Adventure Sports Injuries in NZ: What’s the Problem?

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Injury 2008
Injury initiation

- Falls = 68%
- Collisions = 10%
- Lifting/carrying (kayaks, etc) = 8%
- etc
Body Region

![Bar chart showing the percentage of injuries to different body regions for various activities.](chart.jpg)
Limitations in Study

- ACC data does not distinguish tourists from residents.
- ACC may induce a claim culture
- Participation data is incomplete and unreliable
- Injury rates by commercial operators are grossly under-reported
- Preconceptions are apparent in the recommendations
- These recommendations may have caused major damage to NZ’s reputation as a tourist destination.
The Future

- Prevention and treatment strategies are best founded on quality data.
- We need to get that data.
- A National Trauma System supported by a National Trauma Database will allow rational application of trauma strategies.
- We need to challenge our misconceptions.
Intuition

• Adventure sports are dangerous.
• Tourists are being injured or killed.
• New Zealand is a dangerous place.
The Reality

We don’t have the data to justify any of these statements
Science

- Data is incomplete, poor quality and uncontrolled
- Are we embarking on realistic strategies for injury prevention and treatment or simply reinforcing our own stereotypes.
- Nothing gets better airtime than an injured tourist. What about the rest
- We have to provide better data and make sensible interpretations
• Analysis of ACC claims by adults from July 2004 to June 2005.
• 18,697 injuries related to adventure tourism activities and adventure sports.
• Injuries identified by text narrative.
• Participation rates from SPARC(Sport and Recreation NZ) estimates from 1997-2000.
Results

- 27 fatalities
- 70% of all claims in 21-50 age group
- Cost of claim related to age of patient
- 60% male
- 60% from four activities: horse riding, tramping, mountain biking and surfing.
<table>
<thead>
<tr>
<th>Activity</th>
<th># Claims</th>
<th>%</th>
<th>per/1000</th>
<th>Deaths</th>
<th>$/case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horse-riding</td>
<td>3810</td>
<td>20.4</td>
<td>28.6</td>
<td>3</td>
<td>$134</td>
</tr>
<tr>
<td>Mountain biking</td>
<td>2618</td>
<td>14.0</td>
<td>14.8</td>
<td>0</td>
<td>$148</td>
</tr>
<tr>
<td>Tramping</td>
<td>2468</td>
<td>13.2</td>
<td>7.6</td>
<td>2</td>
<td>$127</td>
</tr>
<tr>
<td>Surfing</td>
<td>2238</td>
<td>12.0</td>
<td>11.1</td>
<td>0</td>
<td>$103</td>
</tr>
<tr>
<td>Waterskiing</td>
<td>1110</td>
<td>5.9</td>
<td>-</td>
<td>0</td>
<td>$128</td>
</tr>
<tr>
<td>Fishing</td>
<td>980</td>
<td>5.2</td>
<td>1.5</td>
<td>6</td>
<td>$74</td>
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<tr>
<td>Kayaking</td>
<td>864</td>
<td>4.6</td>
<td>-</td>
<td>0</td>
<td>$110</td>
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<tr>
<td>Wakeboarding</td>
<td>650</td>
<td>3.5</td>
<td>-</td>
<td>0</td>
<td>$92</td>
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<tr>
<td>Diving/Snorkeling</td>
<td>491</td>
<td>2.6</td>
<td>-</td>
<td>3</td>
<td>$72</td>
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</tbody>
</table>
Males

- 91% of hunting injuries were in males
- 84% of fishing injuries
- 81% of surfing injuries
- 77% of mountain-biking injuries
- 65% of snowboarding injuries
- But.. Only 36% of horse riding injuries