Injury Survey
From Salt Lake to Vancouver

Dr Nick Webborn
## 2002 - 2010 Athletes

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2006</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>416</td>
<td>474</td>
<td>505</td>
</tr>
<tr>
<td>Male</td>
<td>328</td>
<td>375</td>
<td>381</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>99</td>
<td>124</td>
</tr>
<tr>
<td>Alpine</td>
<td>194</td>
<td>184</td>
<td>194</td>
</tr>
<tr>
<td>Nordic</td>
<td>134</td>
<td>131</td>
<td>141</td>
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<tr>
<td>Sledge Hockey</td>
<td>88</td>
<td>112</td>
<td>118</td>
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<tr>
<td>Curling</td>
<td>0</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>
Sports Injury Prevention

1. Establishing the extent of the problem:
   • Incidence
   • Severity

2. Establishing the aetiology and mechanism of sports injury

3. Introducing a preventive measure


Injury Survey

- Commenced in 2002

- Approved by IPS Sports Science Committee, Ethical approval - Univ. of Brighton UK

- Aim to capture information on incidence, aetiology and mechanism of injury with a view to introducing preventative measures

- To look at the impact of equipment on injury
Injury Survey

- Age, Gender, Country
- Sport, Position
- Classification
- Mechanisms of injury
- Diagnoses
- Imaging studies
- Equipment played a role in the injury
- Video analysis - NEW for 2010
What have we learned so far?
Acute Traumatic v Overuse Injuries by Sport
Injury Survey

Injury Onset by Activity

- Non-sport: 5%
- Pre-existing -sport: 15%
- Pre-existing-non-sport: 2%
- Training: 39% (2002) and 20%

Years: 2002, 2006
Alpine
Injury Survey
2006 - Acute Alpine Injuries by Body Part

Sitskiers

- Shoulder: 7
- Abdomen: 2
- Wrist: 2

- Other: 3
Injury Survey
Injury Survey
Injury Survey
Injury Survey

- Injury prevention:
  - Avoiding abduction/ext rotation of shoulder - technique/falling
  - Sprung outrigger?
  - Failure mechanism?
  - Snowboard type glove c. wrist support?
Nordic
Injury Survey
Nordic – Overuse Injuries
Wheelchair Curling
Ice Sledge Hockey
Injury Survey
Injury Survey
Injury Survey
Injury Survey 2002

- 42% (5/12) of sled hockey injuries preventable
- Osteoporotic legs vulnerable

![Bone X-ray Image]

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**Equipment Related Injuries**

- Binding Failed to Release
- No Protective Shell on Hockey Sled
Sport Rule Changes
Post-2002

• Sledge height
• Protective wear feet/legs
• No lower-limb fractures in Torino - Vancouver??
Sports Injury Prevention Example
Acute Injury

IPC Injury Survey

- We can make a difference! - Sports technical committees listen to sound evidence

- Contribution of data from NPCs is invaluable

- Publication of data 2002-2010 post Games
IPC Injury Survey

- Need longitudinal data for risk analysis - injuries / hrs competition or training
- Better Electronic Medical Records systems
- Equipment safety analysis
- Understanding of the long term consequences of sport participation
Thank you for your support

IPC Sports Injury Surveillance Team

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