

ACCIDENTS

September 2003

INTRODUCTION

In England alone accidents cause around 10,000 deaths per year, and are one of the main causes of death and hospital admission among children. Accidents are recognised as a major Public Health priority within the white paper, *Saving Lives: Our Healthier Nation* (Department of Health, 1999).

This report uses routine data sources to provide an analysis of accidents in Doncaster, in order to inform the development of an accident prevention strategy for the borough. The data sources used, accident and emergency data, inpatient admission data and mortality data, are detailed in Appendix 1.

Supplementary data are provided in Appendix 2 and are referred to in the text, for example, as 'Table A1' or 'Figure A3'.

The analysis covers all accident and emergency attendances at Doncaster Royal Infirmary, inpatient admissions at all hospitals for Doncaster residents and deaths of all Doncaster residents.

Sarah Hargreaves – Research and Information Analyst

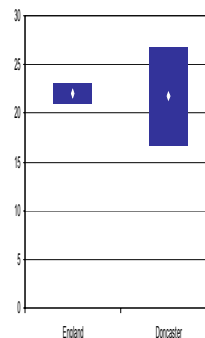
Paul Fryers – Public Health Specialist

Doncaster Public Health Intelligence Unit

NOTES FOR THE INTERPRETATION OF CHARTS WITH CONFIDENCE INTERVALS

Many of the charts shown in the report present rates with 95% confidence intervals.

The vertical bars show the 95% confidence interval for the rate: confidence intervals are a standard statistical tool showing how accurate the rate calculations are. Confidence intervals are especially valuable when working with small numbers. The number of deaths from accidents is small and some years there are more than others just due to random fluctuations; the calculation takes account of this variation by making the confidence interval 'wider' (the vertical bar will be longer). If the rate is calculated on larger numbers that do not vary as much, the confidence interval will be 'narrower' (the vertical bar will be shorter).

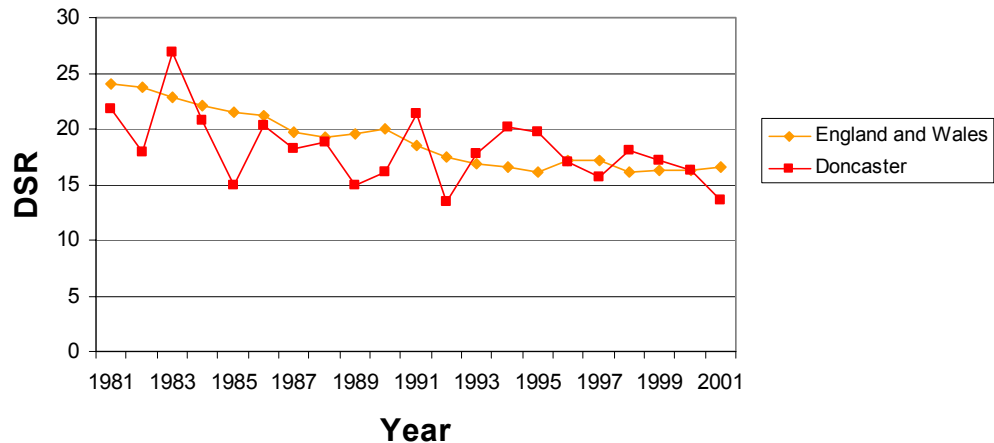


Confidence intervals in this report are calculated using a probability of 95%: in other words, we believe that the rate would fall 95 times out of 100 within the lower and upper interval, and it would fall outside this range the other 5 times purely as a fluke. If the confidence intervals on a chart overlap this shows that there are not great differences between the variables. If the entire confidence interval is above or below the others this shows that there is something 'significantly' different.

TRENDS IN ACCIDENT MORTALITY

Death rates in Doncaster mirror the national trend for a reduction in deaths caused by accidents. The Doncaster rate fluctuates more than the national figures due to the smaller number of deaths each year, but the broad trend is exactly the same.

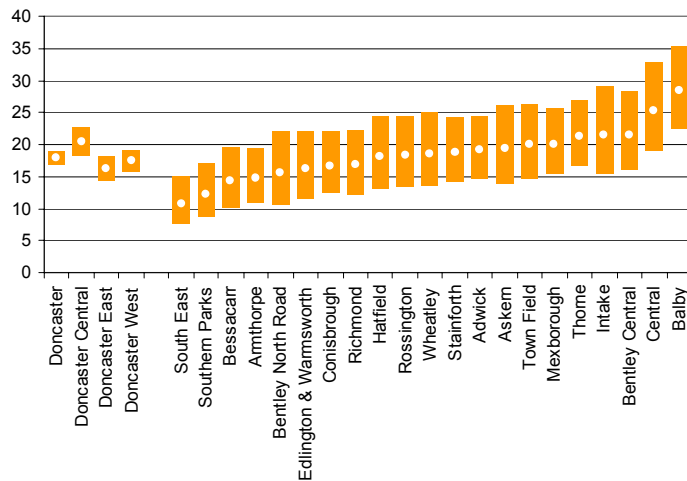
Death Rate for Accidents: 1981-2001
 Directly Standardised Rate per 100,000 Resident Population
 ICD 9 E800-E949. All persons, All Ages.



VARIATIONS WITHIN DONCASTER

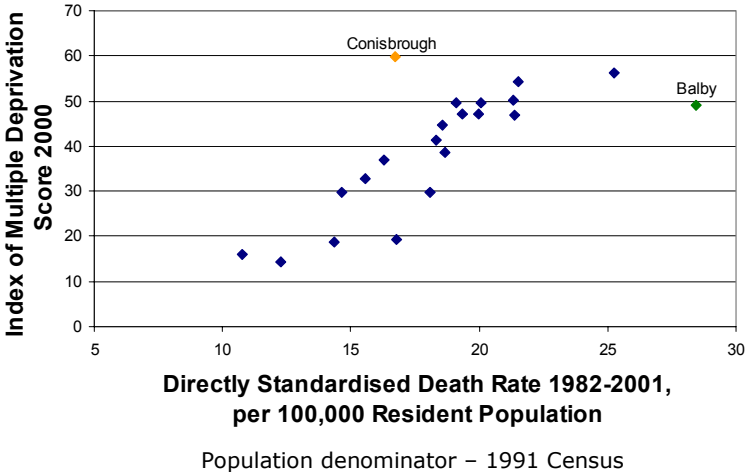
The geographical variations in death rates are shown below. The graph shows rates with 95% confidence intervals – an explanation of confidence intervals is given on the previous page. The numbers of deaths are very small at ward level, hence the analysis is based on 20 years of mortality data. Death rates vary across the three Doncaster Primary Care Trusts, with Doncaster Central significantly higher than Doncaster East.

Accidents: Directly Standardised Death Rate per 100,000 Population 1982-2001
 (Resident Population, All Ages)



At ward level, the lower mortality rates appear to be in the more affluent wards of Doncaster. The graph below makes this clear by plotting the mortality rates against the 2000 Index of Multiple Deprivation (Department of the Environment, Transport and the Regions, 2000a). The link between higher levels of deprivation and increased accident rates has been noted in national literature (Drever & Whitehead, 1997; Shaw *et al*, 2001). The graph shows two outliers. Balby has a higher death rate than expected, given the deprivation score; and Conisbrough with the highest deprivation score, has a relatively low death rate.

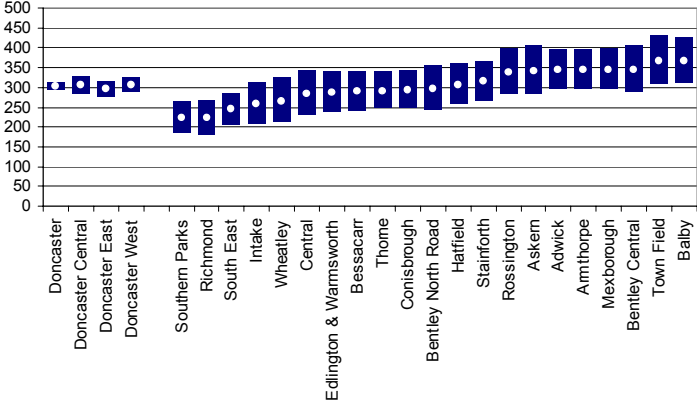
Accidents: Relationship Between Deprivation and Death Rate, by Electoral Ward



The numbers of admissions to hospital for serious accidental injuries are larger and hence the analysis of three years' data shows a similar pattern to the mortality rates, with lower rates generally in the more affluent wards. There are no differences between PCTs here. Figure A4 in Appendix 2 shows the admission rates each year for the PCTs.

Accidents: Directly Standardised Admission Rate per 100,000 Population

(Serious Accidents, Resident Population, All Ages, Financial Years 2000/1-2002/3).



