADS National Incident Dataset. This dataset represents a huge contribution of time and effort from the organisations involved, both in terms of data collection and maintaining the quality of the reports. We would like to thank those organisations and our funding partners. We would also like to urge others to contribute data in future. A larger sample size would allow for more firm conclusions to be drawn regarding the management of risk within the sector and the selection of appropriate targets for prevention strategies.