



HOME OFFICE

Accidents to Firefighters

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**FIRE
RESEARCH &
DEVELOPMENT
GROUP**

Pub No 6/91 Accidents to Firefighters







Home Office
Fire Research and Development Group

ACCIDENTS TO FIREFIGHTERS

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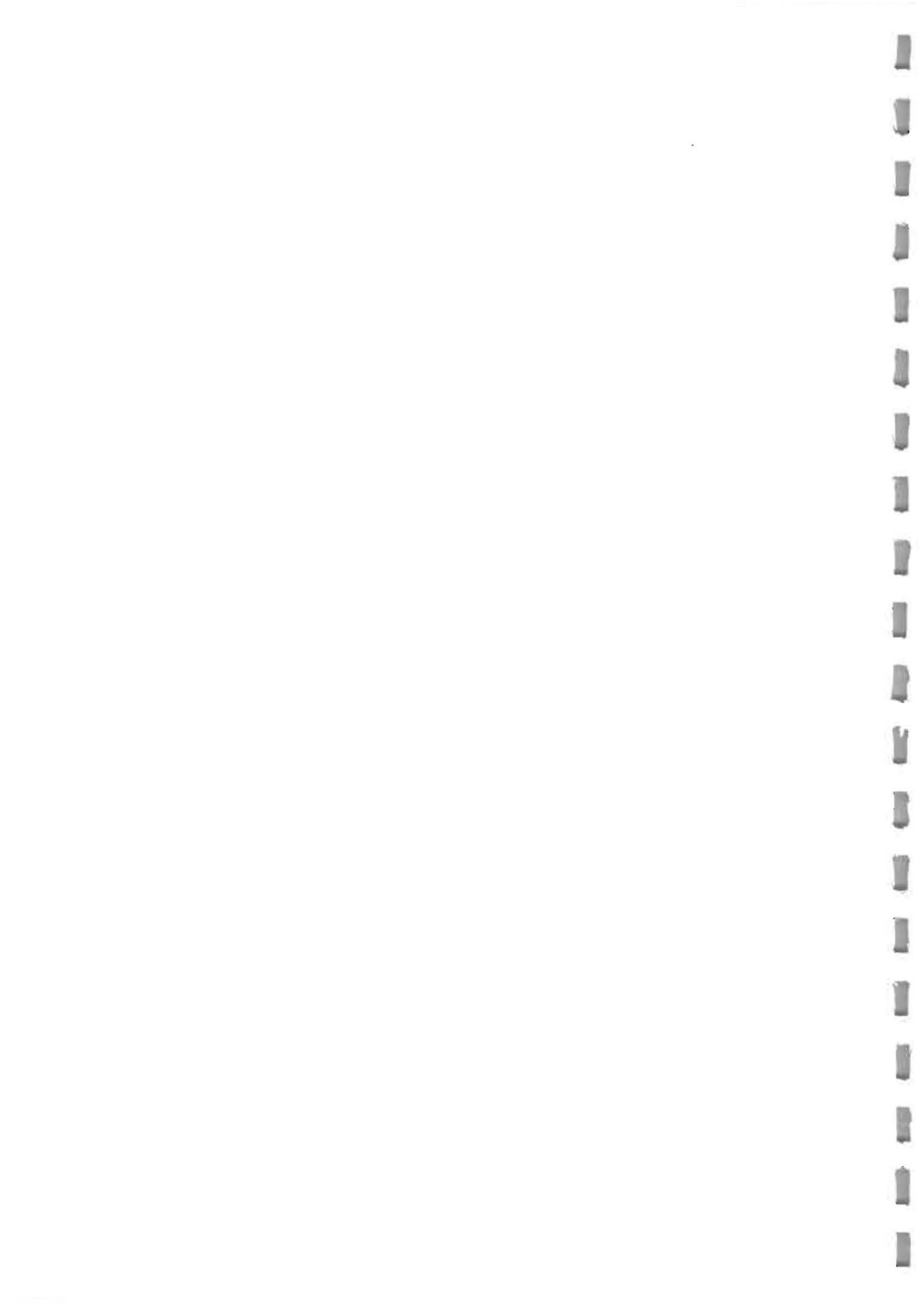
M D Marriott

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ABSTRACT

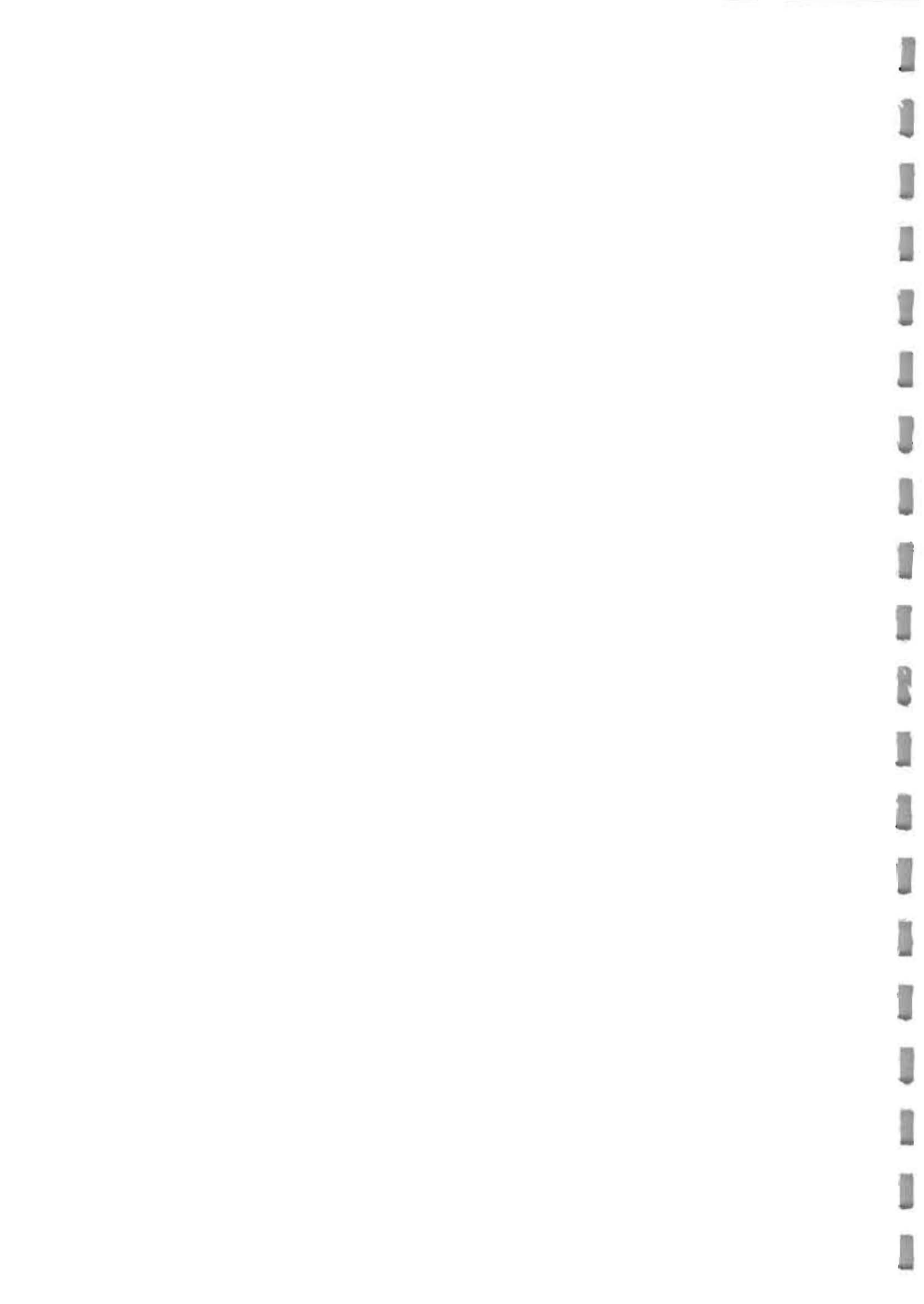
FRDG were asked to investigate the number of accidents involving firefighters to determine if the number was increasing, especially in recent years. Statistics on firefighter injuries were collected from fire service FDR1 forms, the Health and Safety Executive and a sample of four Fire Brigades accident records.

Overall, it was shown that the number of firefighter injuries at fires had increased proportionally with the number of incidents attended over the last thirteen years. Just over half of all injuries in the brigade happened whilst attending incidents. Sport was the only cause of injuries which has been showing a significant increase in magnitude. Leg, hand and back injuries have been the most frequently reported.



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ACCIDENTS TO FIREFIGHTERS

MANAGEMENT SUMMARY

Introduction

The Fire Research and Development Group was asked at the May 1991 meeting of the Joint Committee on Fire Research to undertake a short study to investigate the number, type and cause of injuries to firefighters and to report back to the Autumn meeting. It had been suggested that the frequency of accidents was increasing, particularly in recent years.

Sources of Information

Three main sources of information on injuries to firefighters were available to FRDG:

1. Details of fatalities and injuries to firefighters at fire incidents are recorded by the officer-in-charge on the standard FDR1 report form. These are collated each year and published in the Home Office publication, UK Fire Statistics.
2. All injuries occurring at work resulting in an absence of more than 3 days have to be reported to the Health and Safety Executive (HSE). FRDG were able to obtain details of annual injury incident rates for occupation 'firefighter' from 1 April 1986 for analysis.
3. To gain more detailed information, individual brigade statistics were examined by FRDG. FRDG contacted a sample of four brigades through the Fire Service Inspectorate. FRDG were able to obtain from each brigade a list of all injuries to firefighters whilst on duty, resulting in time off work or not, over a five year period for analysis.

Home Office UK Fire Statistics

The current FDR1 form was introduced in 1978 replacing the K433 form. Analysis of these forms shows that the number of firefighter fatalities at fire incidents would appear to be decreasing after reaching a peak in 1972. However, the number of injuries to firefighters shows an upward trend over the same period. This may be partly explained by the increasing number of incidents attended by the fire service.

