

Fireworks Injuries Enquiry 1999

Scotland Summary

Introduction

This is the 21st annual publication of Scottish results from the Department of Trade and Industry (DTI) Fireworks Injuries Enquiry. The information is derived from data supplied to ISD by NHS hospitals in Scotland and forms part of the DTI's continuing review of policy on fireworks.

The data consist of all injuries caused by fireworks that require treatment in Accident & Emergency Departments and Burns / Plastic Surgery Units in Scotland during the period 11 October to 8 November 1999 inclusive; bonfire-only injuries are excluded.

Comments on this briefing, and requests for further information, are welcomed and should be directed to Frank Clarke, Room BO21, Information & Statistics Division, Trinity Park House, South Trinity Road, Edinburgh, EH5 3SQ (telephone 0131 551 8247)

The main points are:

- the number of injuries reported was 82, up from 60 in 1998, an increase of almost 37% (figure 2).
- 4 patients were detained for at least one night in hospital; a further 20 were referred to outpatient departments for further treatment (figures 2 and 4).
- the numbers of injuries to under 16 yr olds remained similar to 1998, however injuries in the 21 and over age group rose sharply from 11 to 34 and this age group accounts for over 40% of all fireworks injuries in 1999, higher than any previous survey during the 1990s
- the largest single attributable cause of injuries, for the second year in succession, was rockets; injuries from bangers and rockets increased by half from 1998 (figures 2 and 4).
- injuries to the hand still forms the largest group but eye and head injuries both increased from 1998, with head injuries increasing by half (figure 5).
- injuries occurring at family or private parties rose from 1998; casual incidents in the street remained similar to the previous year (figure 2).

An additional survey was carried out from 28 December 1999 to 4 January 2000 to look at Fireworks Injuries at the Millennium New Year celebrations. The figures from this survey were extremely small, and have therefore not been included within this publication. Information for the Millennium Survey including the figures for Scotland can be found on the Department of Trade & Industry website at www.dti.gov.uk/CAPC/ca/firemill.htm

Figure 1 Trend by age group of patient treated

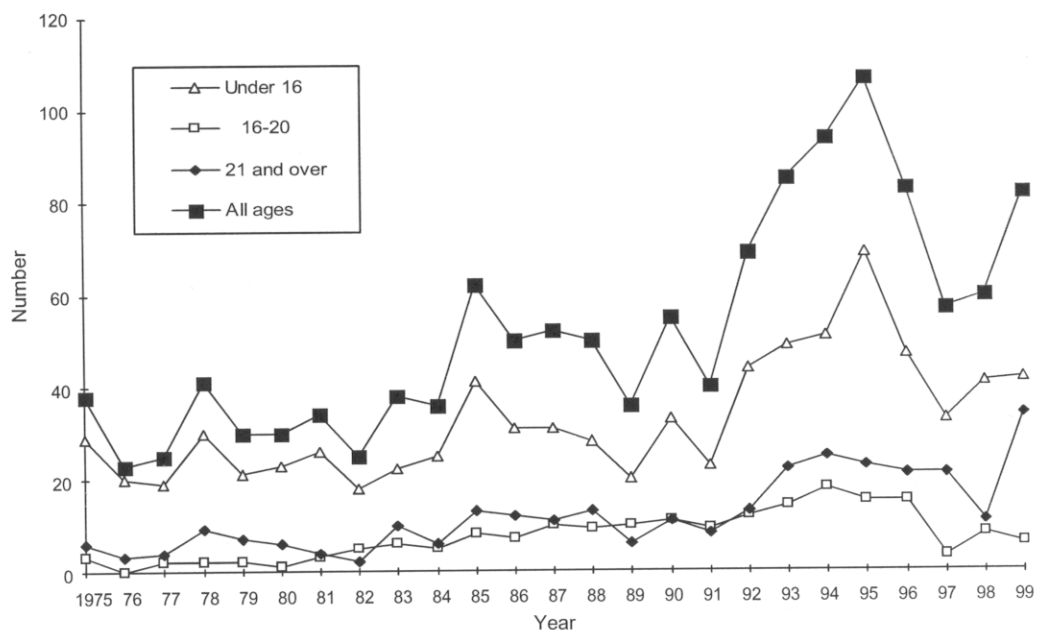
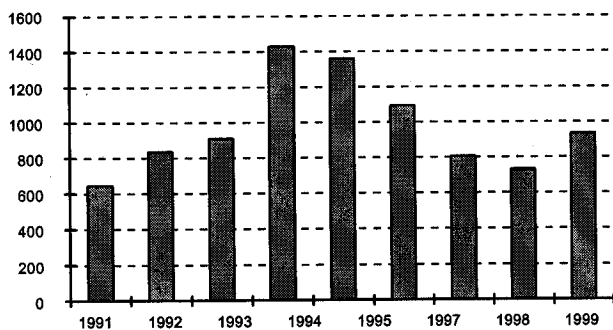