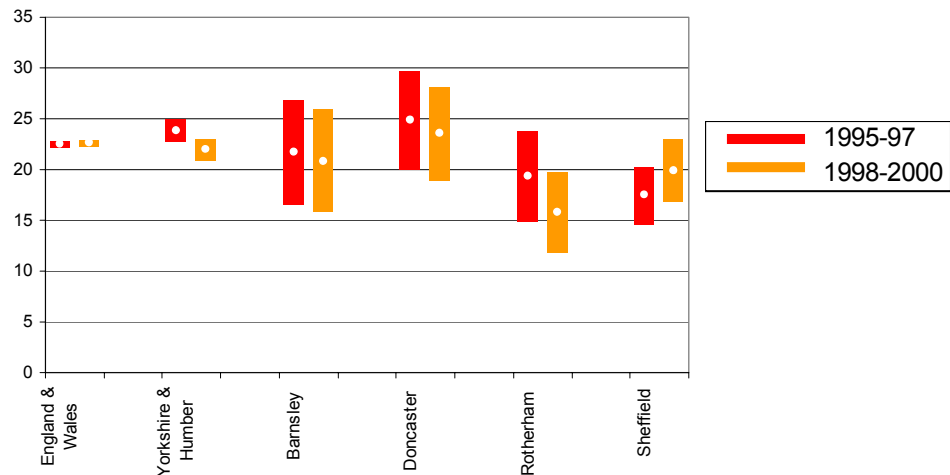
VARIATIONS BY GENDER

Death Rates

The three-year mortality rates used for monitoring the *Saving Lives: Our Healthier Nation* targets are shown below: the rates for males and females (standardised for age and sex) do not differ from the national rates.

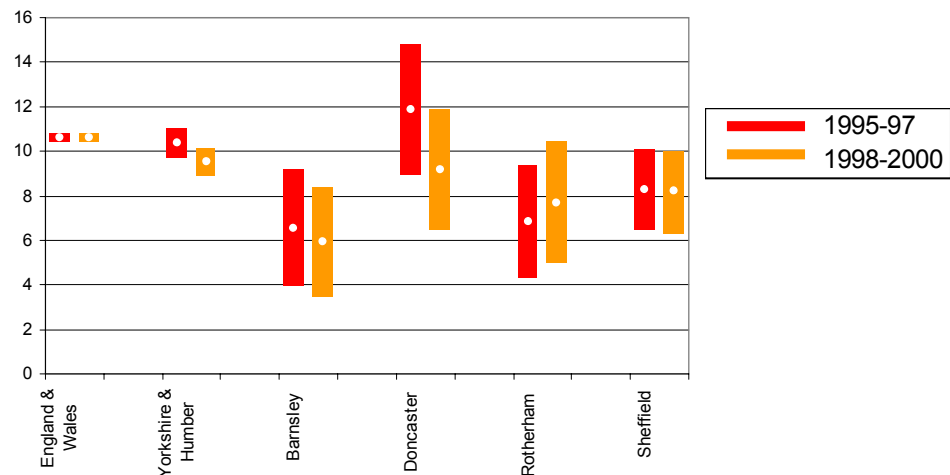
Male Accidents: Directly Standardised Death Rate per 100,000 Population

1995-97 Base Years, & 1998-2000, Pooled All Ages
 (Source: Compendium of Clinical and Health Indicators, 2001.
 Yorkshire and Humber Government Office Region)



Female Accidents: Directly Standardised Death Rate per 100,000 Population

(See above)



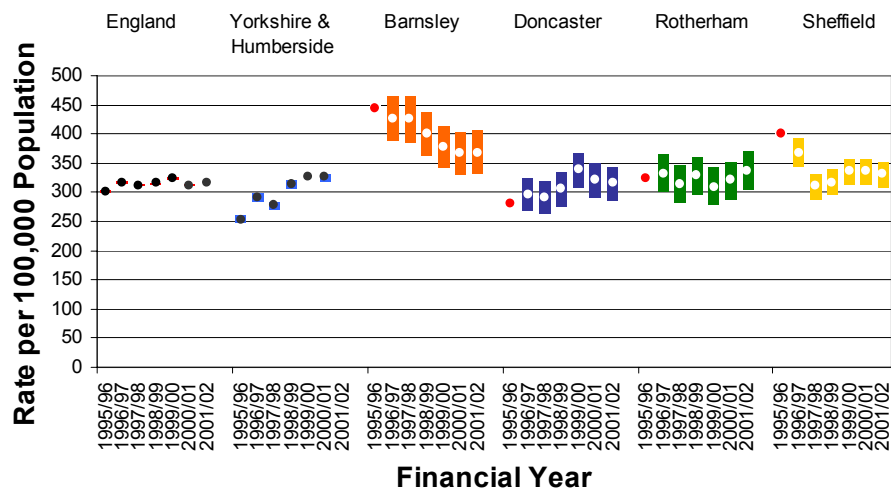
However the number of people killed by accidents is comparatively small and once the data are broken down by gender the numbers are even smaller, in Doncaster an average of 36 men, and 20 women die per year (Table A1).

Hospital Admission Rates

Hospital admission rates for serious accidental injury (injury requiring a stay of at least three days in hospital), shown below, are lower than Barnsley, and comparable to England, Rotherham and Sheffield. After a slight increase in male accident admission rates in 1999/00, the rate has dropped to national levels. The female rate has been consistently below the national average, apart from a blip in 2000/01. There are on average 1,110 admissions for serious accidental injury each year for Doncaster residents, 469 for males and 641 for females (Table A2). Since 1991 the annual admission rate has fluctuated around 300 admissions per 100,000 resident population, the general trend is downwards (Figure A3).

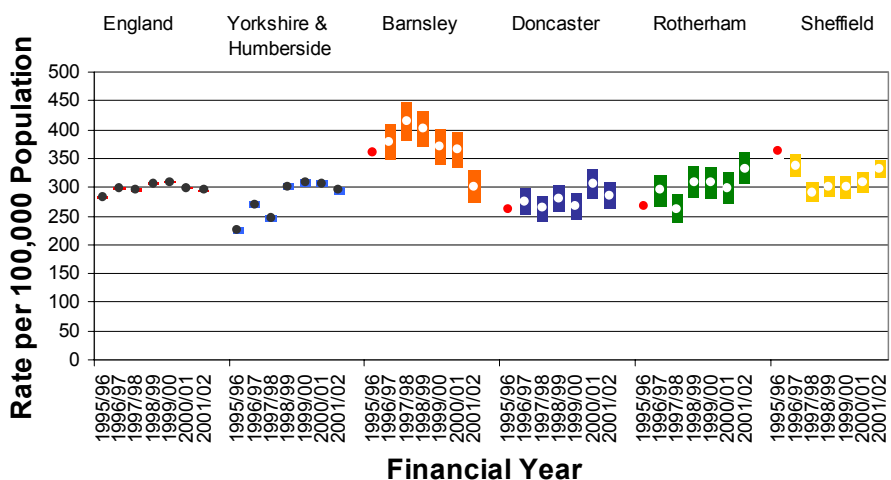
Male Hospital Admissions for Serious Accidental Injury: Directly Standardised Rate per 100,000 Population.

Financial Years 1995/96 – 2001/02. All Ages.
(Source: Compendium of Clinical and Health Indicators, 2002)



Female Hospital Admissions for Serious Accidental Injury: Directly Standardised Rate per 100,000 Population.

(See above)



NB: 1995/96 Data Estimated due to data quality issues.

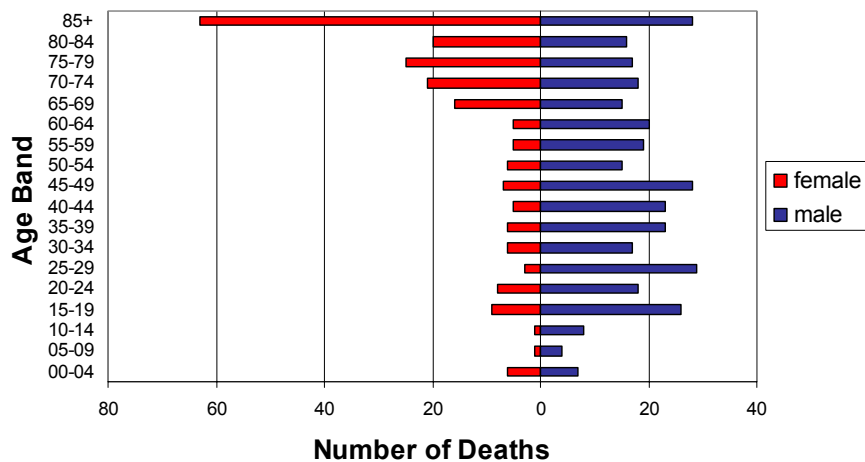
VARIATIONS BY AGE

Death Rates

A small proportion of deaths and hospital admissions are due to accidents (Figure A5). On average 54 people die per year from accidents compared with around 1,300 deaths from diseases of the circulatory system. In total more Doncaster male residents die from accidents than females (Figure A7). However the graph below shows that there are gender variations across the age ranges, with greater numbers of males amongst the under 65s, but more females aged over 65.