When the ratio of injuries to incidents is considered, it can be concluded that the number of firefighter injuries has remained at a relatively constant level of approximately three injuries per thousand

fires since 1977.

Fire brigades also make an annual return of form 44c to the Home Office detailing the number of fatal casualties and serious injuries that resulted in two weeks or more hospitalisation, or absence from duty for one month or more.

Injury Statistics from the Health and Safety Executive

This section consists of an analysis of the statistics obtained from the HSE relevant to the occupation 'firefighter'.

Injuries are classified by HSE into three main types:

- a). Fatalities
- b). Major injuries
- c). 'Over 3 day' injuries.

Statistics are held by occupation type, including 'firefighter'. The total number of major and over 3 day injuries recorded happening to firefighters at work each year shows a similar trend to those in the Home Office fire statistics over the past four years.

Information is also recorded by the HSE concerning the part of the body injured by the accident. Firefighters legs appear to be the most frequently injured. The annual frequency of the different types of injury follow a similar trend to the overall total number of injuries.

Further analysis shows that leg injuries most frequently affect the ankle, torso injuries most frequently affect the back, arm injuries most frequently affect the fingers/thumb and head injuries most frequently affect the eye.

The frequency of injuries to the different parts of the body usually follows a similar trend to the overall injuries totals except for back injuries which show a steady increase in number over the four years being considered. Sprains and strains account for half of all firefighter injuries. Actual burns are responsible for only a relatively small number of the total (5%).

The number of major and over 3 day injuries to firefighters by part of body injured and nature of injury was analysed for 1989/90. The analysis showed that the two most frequently occurring injuries (ankle and back) were generally the result of sprains or strains.

Fire Brigade Accident Logs

All fire brigades are required to keep a log of accidents that occur to fire service personnel during their day-to-day duties. The

accidents are recorded whether they result in the victims taking time off work or not. An analysis of the accident logs from a sample of four brigades (Essex, Greater Manchester, Lancashire and West Yorkshire) was undertaken by FRDG.

The number of injuries reported each year in each of the four brigades remained fairly constant for each Brigade except for Greater Manchester in 1990 when an increase in the total number of injuries occurred. This was reported as being mainly due to an increase in sport being played and the resulting injuries being recorded. The Greater Manchester Health and Safety section informed FRDG that a policy had been introduced in 1990 that firefighters should undertake at least thirty minutes sport per day.

Greater Manchester's accident records are split into the different areas of work where they occurred. These areas show that just over half of all injuries in the brigade happened whilst attending incidents.

The main areas of the body affected by injuries in all the four Brigades each year since 1986 were examined. The relative frequency of injuries to the different parts of the body differs slightly from those recorded by the HSE. The upper limb rather than the lower limb is the area most often injured according to the accident logs.

The frequency of the different types of injury remains fairly constant over the five years being studied. The one noticeable increase occurs with lower limb injuries in 1990. This rise is again mainly attributed to the increase in knee and ankle sprains at Greater Manchester from sporting activities.

Leg, hand and back injuries are being the most frequently reported. As the number of hand injuries reported in accident logs would appear to be larger relative to the HSE figures, it would seem that a significant number of hand injuries require an absence of three days or less from work.

FRDG also categorised each injury in the accident logs by how they were caused. The most common cause of injuries appear to be falls on level ground, firefighters striking against or being struck by objects, manual handling, sport, and cuts and splinters.

Conclusions

A number of conclusions and general statements can be drawn from the above analysis.

Overall, it would appear that the number of firefighter injuries at fires has increased proportionally with the number of incidents attended over the last thirteen years.

Just over half of all injuries in the brigade happen whilst attending incidents.

Sport is a cause of injuries which is showing a significant increase in magnitude in some brigades.

Leg, hand and back injuries are being the most frequently reported. Sprains and strains account for half of all firefighter injuries. Actual burns are responsible for only a relatively small number of the total (5%).

A large number of back injuries are caused by lifting during drill and slipping on the level, especially during colder months.

The majority of leg, ankle and foot injuries involve joints and muscles being strained or struck during sport, falls, or walking into objects. Knee injuries are frequently caused by spending extended periods of time in the BA crawl.

A large proportion of eye injuries are caused by dirt or debris in the eye. Hand injuries are mainly caused by cuts from broken glass (searching through debris, washing up, etc).

1 INTRODUCTION

1.1 Background

The Fire Research and Development Group were asked at the May 1991 meeting of the Joint Committee on Fire Research to conduct a short investigation of accidents to firefighters.

The formal project documentation was signed on 11 June 1991. It was agreed that the project report should be available at the November 1991 meeting of the JCFR.

The research consisted of three main sections; an investigation of injuries to firefighters recorded in the Home Office (chapter 2), an analysis of the injuries reported by all fire brigades to the Health and Safety Executive (chapter 3); and an analysis of the accident reporting logs of a sample of 4 Brigades (chapter 4). A summary of findings is given in chapter 5.

1.2 Description of the Perceived Problem

Home Office fire statistics indicated that there were 1,463 fire related fire brigade casualties during 1989, representing 10% of all fire casualties (ref 1). This figure might increase significantly when other non-reported injuries to firefighters are considered.

An investigation was required into the number, type and cause of injuries to firefighters. It was generally thought that the frequency of accidents was increasing, particularly in recent years. The study concentrated on determining the extent and severity of the problem throughout the UK as a whole, rather than focusing on individual incidents.

1.3 Terminology

For the purposes of this report, and to avoid ambiguity, 'injury' and 'accident' are defined as follows:

When a firefighter is injured at work,

- a). the occurrence is termed an 'accident';
- b). the 'injury' is the result of the accident, eg. a broken leg.

Thus, a firefighter may sustain more than one injury (eg a broken leg and a bruised arm) as a result of one accident.

1.4 Sources of Information

Three main sources of information on injuries to firefighters were available to FRDG.

1. Details of fatalities and injuries to firefighters at fire incidents are recorded by the officer-in-charge on the standard FDR1 report form. These are collated each year and published in the Home Office publication, UK Fire Statistics. In addition, all brigades complete an annual return to the Home Office detailing the number of fatal and serious injuries to brigade personnel.
2. All injuries occurring at work resulting in an absence of more than 3 days have to be reported to the Health and Safety Executive (HSE). FRDG were able to obtain details of annual injury incident rates for occupation 'firefighter' from 1 April 1986 for analysis.
3. To gain more detailed information, individual brigade statistics were examined by FRDG. Every brigade is required to keep an accident book in which all injuries sustained whilst on duty are recorded. Most brigades also have accident report forms, which vary in design, resulting in the information recorded on the forms not being standardised. Some brigades now keep accident information in a computer database.

FRDG contacted a sample of four brigades through the Fire Service Inspectorate. Essex, Lancashire, Greater Manchester and West Yorkshire fire brigades were chosen to cover a broad range of types of working environment (urban, rural, residential, commuter and industrialised areas). FRDG were able to obtain from each brigade a list of all injuries to firefighters whilst on duty, resulting in time off work or not, over a five year period for analysis.

In addition to the above information, FRDG had access to two reports produced some years ago concerning the frequency of accidents to firefighters (refs 2 & 3). Statistics from these reports have been included in the analysis in later chapters, where relevant, for comparison purposes.

2 HOME OFFICE UK FIRE STATISTICS

2.1 Introduction

This first section of this report contains a summary of the information published annually by the Home Office concerning the number of fatalities and injuries within the Fire Service.

2.2 Analysis of Home Office UK Fire Statistics

When the fire service attend an incident, the officer-in-charge is required to complete an FDR1 form. On this form information is recorded concerning the number of fire service and civilian fatalities and casualties occurring at each fire incident. Every year information is collated from all fire report forms and published in the Home Office publication, UK Fire Statistics (Ref 1).

Figures 2.1 and 2.2 show the total number of fatalities and injuries to firefighters each year since 1965. (Note that there were no figures for 1975 due to industrial action and that the method of recording injuries was changed in 1978 and 1983.)

The number of firefighter fatalities at fire incidents would appear to be decreasing after reaching a peak in 1972. However, the number of injuries to firefighters shows an upward trend over the same period. This may be partly explained by the increasing number of incidents attended by the fire service.

Figure 2.3 illustrates the number of fires attended by the fire service each year since 1965. Figure 2.4 shows that when the ratio of injuries to incidents is considered, it can be concluded that the number of firefighter injuries has remained at a relatively constant level of approximately three injuries per thousand fires since 1977. The introduction of the FDR1 form was possibly associated with the increase in the ratio of incidents to injuries in 1977. This is because guidance for the new FDR1 form was likely to have influenced the way brigades recorded casualties that year.

2.3 Analysis of Fire Brigade Annual Returns

The fire brigades of England and Wales are required to make an annual return of form 44c to the Home Office detailing the number of fatal casualties and serious injuries to fire brigade personnel. The definition of a serious injury is one that resulted in 2 weeks or more hospitalisation from the date of injury or absence from duty for one month or more from the date of injury. Injuries should be categorised according to whether they occurred attending fire calls, special service calls, training or other duties.

Figures 2.5 and 2.6 show details of the number of firefighter injuries

recorded between 1985 and 1990 for all brigades. Less than 750 injuries are reported in each of the six years studied. Fire calls result in an average of 41% of the injuries over the six year period.

3 INJURY STATISTICS FROM THE HEALTH AND SAFETY EXECUTIVE

3.1 Introduction

The previous chapter mainly dealt with injuries to firefighters which occurred specifically at fire incidents from FDR1 returns. In their general day to day work, members of the fire service are expected to undertake a number of duties in addition to attending fire incidents. It is envisaged that a number of accidents occur to firefighters undertaking these general duties in addition to those reported at fire incidents.

Since 1 April 1986, it has been required that any accident occurring at work resulting in an absence of more than three days from employment has to be reported to the Health and Safety Executive. This chapter consists of an analysis of the statistics obtained from the HSE relevant to the occupation 'firefighter'.