Figure 2 Trends in fireworks accidents

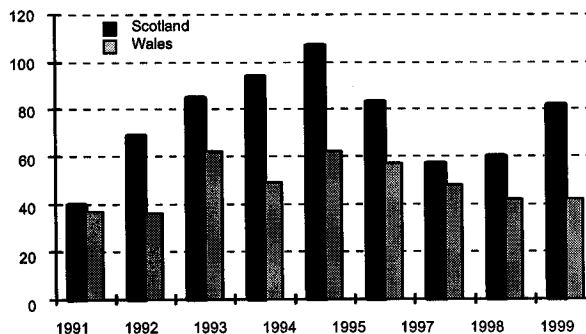
	1975	1980	1985	1990	1995	1997	1998	1999
Total Cases	38	30	62	55	107	57	60	82
Place of Accident								
Family or private party	3	5	10	6	24	20	14	26
Semi public party ¹	{ 4 }	-	4	2	3	2	3	2
Large public display		5	8	11	4	8	9	17
Casual incident in street or other public place ²	17	17	33	29	60	25	31	30
Indoors	{ 3 }	3	3	4	3	1	-	2
Other	{ 14 }	-	4	3	13	1	3	5
Type of Firework								
Banger	12	10	21	15	33	11	10	15
Rocket	6	2	14	6	18	10	14	21
Air bomb	..	..	..	..	3	1	7	3
Roman candle ³	2	2	4	4	2	3	5	6
Sparklers	{ 3 }	3	4	3	12	19	5	11
Other proprietary fireworks		1	2	4	2	9	9	7
Home made or extracted powder	3	1	2	2	-	1	3	1
Not known	12	11	15	21	37	3	7	18
Severity of Injury								
Died	-	-	-	-	-	-	-	-
Transferred to another hospital	..	..	..	..	5	1	7	3
Detained in hospital one night or more	3	2	7	6	3	5	5	4
One days absence from school, work etc	3	2	16	8	..	..	..	..
Minor injury	30	23	36	40	..	..	..	..
Referred to outpatient department	..	..	..	..	39	22	14	20
Referred to GP	..	..	..	..	25	8	7	9
No further treatment required	..	..	..	..	27	18	27	34
Not known	2	3	3	1	8	3	-	12
Age Group of Injured Person								
21 and over	6	6	13	11	23	21	11	34
16-20	3	1	8	11	15	3	8	6
13-15	9	11	20	12	26	10	10	15
Under 13	20	12	21	21	43	23	31	27
Eye Injuries								
	..	14	20	11	18	11	16	17

1 Prior to 1993 figures are for "Public/semi public display".
 2 Prior to 1993 figures are for "Casual incident in street".
 3 Prior to 1993 figures are for "Roman candle or similar".
 .. Not available.

**Figure 3a Patients treated for fireworks accidents
England: 1991-99**



**Figure 3b Patients treated for fireworks accidents
Scotland, Wales: 1991-99**



Source: Department of Trade and Industry (for England and Wales figures).

**Figure 4 Fireworks accidents;
by health board area of treatment ^{1, 2}**

	Scotland	Argyll & Clyde	Ayrshire & Arran	Fife	Forth Valley	Grampian	Greater Glasgow	Highland	Lanarkshire	Lothian	Tayside	Shetland
Total patients treated	82	7	4	4	2	11	27	4	6	14	2	1
Place of Accident												
Family or private party	26	3	1	1	1	6	7	1	1	5	-	-
Public semi/public display	2	1	-	-	-	1	-	-	-	-	-	-
Large public display	17	1	2	1	-	2	4	2	-	5	-	-
Casual incident in street	30	2	1	2	1	2	13	1	2	3	2	1
Indoors	2	-	-	-	-	-	2	-	-	-	-	-
Other	5	-	-	-	-	-	1	-	3	1	-	-
Type of Firework												
Banger	15	2	1	2	-	1	5	-	1	2	-	1
Rocket	21	2	-	1	1	4	4	2	2	5	-	-
Air bomb	3	-	-	-	-	1	1	1	-	-	-	-
Roman candle or similar	6	-	-	-	-	2	2	-	-	1	1	-
Sparklers	11	-	-	1	1	1	3	-	3	2	-	-
Other proprietary fireworks	7	2	1	-	-	-	4	-	-	-	-	-
Homemade or extracted powder	1	-	-	-	-	1	-	-	-	-	-	-
Not known	18	1	2	-	-	1	8	1	-	4	1	-
Severity of Injury												
Died	-	-	-	-	-	-	-	-	-	-	-	-
Transferred to another hospital	3	1	-	1	-	1	-	-	-	-	-	-
Detained in hospital for one night or more	4	-	-	-	-	-	1	-	-	3	-	-
Referred to outpatient dept.	20	1	1	-	-	2	10	-	3	3	-	-
Referred to GP	9	1	-	-	-	1	2	2	2	1	-	-
No further treatment required	34	-	3	3	1	7	8	2	-	7	2	1
Not known	12	4	-	-	1	-	6	-	1	-	-	-
Age Group of Injured Person												
21 and over	34	3	3	2	1	5	6	2	1	9	1	1
16-20	6	1	1	-	-	2	1	1	-	-	-	-
13-15	15	2	-	1	-	3	4	-	4	-	1	-
Under 13	27	1	-	1	1	1	16	1	1	5	-	-
Sex³												
Males	52	3	2	3	2	8	17	2	4	10	1	-
Females	26	1	2	1	-	3	9	2	2	4	1	1
Type of Injury⁴												
Eye	17	-	2	1	-	4	5	1	-	4	-	-
Head	21	2	-	1	1	5	5	-	1	6	-	-
Hand	29	3	1	2	1	2	11	2	4	2	1	-
Arm	5	-	1	-	-	1	-	1	1	1	-	-
Leg / foot	8	1	-	-	-	-	3	-	1	1	1	1
Torso	7	1	-	-	-	1	3	-	1	1	-	-

