Sports and sports injury risk
Results of the Austrian Exposure Study
Robert Bauer | 5.10.19 | EUROSAFETY 2019 | Luxembourg
Objective
Identification of risk sports

• Quantification of the extent of sports practice in the Austrian resident population
• Linking the number of practitioners with injury figures (IDB Austria of the KFV)
• Assessment of risk perception and injury experience
• Definition of athlete types by intensity of exercise
Method
Survey of sports practice & sports accidents

Survey of sports practice
- Sample: Wave 1: 1,016 households (2,286 persons)
- Population: Austrian resident population aged 16+
- Method: Telephone Survey (CATI) & Online Survey (CAWI)
- Design: Random selection, Austria-representative sample
- Survey period: February, June 2018

Survey of sports accidents (IDB Austria)
- Sample: 15,000 interviews per year
- Population: Austrian resident population
- Method: face-to-face interviews in ED
Results

Sports activity (% of population)

Q12: When you think about the last 12 months: Were you specifically physically active? By this we mean active sports (e.g., running, hiking, skiing) as well as consciously walking or cycling, shopping, occasionally going to the swimming pool or doing a tobogganing once in winter. Think about the different seasons, seasons, or even sports activities during your holiday. [MF; percentage]

Base: Persons over 5 years, n=2,224; * small number of cases: adventure sports: n=37, aviation: n=24; ** median

<table>
<thead>
<tr>
<th>Sports Activity</th>
<th>Hours/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sporting activities</td>
<td>78</td>
</tr>
<tr>
<td>Hiking, Mountaineering, Climbing</td>
<td>40</td>
</tr>
<tr>
<td>Running and gymnastics</td>
<td>38</td>
</tr>
<tr>
<td>Cycling, mountain biking, etc.</td>
<td>36</td>
</tr>
<tr>
<td>Water sports</td>
<td>34</td>
</tr>
<tr>
<td>Winter sports</td>
<td>26</td>
</tr>
<tr>
<td>Power, combat and precision sports</td>
<td>10</td>
</tr>
<tr>
<td>Athletics, Gymnastics, Dancing, Riding</td>
<td>8</td>
</tr>
<tr>
<td>Sports with rackets</td>
<td>8</td>
</tr>
<tr>
<td>Team sports</td>
<td>7</td>
</tr>
<tr>
<td>Skateboarding, inline skating, etc.</td>
<td>4</td>
</tr>
<tr>
<td>Motorized sport on wheels</td>
<td>4</td>
</tr>
<tr>
<td>Adventure sports</td>
<td>2</td>
</tr>
<tr>
<td>* Flying</td>
<td>1</td>
</tr>
<tr>
<td>No sporting activities</td>
<td>22</td>
</tr>
</tbody>
</table>

Q12: * small number of cases: adventure sports: n=37, aviation: n=24; ** median
Results

Intensity of sporting activity

<table>
<thead>
<tr>
<th>Basis: Personen über 5 Jahre, n=2.224; Frage F12 (s. F 6)</th>
<th>Ø*no. Sports</th>
<th>Ø* Hours/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>GESAMT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>GESCHLECHT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>männlich</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>weiblich</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>ALTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unter 18 Jahre</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>19-29 Jahre</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>30-49 Jahre</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>50-59 Jahre</td>
<td>19</td>
<td>3</td>
</tr>
<tr>
<td>60-69 Jahre</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>70+ Jahre</td>
<td>40</td>
<td>2</td>
</tr>
</tbody>
</table>
Results
Accident experience

Accident in the last 5 years
- **ja**: 16%
- **nein**: 84%

Top accident sports
- Skiing (17%)
- Football (13%)
- Cycling / Everyday Life (10%)
- Hiking, climbing (6%)
- Cycling / Road (6%)
- Cycling / Leisure (5%)
- Jogging, Running (5%)
- Snowboarding (5%)

**F50**: Hatten Sie im Rahmen Ihrer Sportausübung/ Aktivitäten in den letzten 5 Jahren schon einmal einen Unfall, bei dem ärztliche Behandlung nötig war? **F51**: Und bei welchem Sport/ welchen Sportarten ist Ihnen das passiert? [in Prozent]

**Basis**: F50: Befragte / sportliche Aktivität genannt, n=881; F51: Befragte / sportliche Aktivität genannt / Unfall gehabt, n=141
Results IDB Austria

Injured per 100,000 hours (Top15)

Skateboarding
Soccer
Snowboarding
Motorsport
Ice skating
Inline skating, roller skating
Volleyball
Skiing
Tobogganing, Bob
Martial arts
Equestrian
Mountainbiking
to sail
Cycling
Tennis

Without taking into account the severity of the injury!

Quelle: KFV, IDB Austria, 2018; IFES, 2018
Discussion
Further development of risk indicators

• Differentiation by severity (severely injured, slightly injured)
• Inclusion of deaths (mountain sports, swimming)
• Inclusion of permanent physical impairments
Thank you very much!

KFV (Kuratorium für Verkehrssicherheit)
Forschungsbereich Haushalts-, Freizeit-, Sportsicherheit
Schleiergasse 18 | A-1100 Wien
Tel: +43-(0)5 77 0 77-0 | Fax: +43-(0)5 77 0 77-1186
E-Mail: kfv@kfv.at | www.kfv.at

Jede Verwertung darf nur mit Zustimmung des KFV erfolgen.