3.2 Format of Information

Details of accidents that happen to employees whilst at work and cause either fatalities or an absence from work of greater than three days are collected by the HSE's Factory and Agricultural Inspectorate. Statistics are gathered under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1985 (RIDDOR). For a copy of the standard form (F 2508), see Appendix A.

Injuries are classified into three main types:

- a). Fatalities
- b). Major injuries (for a detailed definition, see Appendix B)
- c). 'Over 3 day' injuries.

Statistics are held by occupation type, including 'firefighter'. (Note, this will include anyone who describes their occupation in this way whether employed by the local authority fire brigade or not). For each severity of injury category, details are stored concerning the part of the body injured and the nature of the injury.

3.3 Analysis of HSE Statistics

Figure 3.1 illustrates the number of major and over three day injuries to firefighters relative to a chosen set of other occupations during 1988/89. The HSE suspect that there is widespread under reporting of over 3 day injuries for all occupations, by as much as 50% in some cases. However 'high risk' occupations tend to be more concerned about correct reporting. Therefore, increases in numbers of injuries could be due to increased reporting rather than an actual increase.

Figure 3.2 shows the total number of major and over 3 day injuries recorded happening to firefighters at work each year since 1 April 1986. Although the reporting years are slightly different, the total number of injuries recorded by the HSE shows a similar trend to those in the Home Office fire statistics over the past four years (Figure 2.2).

Information is also recorded by the HSE concerning the part of the body injured by the accident. Figure 3.3 shows the main area of the body affected by major and over 3 day injuries. The chart shows that firefighters legs appear to be the most frequently injured. The annual frequency of the different types of injury follow a similar trend to the overall total number of injuries.

Figures 3.4 to 3.7 show the injuries to individual parts of the body in more detail. Leg injuries most frequently affect the ankle, torso injuries most frequently affect the back, arm injuries most frequently affect the fingers/thumb and head injuries most frequently affect the eye.

The frequency of injuries to the different parts of the body usually follows a similar trend to the overall injuries totals except for back injuries which show a steady increase in number over the four years being considered.

Figure 3.8 concentrates on the nature of injuries to firefighters. The pie chart depicts the number of each different type of injury to firefighters according to the HSE recording system for major and over 3 day injuries in 1989/90. Sprains and strains account for half of all firefighter injuries. Actual burns are responsible for only a relatively small number of the total (5%).

Table 3.1 indicates the number of major and over 3 day injuries to firefighters by part of body injured and nature of injury for 1989/90. It shows that the two most frequently occurring injuries (ankle and back) are generally the result of sprains or strains.

4 FIRE BRIGADE ACCIDENT LOGS

4.1 Introduction

The previous chapter described the number and nature of fire service injuries reported to the HSE each year. Only injuries which resulted in an absence of more than 3 days from work are recorded. In practice, firefighters (like most other occupations) suffer from a number of small injuries which do not qualify for reporting to HSE.

All fire brigades are required to keep a log of accidents that occur to fire service personnel during their day-to-day duties. The accidents are recorded whether they result in the victims taking time off work or not.

This chapter deals with an analysis of the accident logs from a sample of four brigades: Essex, Greater Manchester, Lancashire and West Yorkshire. These brigades were contacted through the Fire Service Inspectorate. All four kindly volunteered to provide FRDG with copies of accident log books or equivalent information since 1986.

4.2 Format of Information

The format of accident log books is not standardised throughout the fire service (examples of the reporting formats of the four sample Brigades are given in Appendices C to F). However, FRDG were able to obtain details of all injuries to fire service personnel by cause, part of body injured, nature of injury, and duty being performed at the time of the accident. The injury details were analysed by FRDG and are summarised in the following section.

4.3 Analysis of Brigade Accident Logs

Figure 4.1 illustrates the number of injuries reported each year in each of the four brigades. Most of the annual totals remain fairly constant for each Brigade except for Greater Manchester in 1990 when an increase in the total number of injuries occurred. This was mainly due to an increase in sport being played and the resulting injuries being reported. The Greater Manchester Health and Safety section informed FRDG that this was mainly due to a policy that firefighters should undertake at least 30 minutes sport per day.

Greater Manchester's accident records are split into the different areas of work where they occurred. Figure 4.2 illustrates these areas and shows that just over half of all injuries in the brigade happened whilst attending fires at incidents. It is not known how severe operational injuries are relative to the other types. This compares to 41% of injuries from fire calls from Home Office form 44c returns

(section 2.3).

Figure 4.3 indicates the main areas of the body affected by injuries in all the four Brigades each year since 1986. The relative frequency of injuries to the different parts of the body differs slightly from those recorded by the HSE (Figure 3.3). The upper limb rather than the lower limb is the area most often injured according to the accident logs.

The frequency of the different types of injury remains fairly constant over the five years being studied. The one noticeable increase occurs with lower limb injuries in 1990. This rise is mainly due to an increase in knee and ankle sprains at Greater Manchester following the introduction of a policy that firefighters should undertake at least thirty minutes sport per day.

Figure 4.4 shows the injuries to parts of the body in more detail. Leg, hand and back injuries are being the most frequently reported. As the number of hand injuries reported in accident logs would appear to be larger relative to the HSE figures, it would seem that a significant number of hand injuries require an absence of three days or less from work.

In figure 4.5, a comparison is made between the injury figures for 1990 from accident logs and those from 1970 from a sample of 11 brigades (ref 3). The most significant trends are that the percentage number of hand injuries out of the whole total has decreased over the past 20 years and the percentage of back injuries has increased.

FRDG also categorised each injury in the accident logs by how they were caused (Table 4.1). The most common cause of injuries appear to be falls on level ground, firefighters striking against or being struck by objects, manual handling, sport, and cuts and splinters.

A number of further conclusions and general statements can be drawn from the above analysis.

Sport is the only cause of injuries which is showing a significant increase in magnitude.

A large number of back injuries were caused by lifting during drill and slipping on the level, especially during colder months.

The majority of leg, ankle and foot injuries involve joints and muscles being strained or struck during sport, falls, or walking into objects. Knee injuries are frequently caused by spending extended periods of time in the BA crawl.

A large proportion of eye injuries are caused by dirt or debris in the eye. Hand injuries are mainly caused by cuts from broken glass (searching through debris, washing up, etc).

5 CONCLUSIONS

FRDG have undertaken a study of accidents to firefighters by analysing statistical information from Home Office FDR1 forms, Home Office form 44c returns, Health and Safety Executive RIDDOR forms and fire brigade accident report logs.

It has been shown that the number of firefighter fatalities at fire incidents has been steadily decreasing since 1972 but the number of injuries has been increasing. When the rising number of fires attended by brigades is taken into account, the number of firefighter injuries per thousand fires has stayed at a relatively constant level of three since 1977.

An examination of accidents that cause injuries requiring more than three days off work shows that firefighters legs, and in particular the ankle, are the part of the body most often injured. The majority of these leg and ankle injuries are sprains and strains. Back injuries are showing a steady increase each year.

A study of brigade accident logs was undertaken to determine information about all injuries, and in particular, smaller injuries to fire service personnel. The analysis shows that only half of all injuries to fire service personnel occur whilst performing operational duties. A significant number also happen when practising drill and playing sport.

The accident logs reflect more minor injuries usually requiring little or no time off work and show that injuries to the upper limbs, particularly to the hands and fingers, appear to occur most often. The majority of these hand injuries are due to minor cuts and splinters.

The most common causes of injuries to fire service personnel are falls on level ground, firefighters striking against or being struck by objects, manual handling, sport, and cuts and splinters. Sport is a cause of injuries which is showing a significant increase in magnitude in some brigades in the five years examined.

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ACKNOWLEDGEMENTS

FRDG would like to thank Essex, Greater Manchester, Lancashire and West Yorkshire Fire Brigades, the Health and Safety Executive and Home Office S3 Division for supplying the data necessary for this study.

Table 3.1: Major and Over 3 Day Injuries to Firefighters reported to HSE for 1989/90

	Amputations	Loss of Sight In Eye	Fracture	Dislocation	Concussion and Internal Injuries	Lacerations and Open Injuries	Contusions	Burns
Eye	-	-	-	-	-	7	11	10
Ear	-	-	-	-	-	1	2	9
Other Parts of Face	-	-	6	-	-	5	1	11
Head (Not Face)	-	-	-	-	4	13	1	1
Head Multiple	-	-	-	-	-	-	-	10
Total: Head	-	-	6	-	4	26	15	41
Neck	-	-	1	-	-	2	4	2
Back	-	-	10	2	4	3	26	1
Trunk	-	-	26	-	2	3	32	-
Torso Multiple	-	-	-	-	-	-	3	-
Total: Torso	-	-	37	2	6	8	65	3
Fingers/Thumbs	2	-	46	17	-	54	32	4
Hand	-	-	20	1	-	31	11	20
Wrist	-	-	29	-	-	6	1	7
Rest of Arm	-	-	25	8	-	10	36	1
Arm Multiple	-	-	1	-	-	2	5	5
Total: Arm	-	-	121	26	-	103	86	37
Toes	-	-	15	1	-	2	14	-
Foot	-	-	30	1	-	5	29	3
Ankle	-	-	49	2	-	1	28	-
Rest of Leg	-	-	13	4	-	22	63	1
Leg Multiple	-	-	3	-	-	-	4	2
Total: Leg	-	-	140	8	-	30	138	6
Multiple	-	-	5	-	-	1	34	47
General	-	-	-	-	1	-	-	-
Unspecified	-	-	-	-	1	-	2	-
TOTAL	2	-	279	36	12	168	340	134