Deaths Caused by Accidents, by Age and Gender

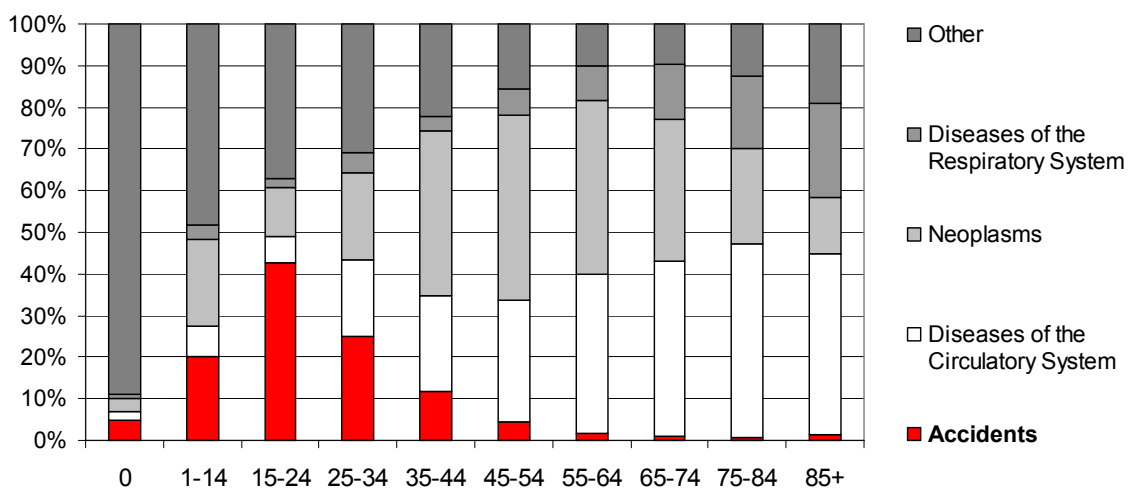
Doncaster Residents, 1992-2001.



The graph below highlights the large proportions of deaths caused by accidents in people aged 1-44, and especially people aged 15-24.

Accidents as a Proportion of all Deaths, by Age Band, 1992-2001

Doncaster Residents



Hence, while the number of deaths is small compared with causes of death such as cancers, heart disease, stroke and respiratory disease, for example, the relatively large number of deaths in younger people is of particular concern. The table below shows mortality in terms of years of life lost: accidents cause many more years to be lost in men than strokes.

Years of Life Lost (YLL) in Doncaster, 1999 & 2001 for Selected Causes of Death

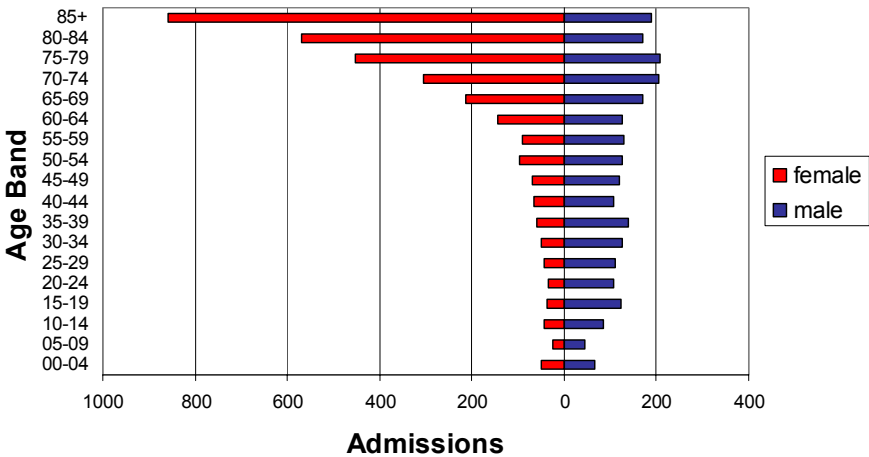
Cause of death	Males	Females	Total
Accidents	2273	540	1812
Cancers	5376	5223	10599
Stroke	747	855	1602
Coronary Heart Disease	3654	1349	5002
Total (all causes)	19467	11825	31292

YLL is the number of years of life lost to age 75
 Source: Compendium of Clinical and Health Indicators, 2002.

Hospital Admission Rates

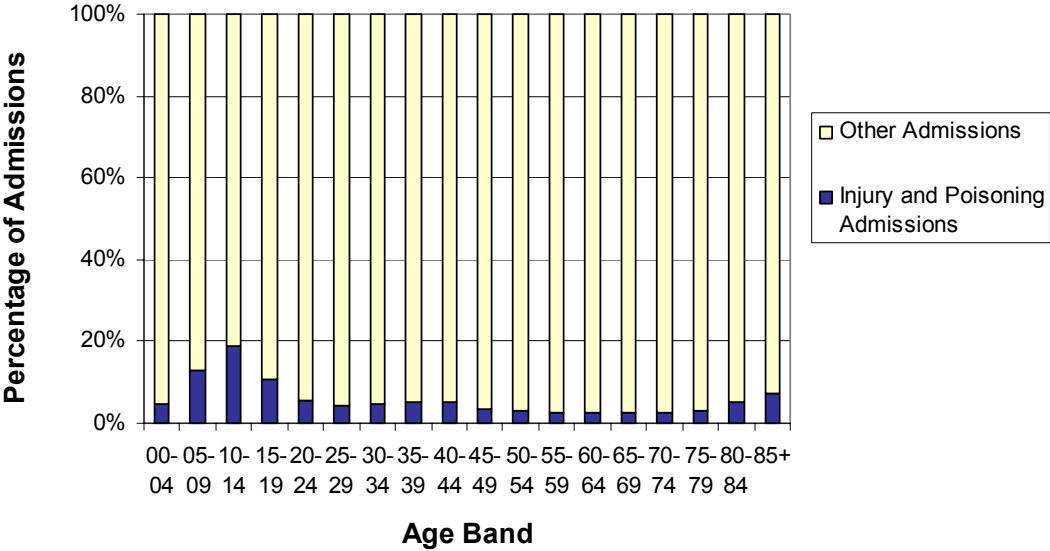
In total more Doncaster women are admitted to hospital for serious accidental injury than men as has already been referred to. However, the graph below shows that there are large gender variations across the age ranges, with more frequent admissions for males up to age 60 but many more female admissions in the older age ranges.

Admissions for Serious Accidents, by Gender
 Doncaster Residents, 1998-2002



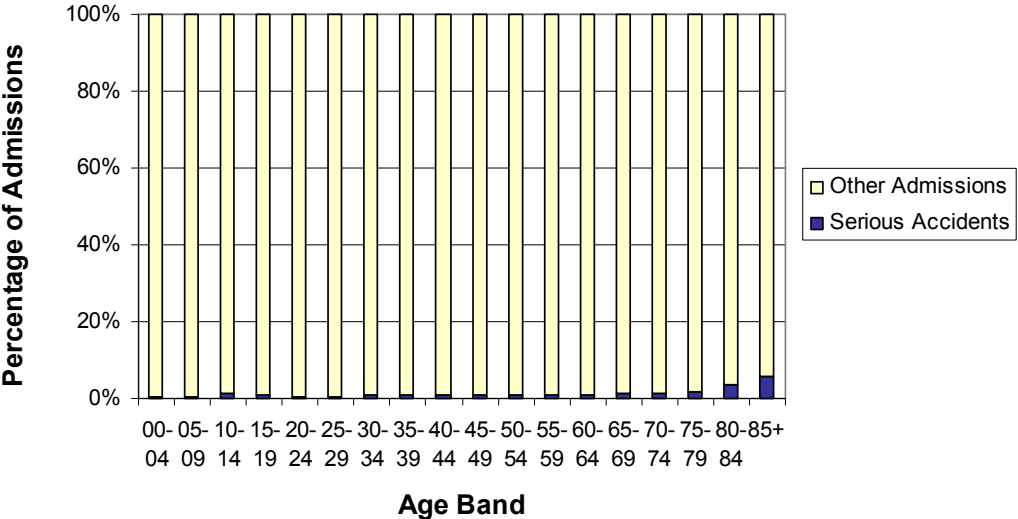
As for deaths, only a small proportion hospital admissions are due to accidents (Figure A6). Only 1.3% of hospital admissions are serious accidental injuries. However, the graph below show that in the 10-14 age band nearly 20% of all admissions are due to injury and poisoning.

Proportion of Injury and Poisoning Admissions, by Age Band
Doncaster Residents, 1998-2002



For serious admissions (involving a stay of at least three days) the proportion is very small across all ages, but increases in the oldest age groups.

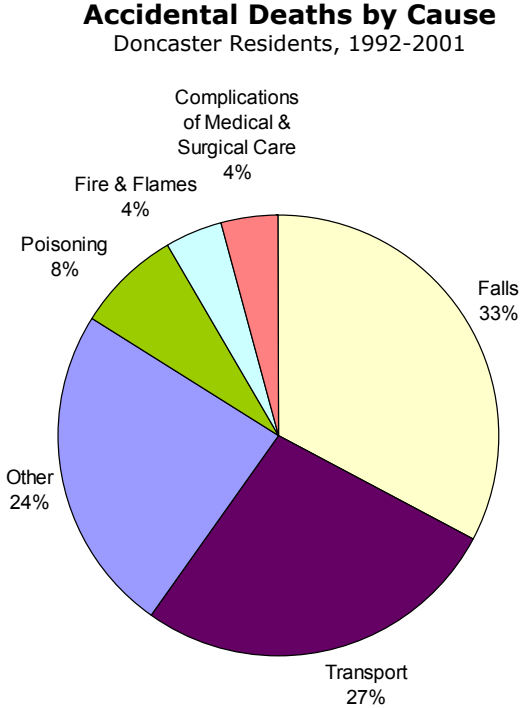
Proportion of Serious Accident Admissions, by Age Band
Doncaster Residents, 1982-2002



More males than females attend A&E, especially those aged 0-44; however it is not possible to split out the accidents from the other reasons for attending the department (Figure A8).