- Where patients were transferred between hospitals data is recorded against the first hospital of treatment.
- No injuries were reported in the following health board areas: Borders, Dumfries & Galloway, Forth Valley, Highland, Orkney, and Western Isles.
- Excludes 4 cases where sex was missing.
- The number of patients treated may not equal the total number of injuries sustained as patients may have more than one type of injury.

Figure 5 Type of injury by type of firework

Type of injury	Type of firework									
	All Fireworks		Banger	Rocket	Air Bomb	Roman Candle	Sparkler	Other proprietary fireworks	Home made or extracted powder	Not known
	1998	1999								
Total patients treated¹	60	82	15	21	3	6	11	7	1	18
Eye	16	17	2	4	2	1	-	-	1	7
Head	14	21	5	7	1	2	-	5	-	1
Hand	21	29	5	2	1	3	10	1	-	7
Arm	2	5	-	3	-	-	-	1	-	1
Leg / foot	8	8	3	2	-	-	-	-	-	3
Torso	5	7	1	4	-	-	1	-	-	1

- The number of patients treated may not equal the total number of injuries sustained as patients may have more than one type of injury.

Figure 6 Type of injury; by outcome

Type of injury	Outcome of injury							Not known
	All outcomes	No further treatment required	Referred to		Detained in this hospital	Transferred to another hospital	Died	
			GP	Outpatient department				
Total patients treated¹	82	34	9	20	4	3	-	12
Eye	17	11	1	3	1	1	-	-
Head	21	13	3	2	2	-	-	1
Hand	29	7	4	9	1	2	-	6
Arm	5	2	-	3	-	-	-	-
Leg / foot	8	2	-	2	-	-	-	4
Torso	7	-	2	4	-	-	-	1

¹ The number of patients treated may not equal the total number of injuries sustained as patients may have more than one type of injury.

Figure 7 Fireworks injuries; by age

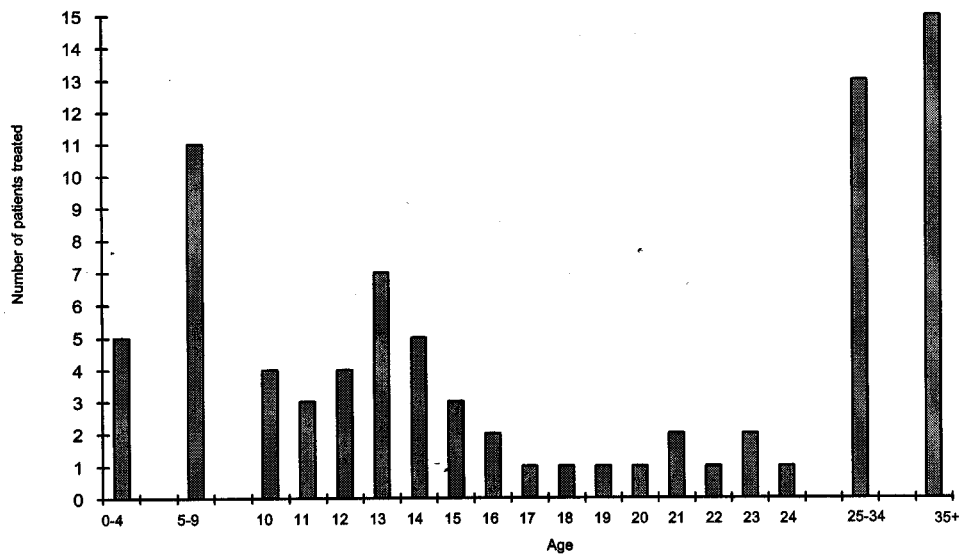


Figure 8 Calendar of injuries sustained