Table 4.1: Totals by Cause of Injury by Year for the Four Sample Brigades

Cause	Year	1986	1987	1988	1989	1990
Fall on Level		359	347	293	321	275
Fall from Height		102	81	89	105	70
Striking Against		197	178	153	125	161
Struck by		195	193	166	176	173
Falling Objects		67	83	60	59	60
Contact Heat		121	95	88	95	125
Contact Electricity		3	6	2	4	1
Contact Other		59	58	39	91	83
Manual Handling		251	161	236	242	256
Machine in Operation		12	8	3	4	6
Vehicle in Motion		57	59	65	69	59
Hand Tools		16	23	21	18	16
Toxic Fumes		90	58	39	106	42
Animal or Insect		24	14	18	6	15
Assault		3	2	3	5	5
Sport		217	217	290	265	485
Cuts or Splinters		209	192	171	189	175
Other		89	83	69	138	101
Total		2164	1922	1856	2033	2203



Figure 2.1: Fire Incident Firefighter Fatalities
UK Fire Statistics (1965-89)

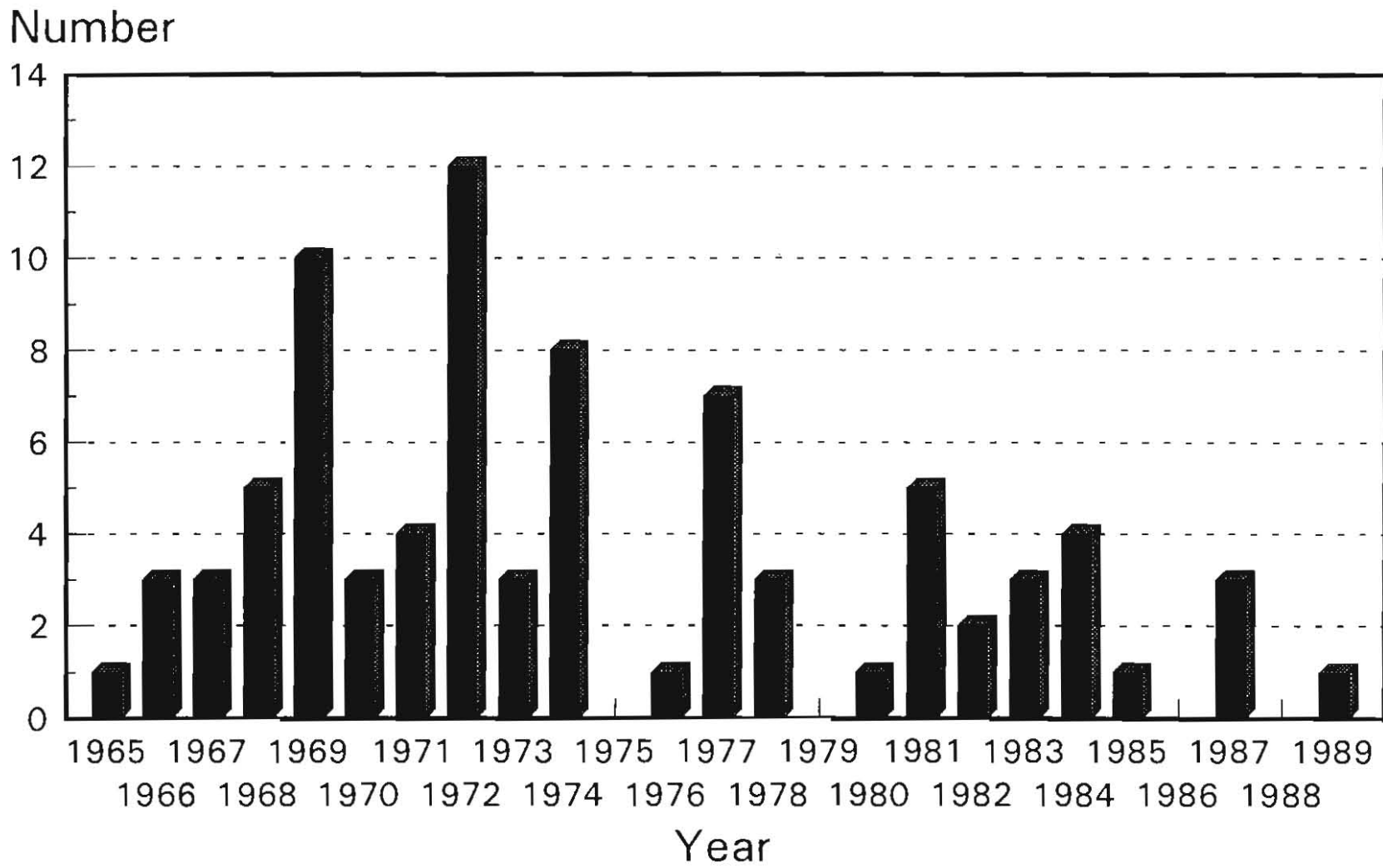
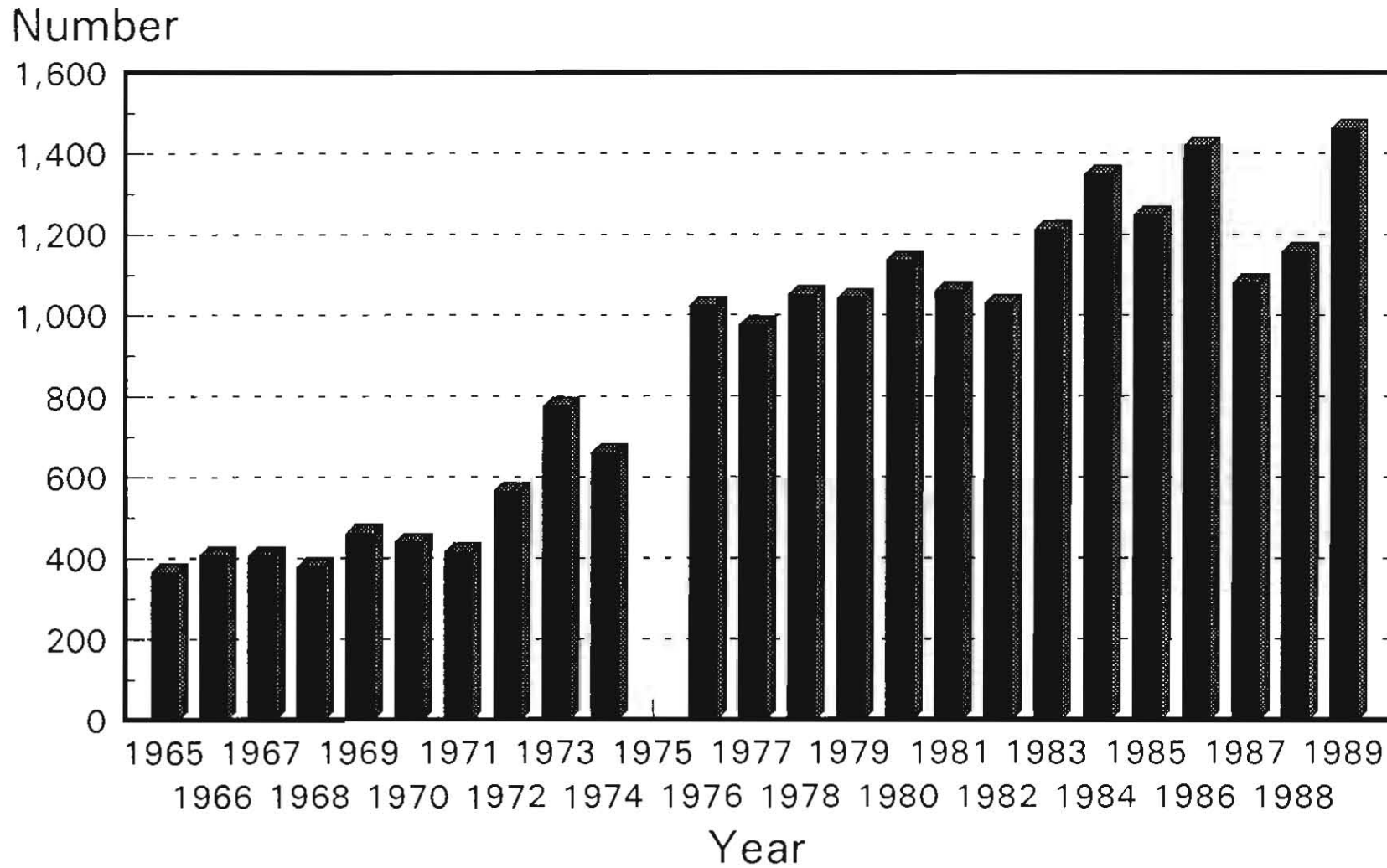




Figure 2.2: Fire Incident Firefighter Injuries
UK Fire Statistics (1965-89)