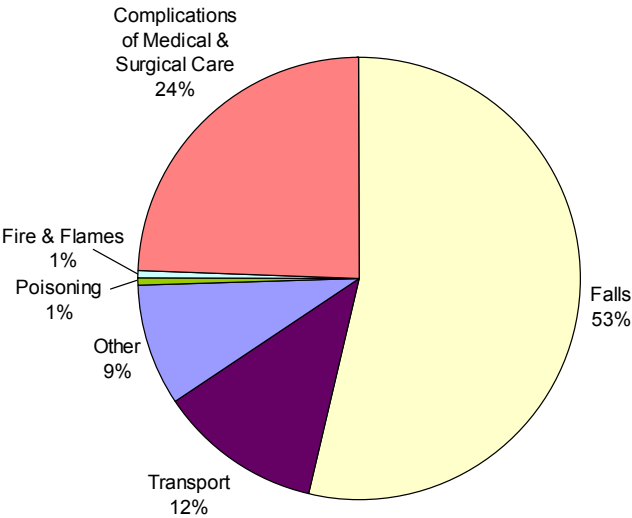
TYPES OF ACCIDENTS

The graph below shows that the largest cause for accidental deaths is falls, followed by transport accidents.



As with deaths, the most common cause is falls, but the second most frequent cause of admission is complications of medical and surgical care; either adverse reactions to drugs, medicaments, biological substances, medical devices, or surgical and medical care; or misadventure where unintentional mistakes are made in any of these areas. 99.5% of the complications admissions are adverse reactions; and 0.5% (7) medical misadventures.

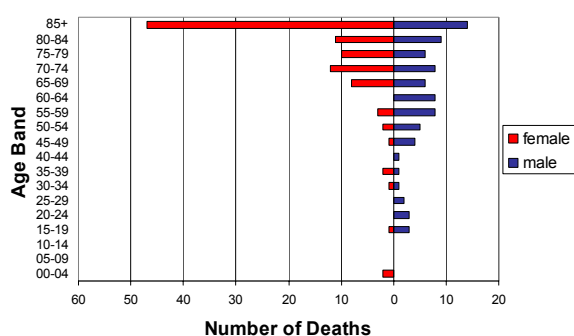
Admissions for Serious Accidents, by Cause
Doncaster Residents, 1998-2002



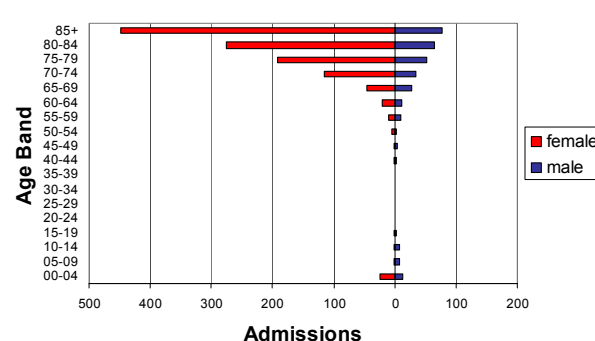
FALLS

Falls are the principle cause of accidental death and injury in Doncaster, accounting for 33% of deaths (1992-2001), and 53% of admissions for serious injury (1998-2002). Nationally the primary cause is road traffic accidents (Department of Health, 1999). The Health Survey for England (Office for National Statistics, 2003a) identified falls as the most common cause of major accidents, and highlighted the fact that accident rates in women rise steeply over the age of 75. The graphs below confirm that Doncaster data mirror this finding in both admissions and deaths.

Deaths Caused by Accidental Falls,
By Age & Gender. Doncaster Residents, 1992-2001



Falls: Admissions Serious Injury,
By Age & Gender. Doncaster Residents, 1998-2002



The most frequent serious injury caused by falls is fracture of the femur (51%), most commonly fractured neck of femur (49%). Elderly women are particularly prone to fractures because of osteoporosis: this is evident in the steep rise in the number of admissions in women aged over 75 in Doncaster (Figure A13).

It is difficult to reach any definitive conclusion about the cause of falls because most death and hospital records are coded to 'unspecified fall' (Table A14). The main coded cause for admissions is 'slipping, tripping, and stumbling,' and for deaths falls on 'stairs or steps.' The majority (58%) of falls resulting in a hospital stay over 3 days happen in the home (Table A15).

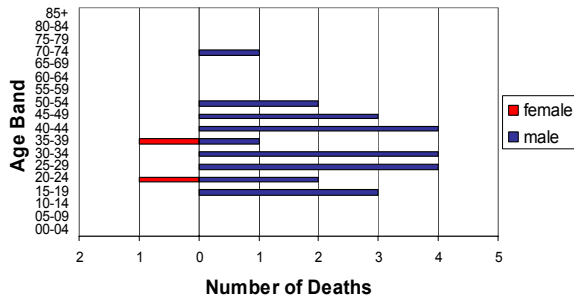
TRANSPORT ACCIDENTS

Transport accidents predominantly affect men: over 70% of residents killed or admitted to hospital for serious injury were men (Figure A9). Casualty rates from transport accidents are not distributed evenly across the population. Nationally the highest rates occur among children aged between 12 and 15, and the lowest in those aged 40 to 59 (Office for National Statistics, 2003a). In Doncaster the crude rate for admissions for serious transport accidents is highest in people aged between 15 and 24, and lowest in young children (0-4 year olds). The crude rate for deaths from transport accidents is highest in young people aged between 15 and 19 (Table A16).

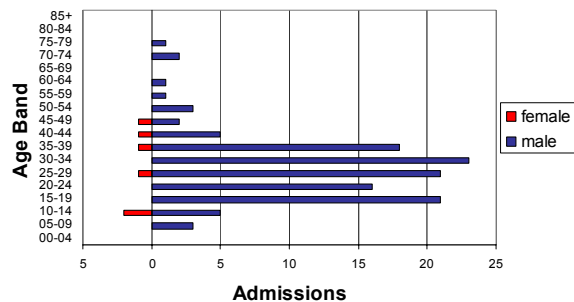
More casualties happen in car accidents than any other type of vehicle, which reflects the fact that cars are by far the most common form of vehicle on the road (Figure A17 & Table A18). Death rates for motorcycling are over 42 times greater

than those for the car (Office for National Statistics, 2003b). On average around 6 Doncaster residents are killed per year whilst travelling as an occupant of a motor vehicle, and over 8 times that number are seriously injured (Figure A19). An average of 2.4 motorcycle riders are killed annually, typically young or middle-aged men, as the graphs below illustrate.

Motorcycle Rider Deaths,
By Age & Gender. Doncaster Residents, 1992-2001



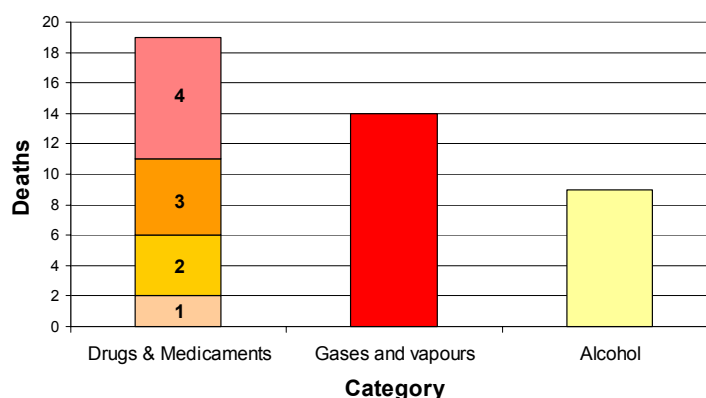
Motorcycle Rider: Admissions, for Serious Transport Accidents
By Age & Gender. Doncaster Residents, 1998-2002



ACCIDENTAL POISONING

An average of just over 4 Doncaster residents are killed per year as a result of accidental poisoning (Figure A20 & Table A21). People are poisoned by either medicines and drugs, gases and vapours (including carbon monoxide) or alcohol. The graph below shows the proportions of deaths from each of these groups. The largest group of deaths from drugs and medicaments are caused by painkillers. A separate report on drug-related deaths, available from the Public Health Intelligence Unit, examines these deaths more closely.

Accidental Poisoning Deaths, by Category: 1992-2001
Doncaster Residents. ICD 9 E850-E869, ICD 10 X40-X49



- 1 – Narcotics and psychodysleptics (hallucinogens)
- 2 – Unspecified drugs, medicaments and biological substances
- 3 – Anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs not classified elsewhere.
- 4 – Analgesics, antipyretics, antirheumatics.

EXPOSURE TO INANIMATE MECHANICAL FORCE

An annual average of 32 Doncaster residents are admitted to hospital with a serious accidental injury after being 'exposed to an inanimate mechanical force'. Typically this means being hit by a falling object (Table A22). Some occupations are more dangerous in this respect than others and it is predictable that most of these accidents occur on industrial or construction sites (28%). However, the table below shows that as many accidents occur at home. The accidents happen mostly to males, with the 30-34 age group being most prone (Figure A23).

