

# Sports Injuries

## Data Sheet



Which sports do you think are most dangerous?

The Department of Trade and Industry collected the data in the table below. It gives the age and gender of patients who required treatment at a sample of hospitals after suffering sports injuries.

Sport	Under 15 years		15 - 64 years		65 years or over		Total
	Male	Female	Male	Female	Male	Female	
Athletics	34	42	255	116	6	2	455
Gymnastics	30	170	37	72	1	0	310
Ball sport with racquet/bat/stick	293	160	1932	694	74	43	3196
Ball sport without bat etc	4897	697	15308	1073	46	27	22048
Combat sport	192	94	652	188	2	0	1128
Shooting/archery/darts	2	2	52	10	1	0	67
Wheel/motor/cycle/roller skating	828	201	1446	178	7	1	2661
Animal sport/riding	37	289	93	575	8	2	1004
Winter sport	137	165	297	239	3	0	841
Walking/climbing/caving	9	7	60	14	1	4	95
Water sport	235	140	477	167	27	13	1059
Air sport	1	0	39	11	0	2	53
Exercise/fitness/weight lifting	13	41	213	180	1	20	468
Other	53	20	277	47	1	0	398
<b>Total</b>	<b>6761</b>	<b>2028</b>	<b>21138</b>	<b>3564</b>	<b>178</b>	<b>114</b>	<b>33783</b>

Source: [www.hassandlass.org.uk](http://www.hassandlass.org.uk)

How could the data in the table help you to decide how dangerous a sport is?

What else would you need to know?



**Teacher Notes**

**Unit** Intermediate Level, Handling and interpreting data  
Intermediate Level, Data Handling  
Advanced Level, Hypothesis Testing

**Notes**

The Data Sheet gives simplified versions of the official statistics for the year 2002 which is the latest data that is available. These data are also supplied on a spreadsheet. The Data Sheet can be used in a class or group discussion about the difficulties that are encountered when attempting to use real data to answer a question such as 'How dangerous are water sports?' The data are also provided on a spreadsheet which can be used for practice in drawing statistical diagrams for the intermediate level FSMQs.

**Discussion Points:**

- More information is needed about the data. Discussion should include the importance of using a representative sample and what this means. In this case the data was collected from a sample of 18 hospitals (from different geographical areas, urban and rural, serving different sized populations with different sized A&E units).
- The Data Sheet (and the original source) does not say whether the data includes spectators as well as participants.
- Fatal accidents are not fully represented as the data was collected only when sports injuries were treated – this may not have been possible in some cases.
- The number of injuries should be studied alongside the number of participants in each sport. Different people are likely to spend different amounts of time on the activity - this could lead to further discussion about methods that could be used that take into account the time spent on the activity.
- For a particular person, the probability of having an accident would also depend on how careful they are, how much experience they have etc. Some people may have more than one accident during the year.
- The number of accidents varies from one year to the next so another year's results might give a different impression.

**Extensions**

Further data and worksheets concerning accidents at work can be found in the Nuffield activity called 'A Risky Business' which can be found at <http://www.fsmq.org/resources/handling-and-interpreting-data,82,MO,SK.html>.

Much more detailed data involving accidents that occurred during leisure and home activities in 2002 and earlier years can be found at [www.hassandlass.org.uk](http://www.hassandlass.org.uk). Learners could be asked to analyse this data and look for trends.