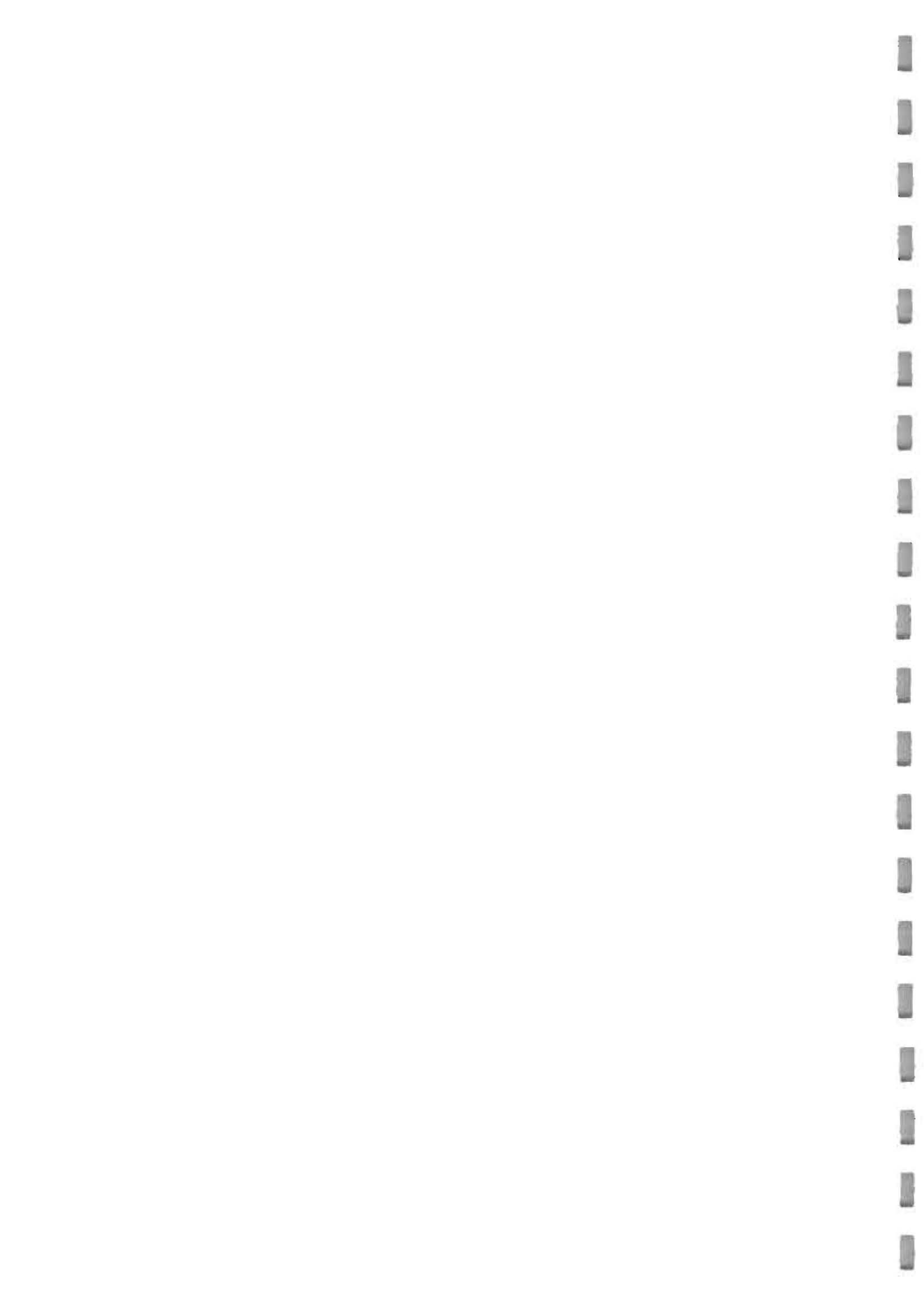


Figure 2.3: Number of Fire Incidents
UK Fire Statistics (1965-89)

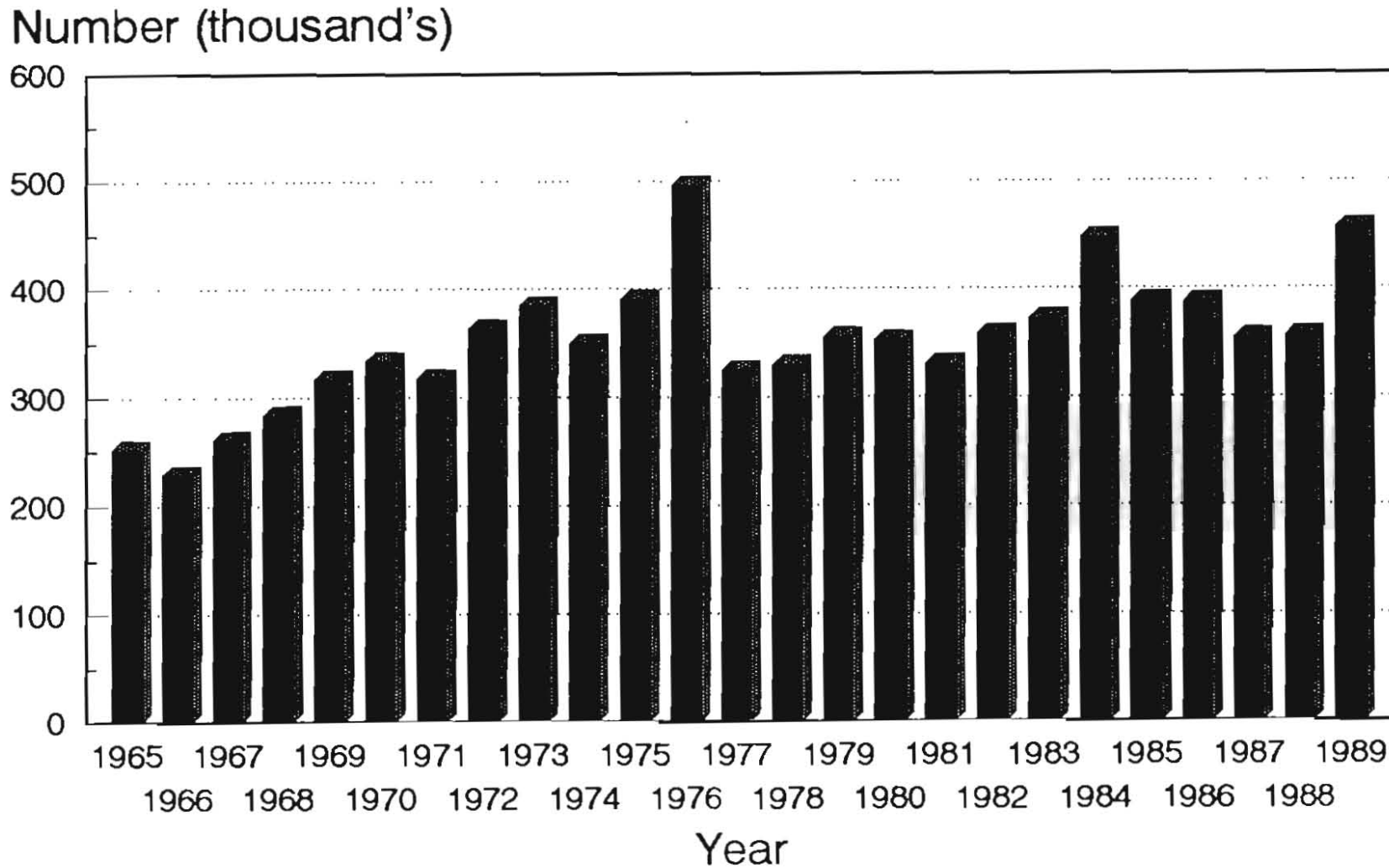
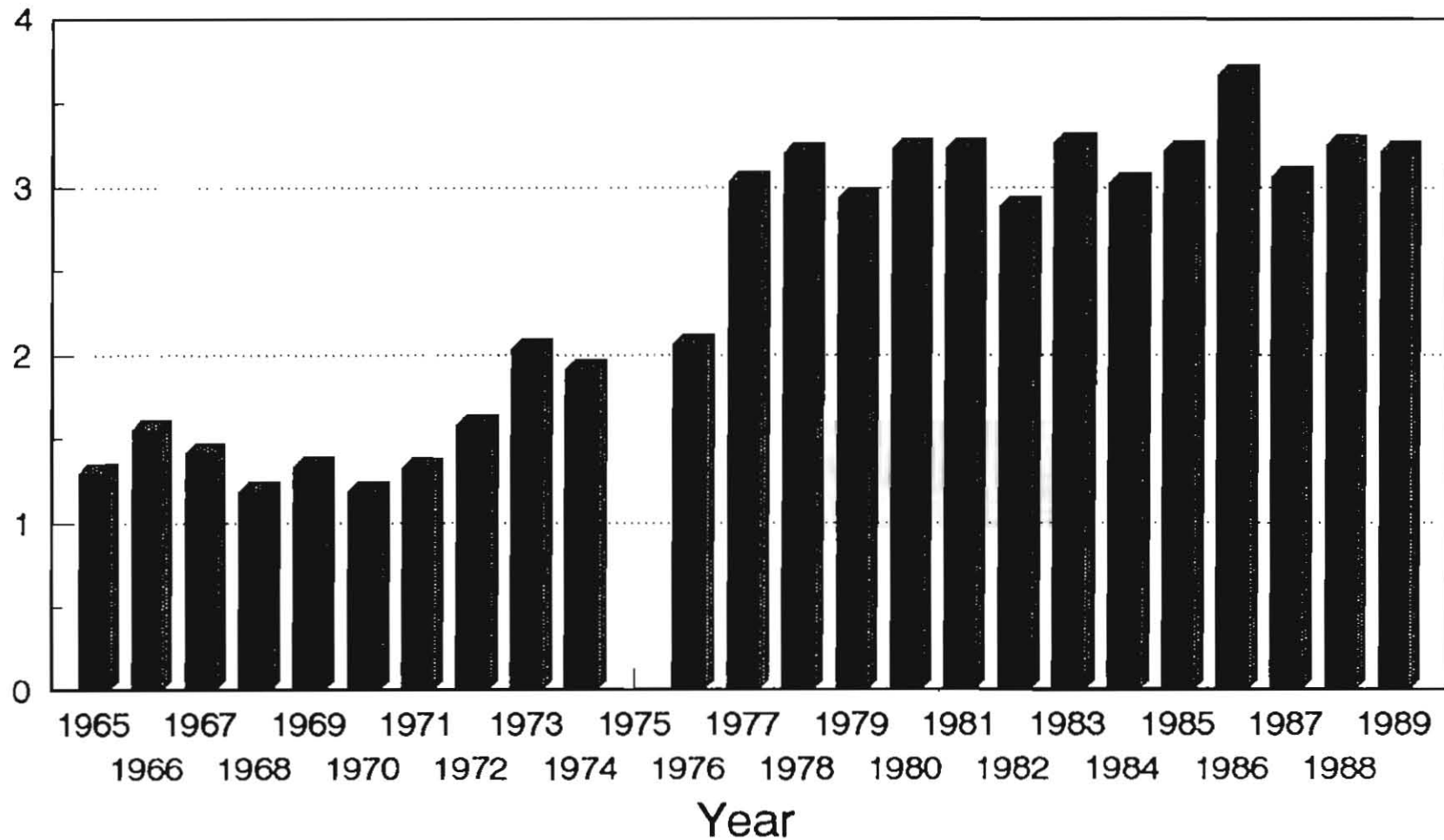