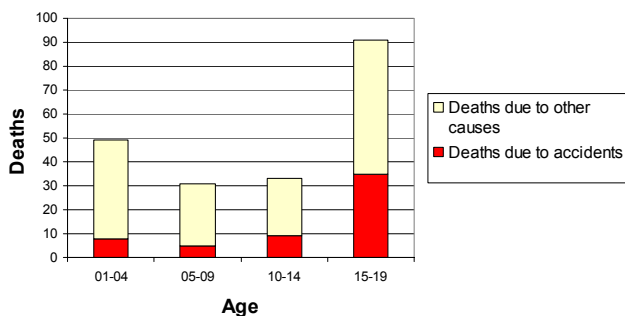
Location of Accidents Resulting in Hospital Admission Due to Exposure to Inanimate Mechanical Force

Location	Admissions	Percentage
Industrial and construction area	44	28%
Home	43	27%
Unspecified place	29	18%
Other outdoor public place, such as park or hill	17	11%
Residential institution	5	3%
Sports and athletics area	4	3%
Shop or service area, such as café or hotel	4	3%
Road and pavement	4	3%
School, other institution and public admin. area	4	3%
Farm	4	3%
Total	158	

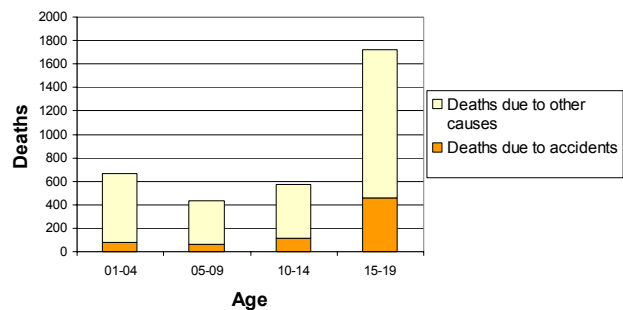
CHILDREN

Although accidents cause far fewer deaths than other cause groups, such as cancers, cardiovascular diseases and respiratory diseases, in children, who rarely suffer these other conditions, it is a very significant cause of death, as illustrated by the graphs below. The proportion of deaths due to accidents is particularly high in the 15-19 age group.

Proportion of Child Deaths Due to Accidents, Doncaster
Doncaster Residents, 1992-2001



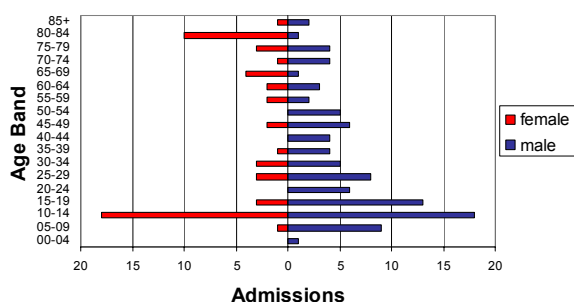
Proportion of Child Deaths Due to Accidents, Doncaster
2001



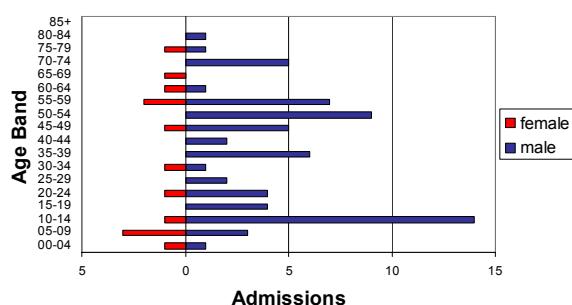
Children are particularly vulnerable to transport accidents (Figure A9), especially as pedestrians and cyclists, as the graphs opposite demonstrate. Walking and cycling are among the most dangerous forms of transport: nationally pedestrians have a death rate 16 times greater than that for car passengers, and cyclists 11 times

greater (Office for National Statistics, 2003b). However the risk needs to be balanced against the health benefits of regular exercise, and children need the opportunity to develop the skills to deal with potential dangers on the road (Dekoster & Schollaert, 1999; Department of the Environment, Transport and the Regions, 2000b). The number of Doncaster children killed annually in transport accidents is small, an average of just under one child aged under 15 per year. In comparison with European countries Doncaster has one of the lowest date rates for children's transport accidents (Table A10). Death rates are comparable to other parts of South Yorkshire, with the exception of the rate for boys aged between 5 and 14, which is higher than Rotherham and Sheffield (Table A12).

Pedestrian: Admissions Serious Injury
By Age & Gender. Doncaster Residents, 1998-2002



Pedal Cyclist: Admissions Serious Injury
By Age & Gender. Doncaster Residents, 1998-2002



REFERENCES

- Dekoster J, Schollaert U (1999). *Cycling: The Way Ahead for Towns and Cities*. Luxembourg:Office for Official Publications of the European Communities.
http://europa.eu.int/comm/environment/cycling/cycling_en.pdf [Accessed September 2003].
- Department of Health (1999). *Saving Lives: Our Healthier Nation*. London:The Stationary Office.
- Department of the Environment, Transport and the Regions (2000a). *Indices of Deprivation 2000. Regeneration Research Summary*. Number 31. London: The Stationery Office.
<http://www.neighbourhood.statistics.gov.uk/default.asp?nsid=false&CE=True&SE=True> [Accessed September 2003].
- Department of the Environment, Transport and the Regions (2000b). *Encouraging Walking: Advice to Local Authorities*. London:The Stationary Office.
http://www.dft.gov.uk/stellent/groups/dft_localtrans/documents/page/dft_localtrans_504172.pdf [Accessed September 2003].
- Drever F, Whitehead M (eds) (1997). *Health Inequalities Decennial Supplement. Series DS No. 15*. London:The Stationary Office.
http://www.statistics.gov.uk/downloads/theme_health/DS15_HlthInequls_v2.pdf [Accessed September 2003].
- Office for National Statistics (2003a). *Health Survey for England 2001: Non-Fatal Accidents*. London:The Stationary Office.
- Office for National Statistics (2003b). *Social Trends. Number 33*. London:The Stationary Office.
- Shaw M, Dorling D, Gordon D, Davey Smith G (2001). Health and poverty. In Fimister G (ed). *An End in Sight? Tackling child poverty in the UK*. London:Child Poverty Action Group.

APPENDIX 1 – DATA SOURCES

Doncaster Primary Care Trusts (PCTs) have access to three sources of data used to quantify the number of accidents occurring within the resident population.

Hospital Admissions Data

The PCTs receive a dataset for each of their residents and responsible patients receiving hospital care. The individual records can be used to produce admission rates or numbers of admissions for accidents, for different geographical areas and time periods. The records are coded with International Classification of Diseases code (ICD), the following codes were used to identify accidents: -

Admissions for Serious Accidents: Primary diagnosis – S00-T98, Secondary diagnoses – V00-X59, Y40-Y84 and a stay in hospital of longer than three days.

Data were allocated to an accident cause by the first occurrence of an accident code in any of the secondary diagnosis fields.

Accident and Emergency Data

Doncaster Royal Infirmary sends a dataset to the PCTs detailing each visit to the Accident and Emergency (A&E) department. The clinical coding on the A&E data is not as sophisticated as on the admissions data: it is not possible to filter out the people attending the department with due to illness rather than an accident. In addition a large proportion of the records do not record any diagnostic information: within the last complete 5-year period (1997-2001) 48.7% of the records were either not coded or coded as 'not classifiable'.

Deaths Data

Similarly, the PCTs receive a copy of death records for Doncaster residents. The individual records can be used to produce death rates or numbers of deaths for specific causes (such as accidents), for different geographical areas and time periods.

The underlying cause of death is coded with ICD codes; the following codes identified accidents:

	ICD-9	ICD-10
All accidents:	E800-E949	V01-X59; Y40-Y84
Transport accidents:	E800-E848	V01-V99
Motor vehicle accidents:	E810-E819	V01-V79
Motor cycle rider:	E810-E825 4th digit 2 or 3	V20-V29
Pedal cyclists:	E810-E825; E827-E829 4th digit 6; E826*	V10-V19
Pedestrians:	E810-E825 4th digit 7; E826-E829 4th digit 0	V01-V09
Accidental falls:	E880-E888	W00-W19
Falls causing fracture of femur:		Primary diagnosis S72 Secondary diagnoses W00-W19
Falls causing fractured neck of femur:		Primary diagnosis S72 excl S72.4 Secondary diagnoses W00-W19
Accidental poisoning:	E850-E869	X40-X49
Fire & flames:	E890-E899	X00-X09
Medical misadventure & adverse effects of treatment:	E870-E879; E930-E949	Y40-Y84
Inanimate mechanical forces:		W20-W49

Population Denominators

Office for National Statistics, mid-year population estimates (Doncaster residents).