Figure 2.4: Ratio of Incidents to Injuries
UK Fire Statistics (1965-89)

Injuries per 1000 Fires



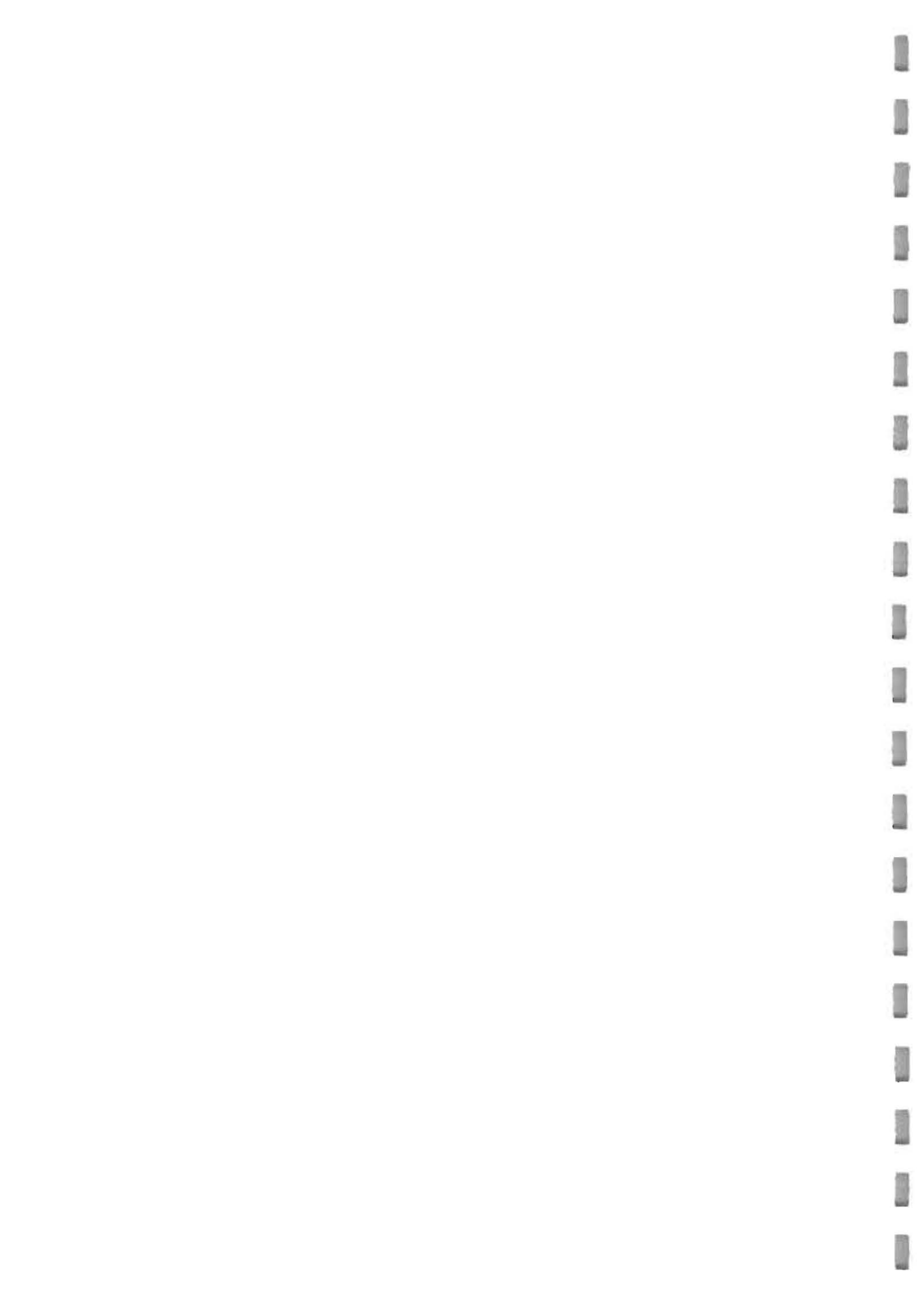
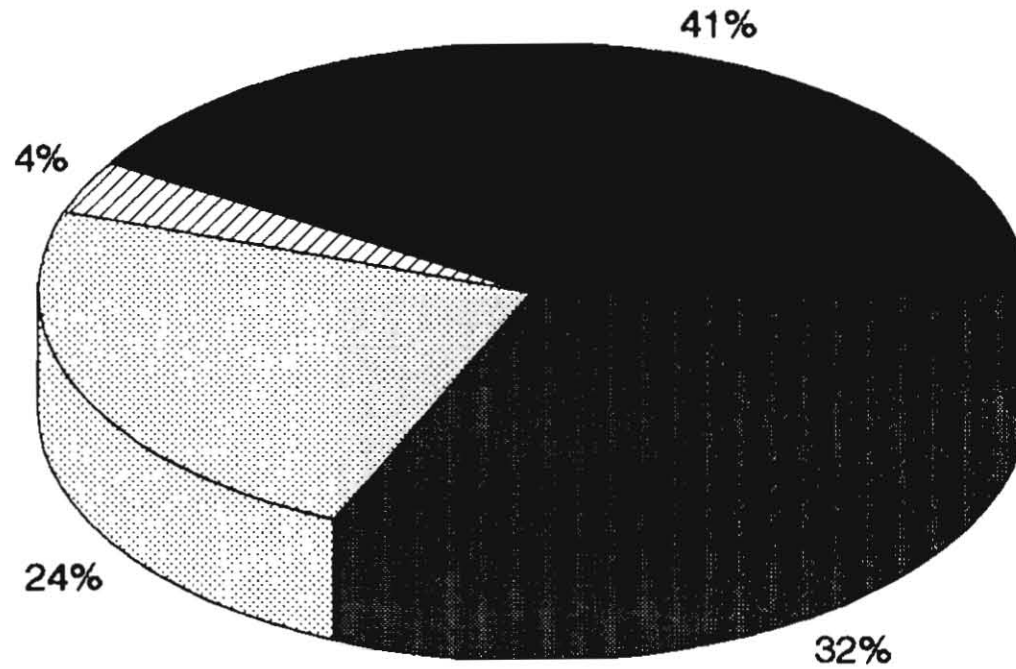


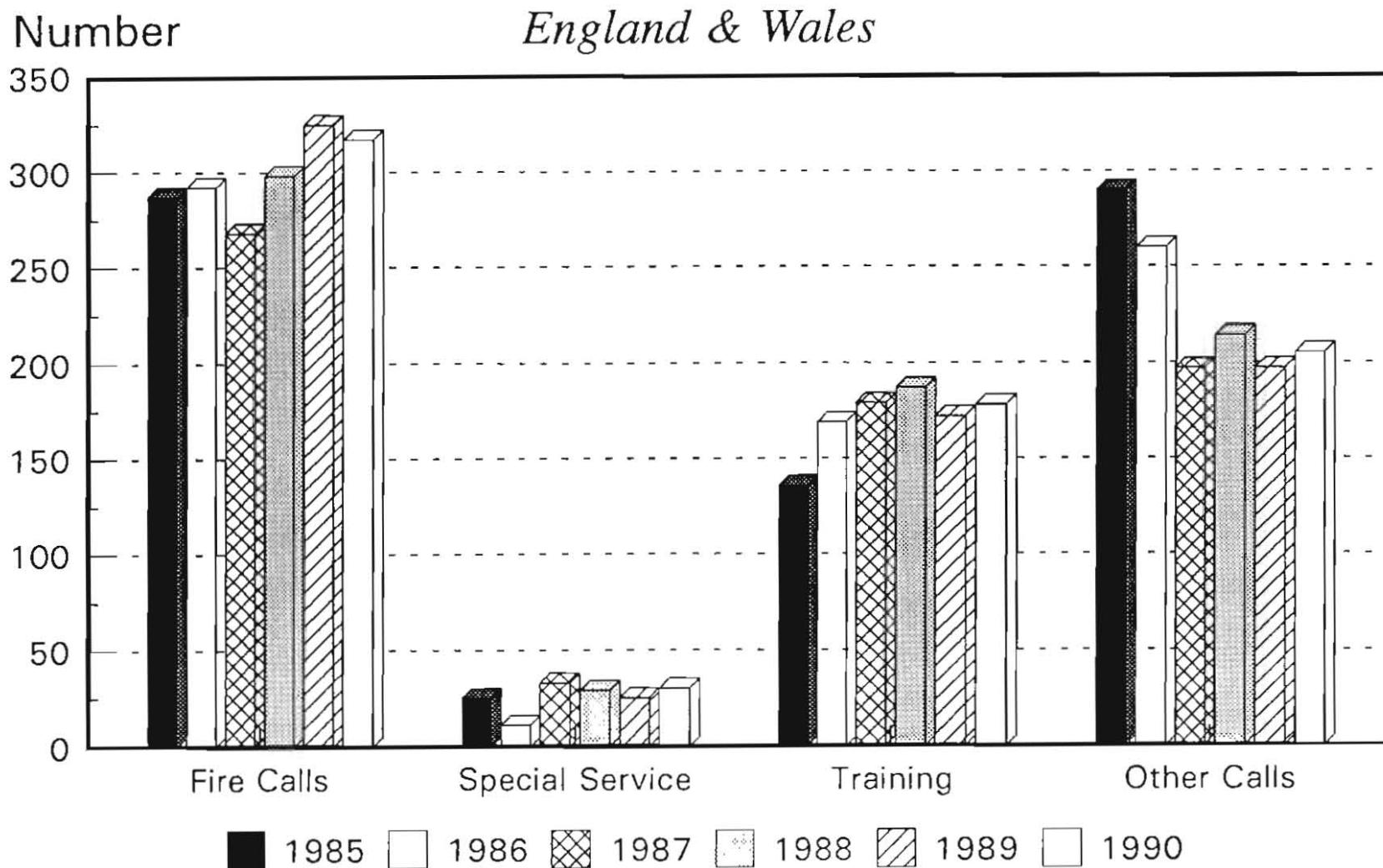
Figure 2.5: Firefighter Injuries by Duty
Home Office Form 44c (1985-1990)



■ Fire Calls ▨ Special Service ▩ Training ■ Other Duties



Figure 2.6: Firefighter Injuries by Duty
Home Office Form 44c 1985-1990



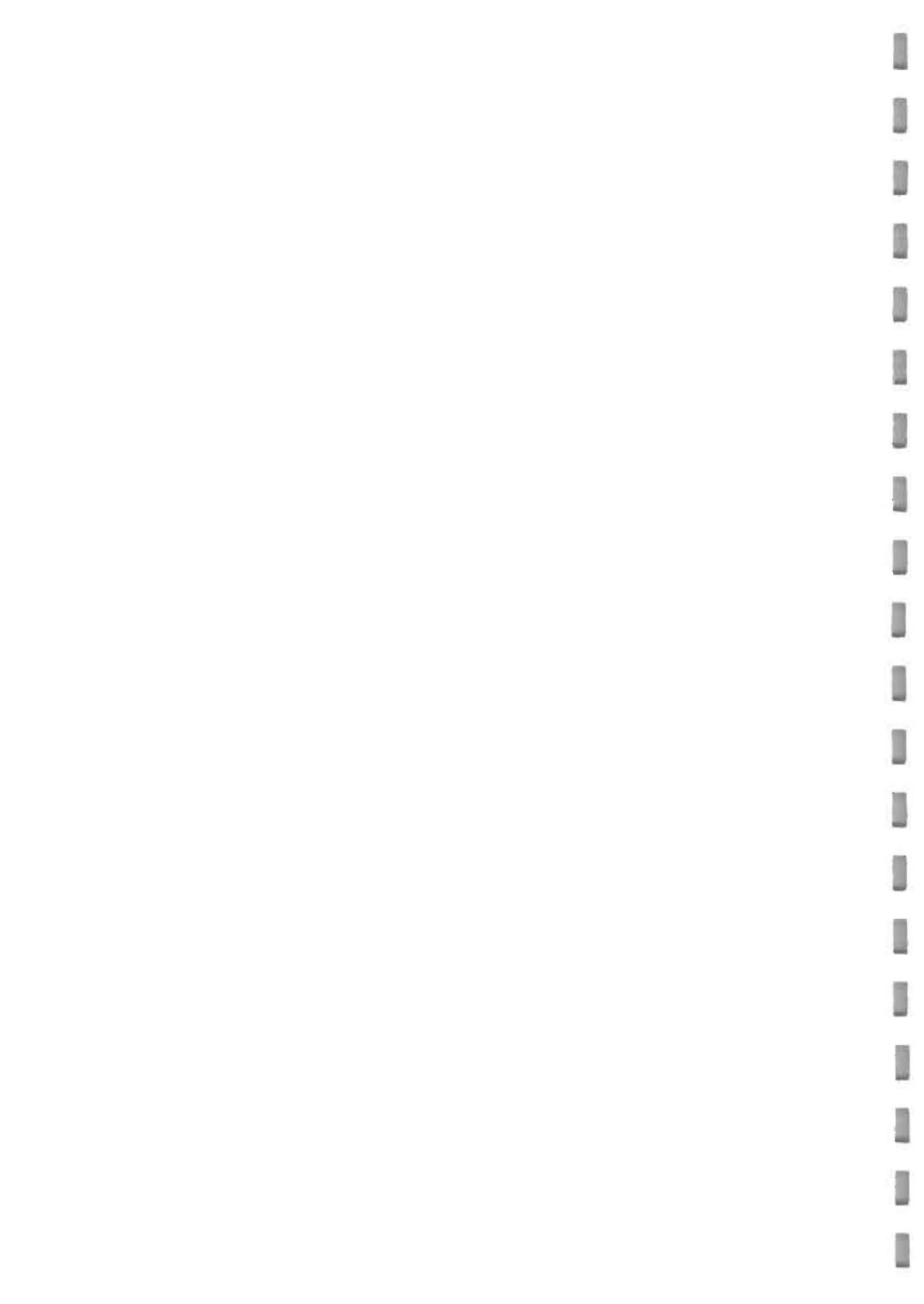


Figure 3.1: Injuries by Occupation

Major & Over 3 Day

HSE 1988/89

Occupation

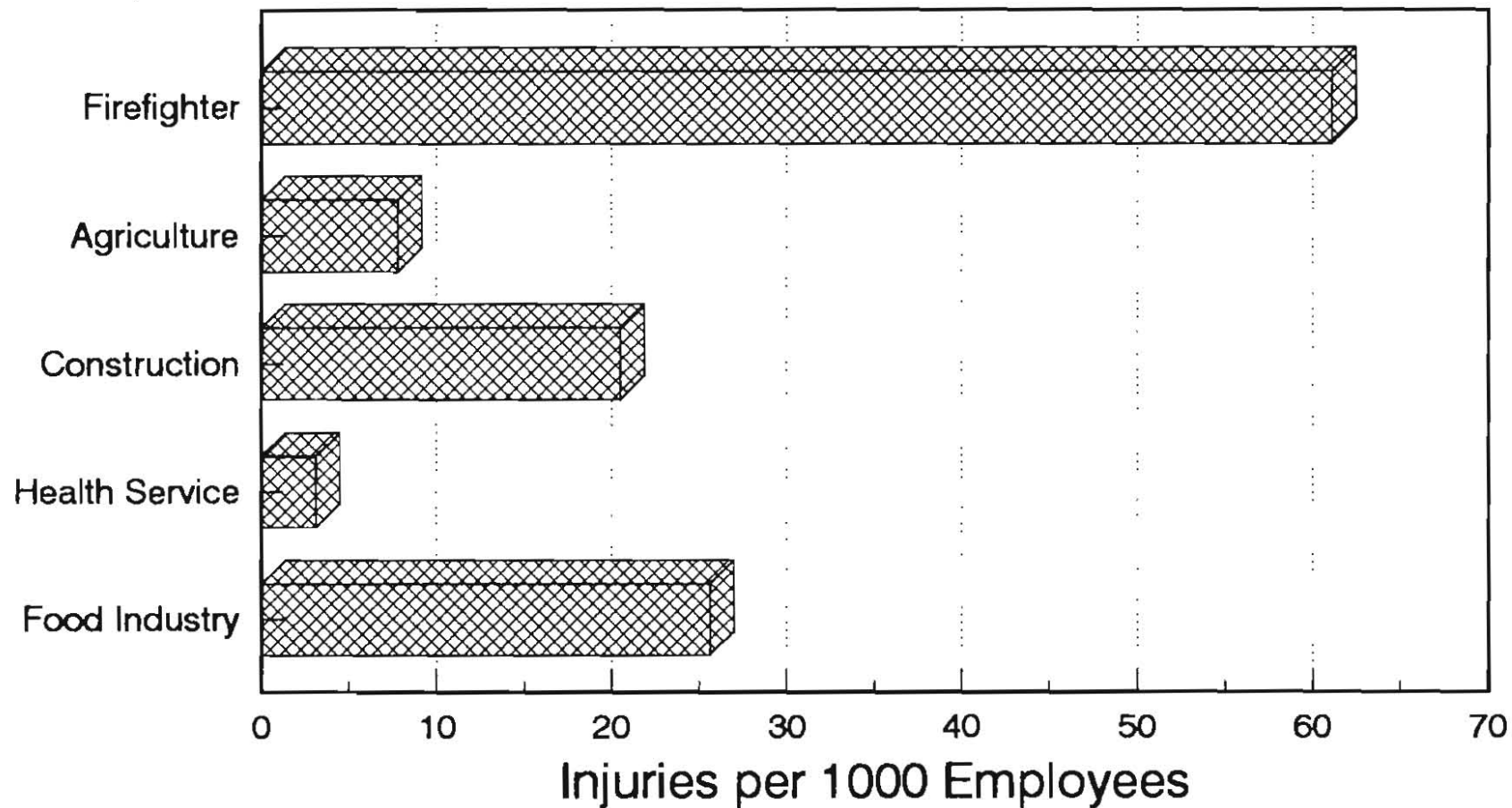
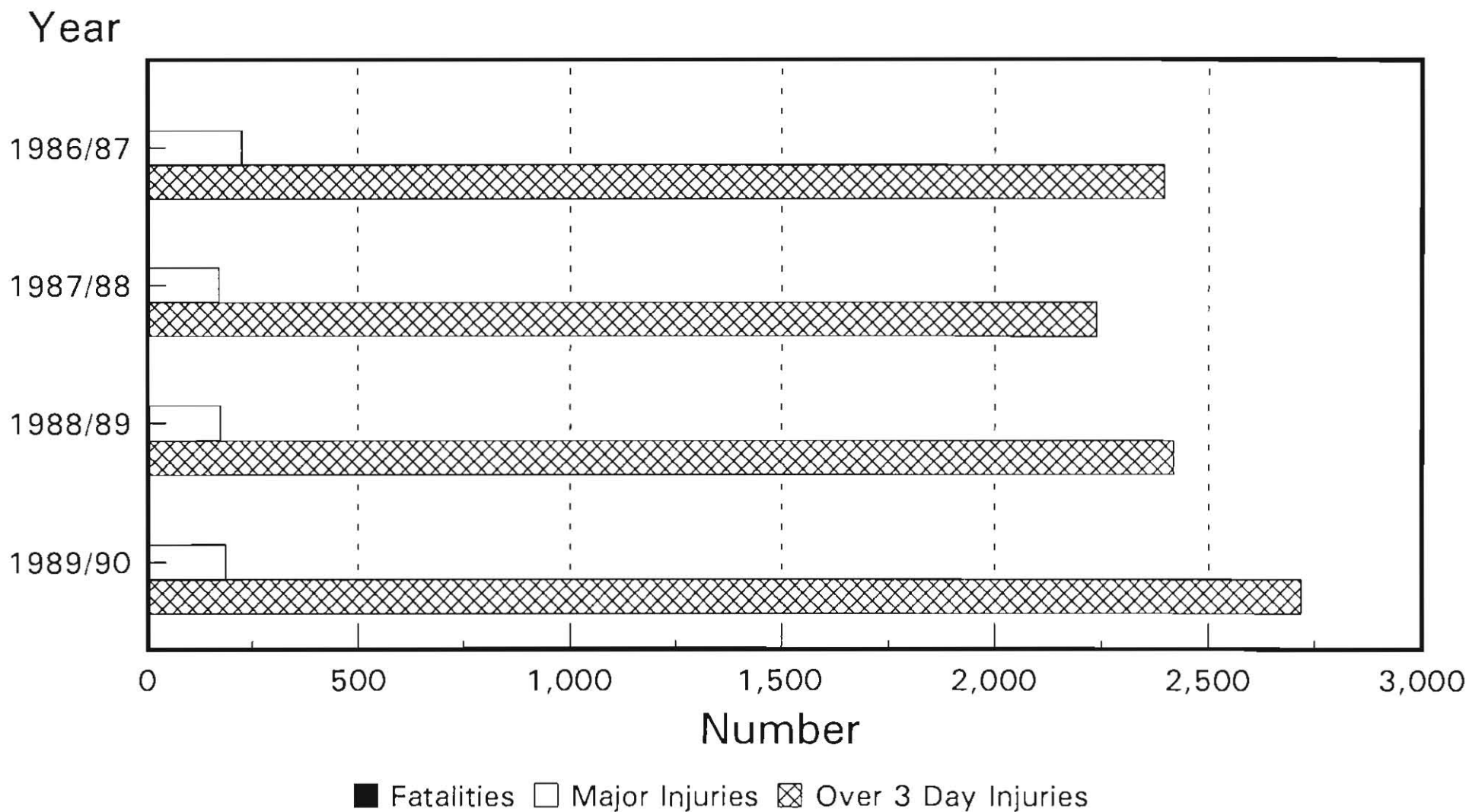