APPENDIX 2 – SUPPLEMENTARY DATA

Table A1: Deaths by Year and Gender

Year of Death	Male	Female
1981	44	20
1982	33	21
1983	54	20
1984	39	24
1985	32	13
1986	47	14
1987	36	19
1988	35	20
1989	26	22
1990	34	17
1991	52	17
1992	25	21
1993	34	19
1994	32	36
1995	40	24
1996	34	19
1997	30	20
1998	35	22
1999	35	22
2000	37	15
2001	29	15

Table A2: Admissions for Serious Accidental Injury by Year and Gender

Year of Admission	Male	Female
1998	468	649
1999	480	596
2000	472	666
2001	450	615
2002	477	681

Figure A3: Annual Admission Rate for Serious Accidental Injury

Doncaster Admission Rate for Serious Accidents: 1990-2001.
Directly Standardised Rate per 100,000 Resident Population.
All Persons. All Ages.

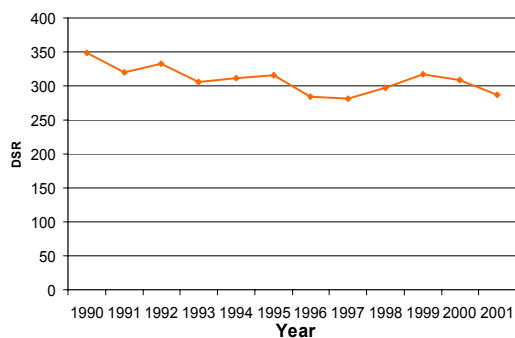


Figure A4: Admission Rate for Serious Accidental Injury by Primary Care Trust.

PCT Admission Rates for Serious Accidents: 1990-2001.
 Directly Standardised Rates per 100,000 Resident Population.
 All Persons. All Ages.

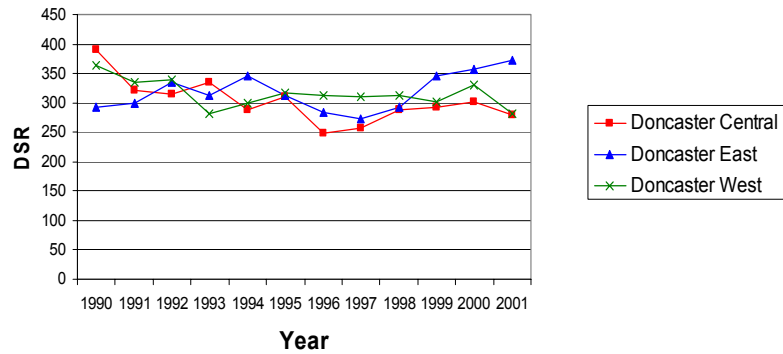
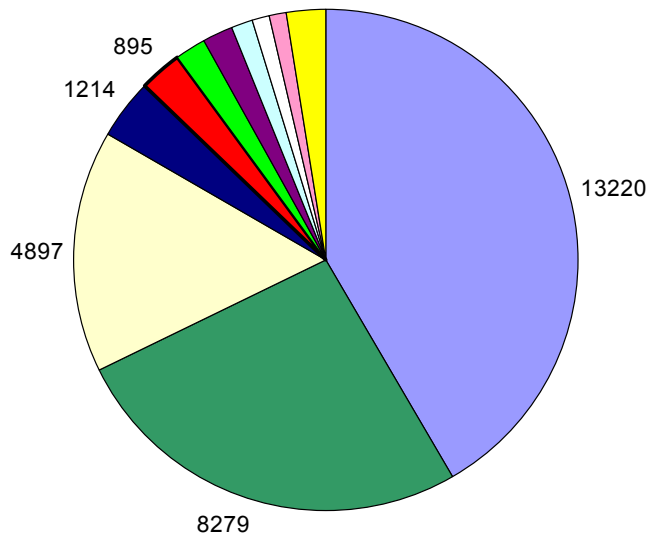


Figure A5: The Proportion of Deaths due to Accidents: 1992-2001

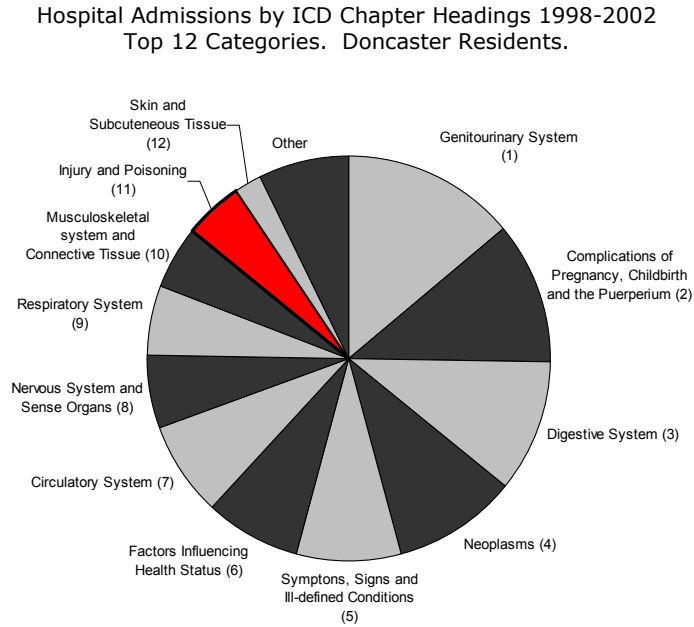
Underlying Cause of Death, Doncaster Residents 1992-2001.
 Top Ten Causes.

- Diseases of the Circulatory System (1)
- Neoplasms (2)
- Diseases of the Respiratory System (3)
- Diseases of the Digestive System (4)
- Injury and Poisoning (5)
- Diseases of the Nervous System (6)
- Mental Disorders (7)
- Endocrine, Nutritional and Metabolic Diseases (8)
- Symptoms, Signs and Ill-defined Conditions (9)
- Diseases of the Genitourinary System (10)
- Other Causes



All causes of death by ICD chapter heading. The injury and poisoning chapter includes non-accidental injury.
 61% (544) of the injury and poisoning section were deaths caused by accidents.

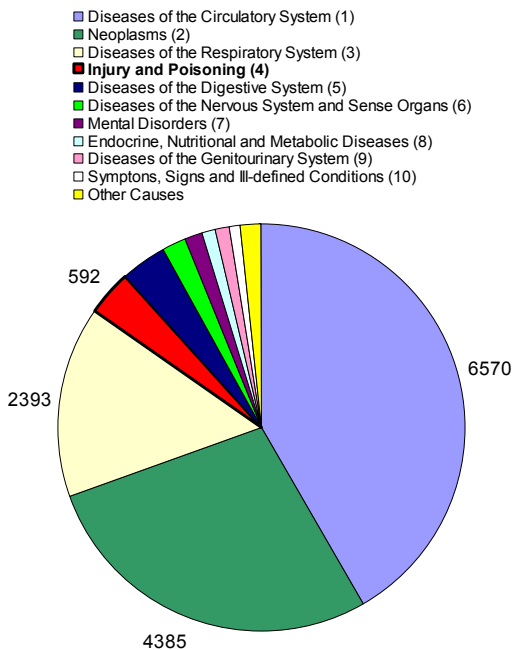
Figure A6: The Proportion of Admissions due to Accidents: 1998-2002



All admissions by ICD chapter heading. The injury and poisoning chapter includes non-accidental injury. 27% of the injury and poisoning section were serious accidental injury admissions and 55% were less serious accidents (82% in total attributed to accidental injury).

Figure A7: Cause of Death by Gender.

Male Underlying Cause of Death, 1992-2001
Top Ten Causes, Doncaster Residents



Female Underlying Cause of Death, 1992-2001
Top Ten Causes, Doncaster Residents

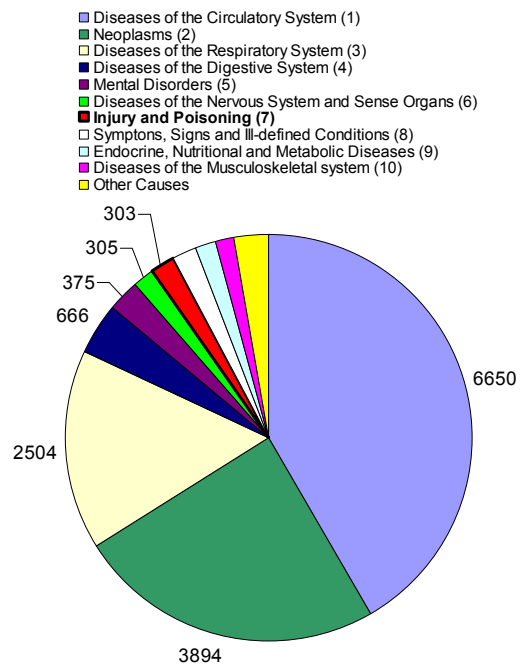


Figure A8: Accident & Emergency Attendances by Gender and Age.

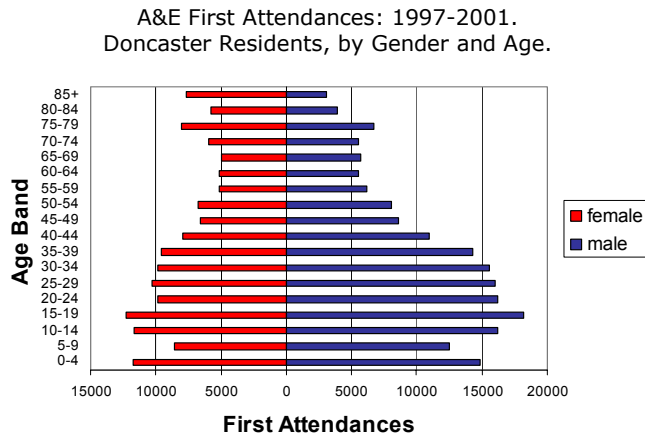
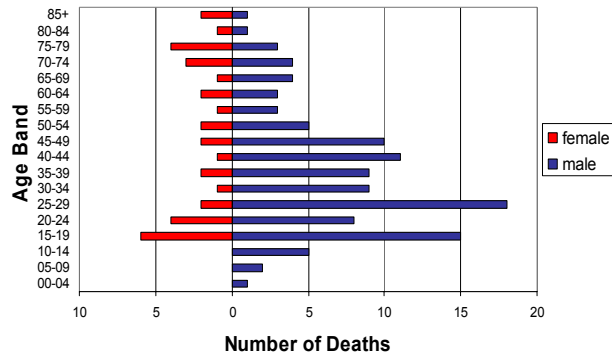


Figure A9: Transport Accidents (Deaths & Admissions) by Gender and Age

Deaths Caused by Transport Accidents, by Gender and Age
Doncaster Residents, 1992-2001



Admissions for Serious Transport Accidents, by Gender and Age
Doncaster Residents, 1998-2002

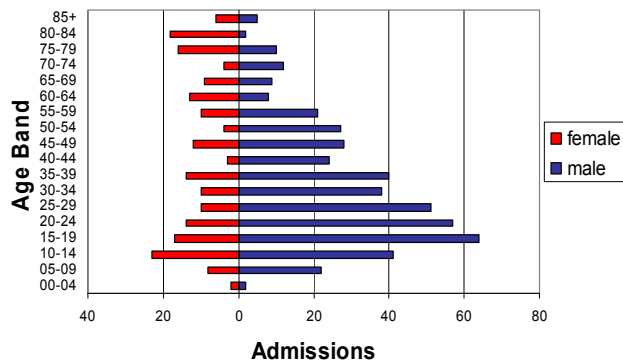


Table A10: International Comparison of Road Deaths.

	Number of road deaths	Road deaths per 100,000 population	Children (aged 0 -14) deaths per 100,000 population	2000 Population (000's)
Doncaster 1996-2000	91	6.1	1.4	
England	2,915	5.8	1.4	49,997
Wales	169	5.7	1.3	2,946
Scotland	325	6.4	2.1	5,115
Great Britain	3,409	5.9	1.5	58,058
Northern Ireland	171	10.1	2.4	1,698
United Kingdom	3,580	6.0	1.5	59,756
Austria	976	12.0	1.8	8,110
Belgium	1,470	14.4	2.9	10,239
Denmark	498	9.3	2.6	5,330
Finland	396	7.7	2.1	5,171
France	8,079	13.6	3.2	59,225
Germany	7,503	9.1	1.9	82,163
Greece	2,116	10,544
Irish Republic	415	11.0	2.7	3,787
Italy	6,410	11.1	..	57,679
Luxembourg	76	17.5	3.7	435
Netherlands	1,082	6.8	1.9	15,864
Portugal	1,860	
Spain	5,776	14.5	3.1	39,733
Sweden	591	6.7	1.2	8,861
Czech Republic	1,486	14.5	3.2	10,278
Hungary	1,200	11.9	2.6	10,043
Norway	341	7.6	2.0	4,490
Poland	6,294	16.3	3.7	38,644
Switzerland	592	8.3	2.2	7,164
Turkey	5,123	7.5	..	67,884
Australia	1,824	9.5	2.9	19,157
Canada	2,972	9.7	..	30,759
Iceland	32	11.3	0.0	283
Japan	10,403	8.2	1.3	126,698
New Zealand	462	12.1	4.7	3,831
Republic of Korea	10,236	21.8	5.8	46,858
USA	41,821	15.2	4.0	275,130

Source: Department for Transport, Transport Statistics, Road Accidents Great Britain 2001: The Casualty Report. Available: <http://www.transtat.dft.gov.uk/tables/2002/ragb/download/tables/pdf/table50a.pdf> [July-2003]
 Doncaster data: ONS Annual Death Extracts, ONS Population Mid Year Estimates ICD9 E810-E819

Figure A11: European Union Road Death Rates.

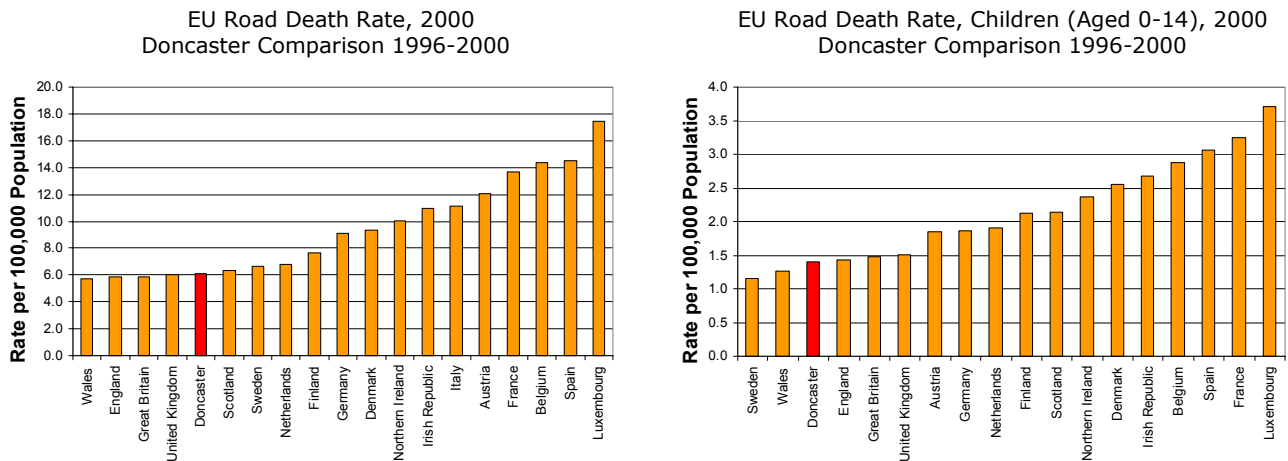


Table A12: Gender and Age Specific Death Rates for Land Transport Accidents (per 100,000 population), 1999 and 2001 Pooled.

Males							
	1+	1-4	5-14	15-34	35-64	65-74	75+
England & Wales	9.0	1.2	2.7	14.5	7.7	7.6	16.1
England	8.9	1.1	2.8	14.2	7.7	7.6	16.0
Barnsley	7.1	9.2	6.7	14.6	4.7	0.0	0.0
Doncaster	10.5	0.0	5.0	23.8	6.3	12.2	0.0
Rotherham	3.8	0.0	0.0	8.1	4.1	0.0	0.0
Sheffield	6.2	0.0	3.1	7.3	4.3	10.1	20.5

Females							
	1+	1-4	5-14	15-34	35-64	65-74	75+
England & Wales	3.0	1.3	1.3	3.3	2.0	4.5	8.4
England	3.1	1.2	1.3	3.4	2.0	4.5	8.8
Barnsley	0.4	0.0	0.0	1.8	0.0	0.0	0.0
Doncaster	1.7	0.0	0.0	7.0	0.0	0.0	0.0
Rotherham	3.6	0.0	0.0	7.9	1.0	4.4	9.0
Sheffield	2.3	4.3	0.0	2.7	1.6	2.2	5.6

Data source: Compendium of Clinical and Health Indicators 2002. ICD 10 V01-V89.

Figure A13: Falls Resulting in Fractured Neck of Femur (FNOF).

Admissions for Serious Accidental Falls, Resulting in FNOF
Doncaster Residents 1998-2002, by Gender and Age

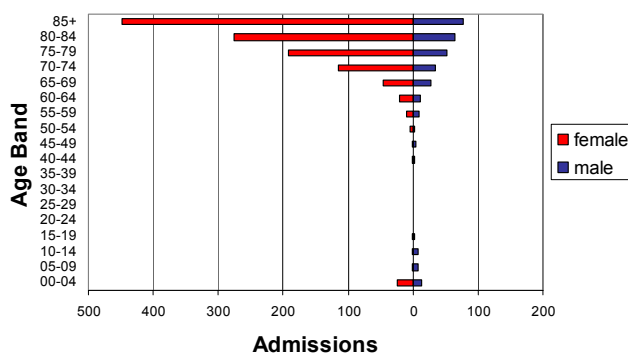


Table A14: Falls by Cause (Deaths & Admissions).

Fall Deaths by Cause	Male	Female	Total
Fall: fracture, cause unknown	21	37	58
Fall: from building or structure	3	1	4
Fall: from chair or bed	2	2	4
Fall: from one level to another	3	1	4
Fall: from same level - slipping or tripping	1	6	7
Fall: ladder	4	2	6
Fall: other unspecified	29	39	68
Fall: stairs or steps	16	12	28
Total	79	100	179

Doncaster Residents 1992-2001

Falls: Serious Accident Admissions by Cause	Count
Unspecified fall	1450
Fall on same level from slipping tripping and stumbling	525
Fall on and from stairs and steps	297
Other fall on same level	167
Fall involving bed	134
Fall involving chair	90
Fall on and from ladder	83
Other fall from one level to another	73
Other fall same level due to collision/pushing by another person	45
Fall from out of, or through, building or structure	36
Fall on same level involving ice and snow	21
Fall involving other furniture	16
Fall involving wheelchair	11
Fall involving ice-skates, skis, roller-skates, or skateboards	10
Fall involving playground equipment	7
Fall from tree	7
Fall on and from scaffolding	6
Fall while being carried or supported by other persons	4

Doncaster Residents, 1998-2002

Table A15: Falls by Location of Accident Admissions for Serious Accidental Injury, 1998-2002.

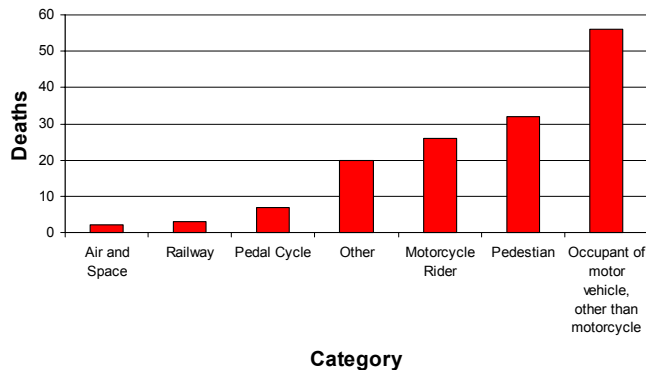
Falls by Location	Count	Percentage
Home	1721	57.7%
Residential Institution	407	13.6%
Other Public Place, such as park, lake, hill	292	9.8%
Unspecified place	235	7.9%
Road and Pavement	110	3.7%
School, other institution and public admin. area	93	3.1%
Shop or Service Area, such as Café, or Hotel	46	1.5%
Sports and Athletics Area	41	1.4%
Industrial and Construction Area	33	1.1%
Farm	3	0.1%
Not coded	1	0.0%
	2982	

Table A16: Transport Accident Crude Rate Per 100,000 Population (Doncaster)

Age Band	Deaths		Age Band	Hospital Admissions for Serious Injury	
	Deaths 1992-2001	Rate per 100,000		Admissions 1998-2002	Rate per 100,000
00-04	1	0.5	00-04	4	4.5
05-09	2	1.0	05-09	30	30.6
10-14	5	2.6	10-14	64	64.1
15-19	21	12.0	15-19	81	90.0
20-24	12	7.2	20-24	71	101.7
25-29	20	9.1	25-29	61	57.7
30-34	10	4.4	30-34	48	42.8
35-39	11	5.1	35-39	54	48.0
40-44	12	6.1	40-44	27	27.0
45-49	12	6.2	45-49	40	42.6
50-54	7	4.0	50-54	31	32.0
55-59	4	2.6	55-59	31	39.8
60-64	5	3.4	60-64	21	28.8
65-69	5	3.6	65-69	18	26.4
70-74	7	5.5	70-74	16	25.7
75-79	7	7.6	75-79	26	51.5
80-84	2	3.6	80-84	20	72.3
85+	3	7.2	85+	11	51.1
Total	146	5.0	Total	654	45.1

Figure A17: Transport Accidents by Mode of Transport.

Transport Deaths by Mode of Transport: 1992-2001
Doncaster Residents. ICD 9 E800-E848, ICD10 V01-V99



Doncaster residents. Deaths – 1992-2001.

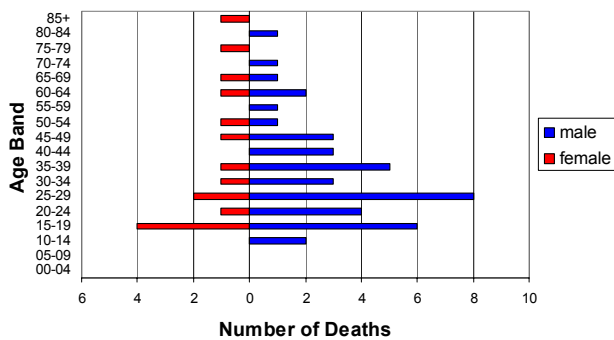
Table A18: Transport Accident Admissions by Mode of Transport (Serious Accident)

Admissions by Mode of Transport	Count	Percentage
Car Occupant	184	28.1%
Pedestrian	150	22.9%
Motorcycle Rider	128	19.6%
Pedal Cyclist	79	12.1%
Other Land Transport Accidents	45	6.9%
Bus Occupant	23	3.5%
Unspecified Transport Accident	15	2.3%
Occupant of Heavy Transport	15	2.3%
Occupant of Van	9	1.4%
Air and Space Transport Accidents	3	0.5%
Water Transport Accidents	2	0.3%
Occupant, Three Wheeled Vehicle	1	0.2%
Total	654	

Admissions for serious injury – 1998-2002.

Figure A19: Occupant of Motor Vehicle by Gender and Age.

Occupant of Motor Vehicle Deaths by Gender and Age
Doncaster Residents, 1992-2001



Car Occupant: Admissions for Serious Transport
Accidents, by Gender and Age
Doncaster Residents, 1998-2002

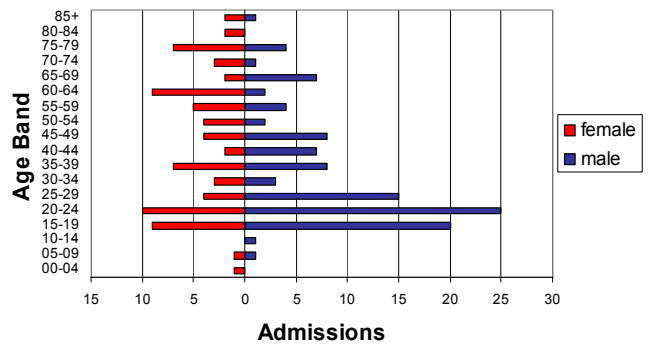


Figure A20: Accidental Poisoning Deaths by Gender and Age.

Deaths Caused by Accidental Poisoning, by Gender and Age
Doncaster Residents, 1992-2001

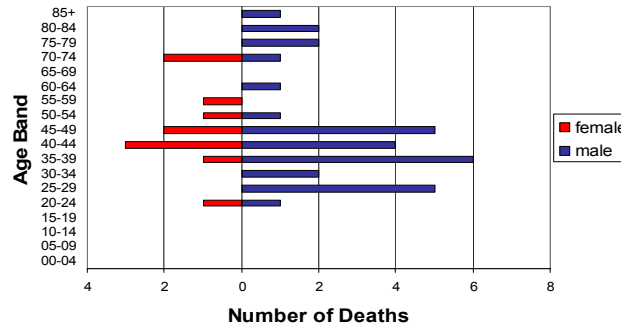


Table A21: Accidental Poisoning Deaths by Poison

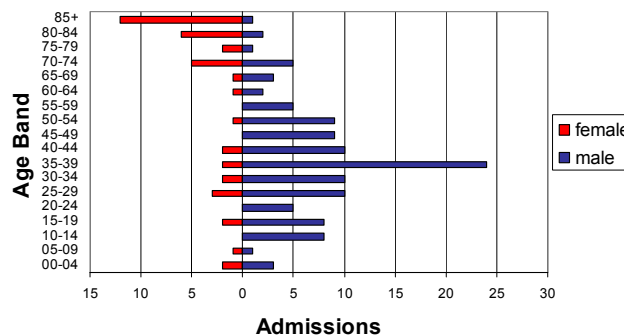
Accidental Poisoning: 1992-2001	Male	Female	Total
Alcohol	7	2	9
Drugs, Medicaments, and Biologicals	12	7	19
Gas and Vapours	12	2	14
Total	31	11	42

Table A22: Exposure to Inanimate Mechanical Force by Accident Type: Admissions for Serious Accidental Injury, 1998-2001. Doncaster Residents.

Exposure to Inanimate Mechanical Force by Accident Type	Count	Percentage
Striking against or struck by other objects	29	18.4%
Struck by thrown projected or falling object	24	15.2%
Caught crushed jammed or pinched in or between objects	19	12.0%
Foreign body entering into or through eye or natural orifice	18	11.4%
Contact with other and unspecified machinery	16	10.1%
Contact with nonpowered hand tool	9	5.7%
Foreign body or object entering through skin	7	4.4%
Contact with sharp glass	7	4.4%
Exposure to other and unspec inanimate mechanical forces	6	3.8%
Explosion of other materials	4	2.5%
Striking against or struck by sports equipment	4	2.5%
Contact with lifting and transmission devices NEC	3	1.9%
Contact with other powered hand tools and household machinery	3	1.9%
Contact with powered lawnmower	3	1.9%
Explosion and rupture of gas cylinder	2	1.3%
Explosion and rupture of pressurized tyre pipe or hose	1	0.6%
Exposure to high-pressure jet	1	0.6%
Contact with knife, sword or dagger	1	0.6%
Discharge from other and unspecified firearms	1	0.6%
Total	158	

Figure A23: Inanimate Mechanical Forces Admissions, by Gender and Age.

Inanimate Mechanical Forces: Admissions for Serious Accidents, By Gender and Age
Doncaster Residents, 1998-2002



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