Figure 3.2: Firefighter Fatalities & Injuries
HSE (1986/87 - 1989/90)



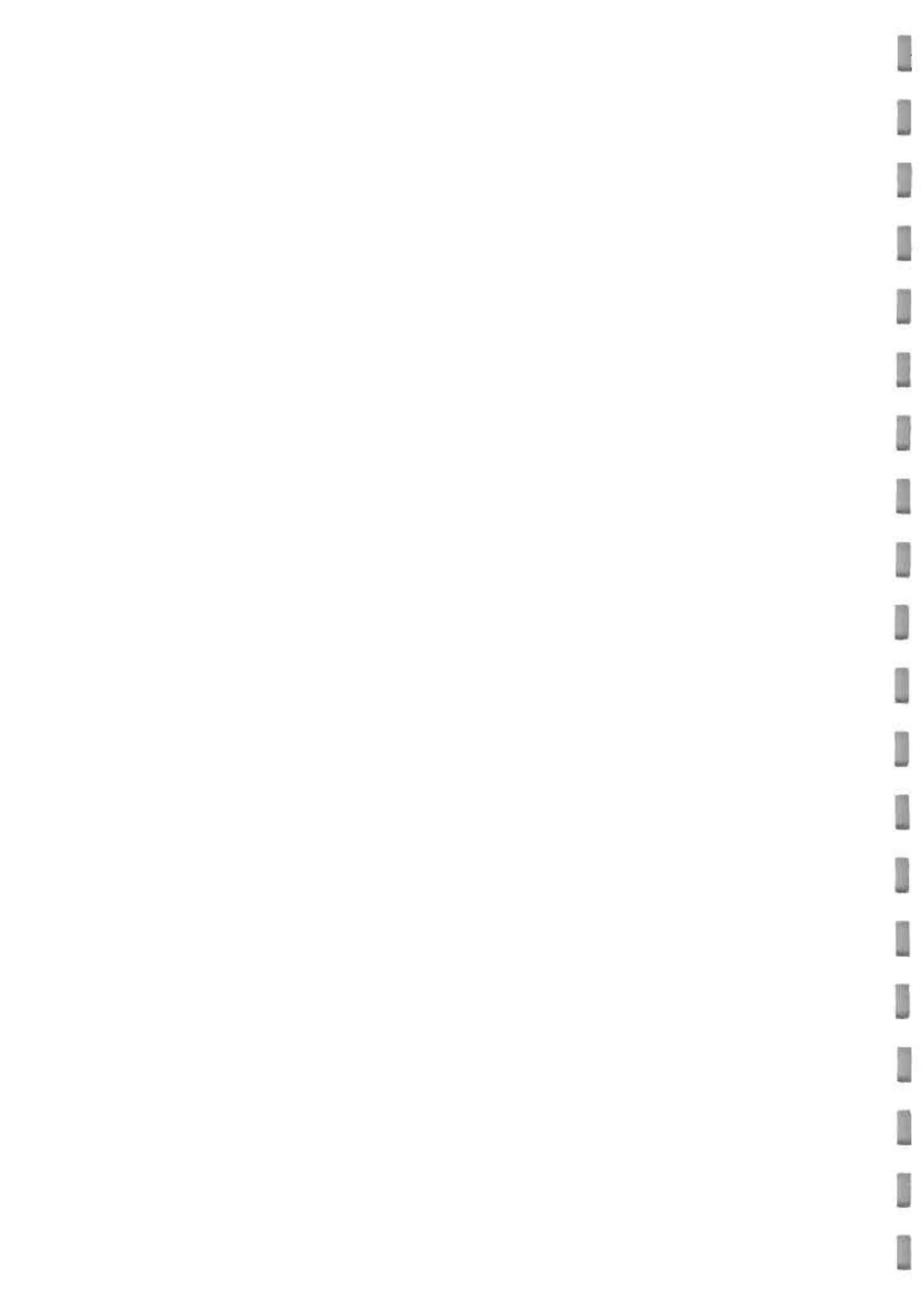


Figure 3.3: Part of Body Injured
HSE

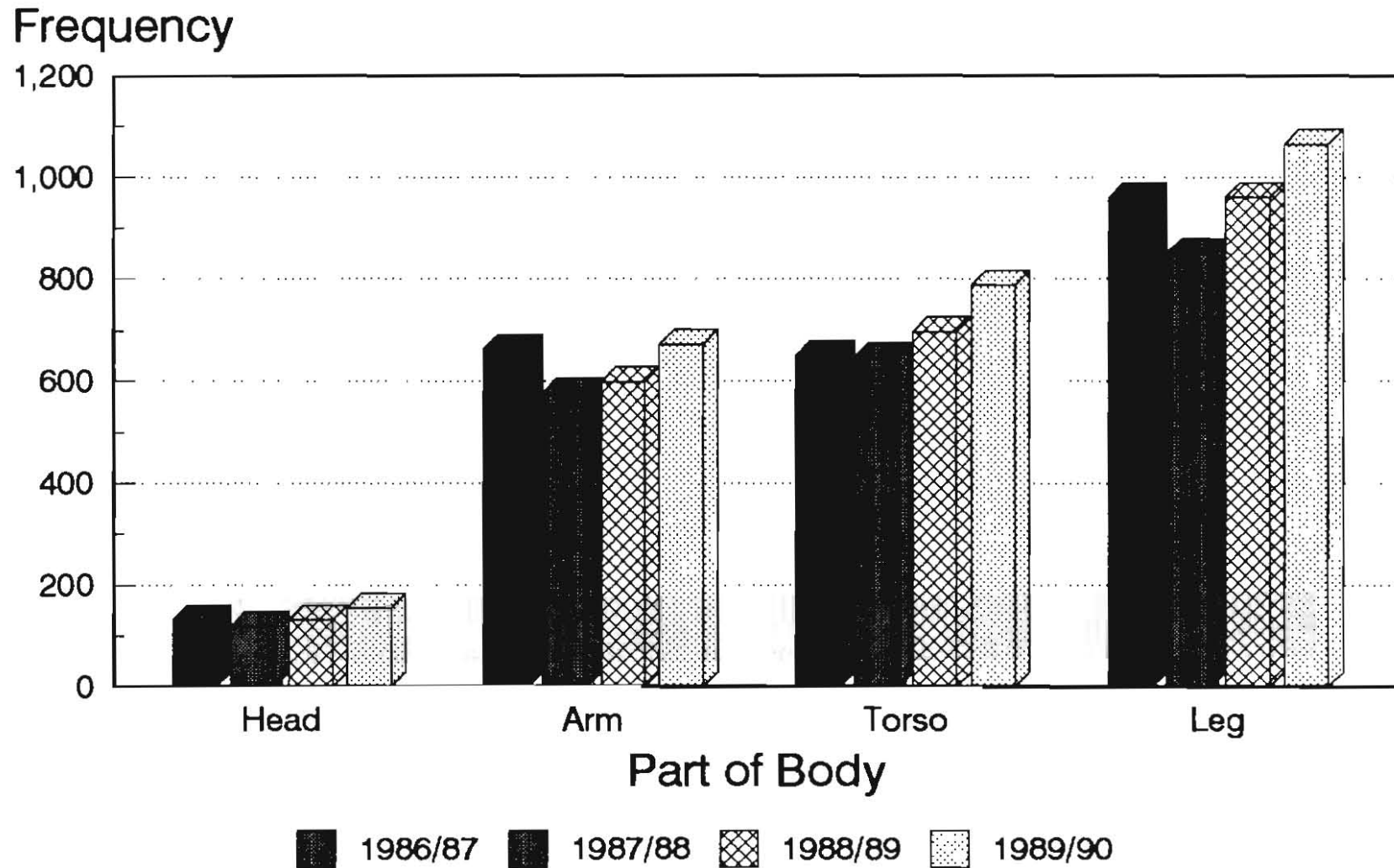
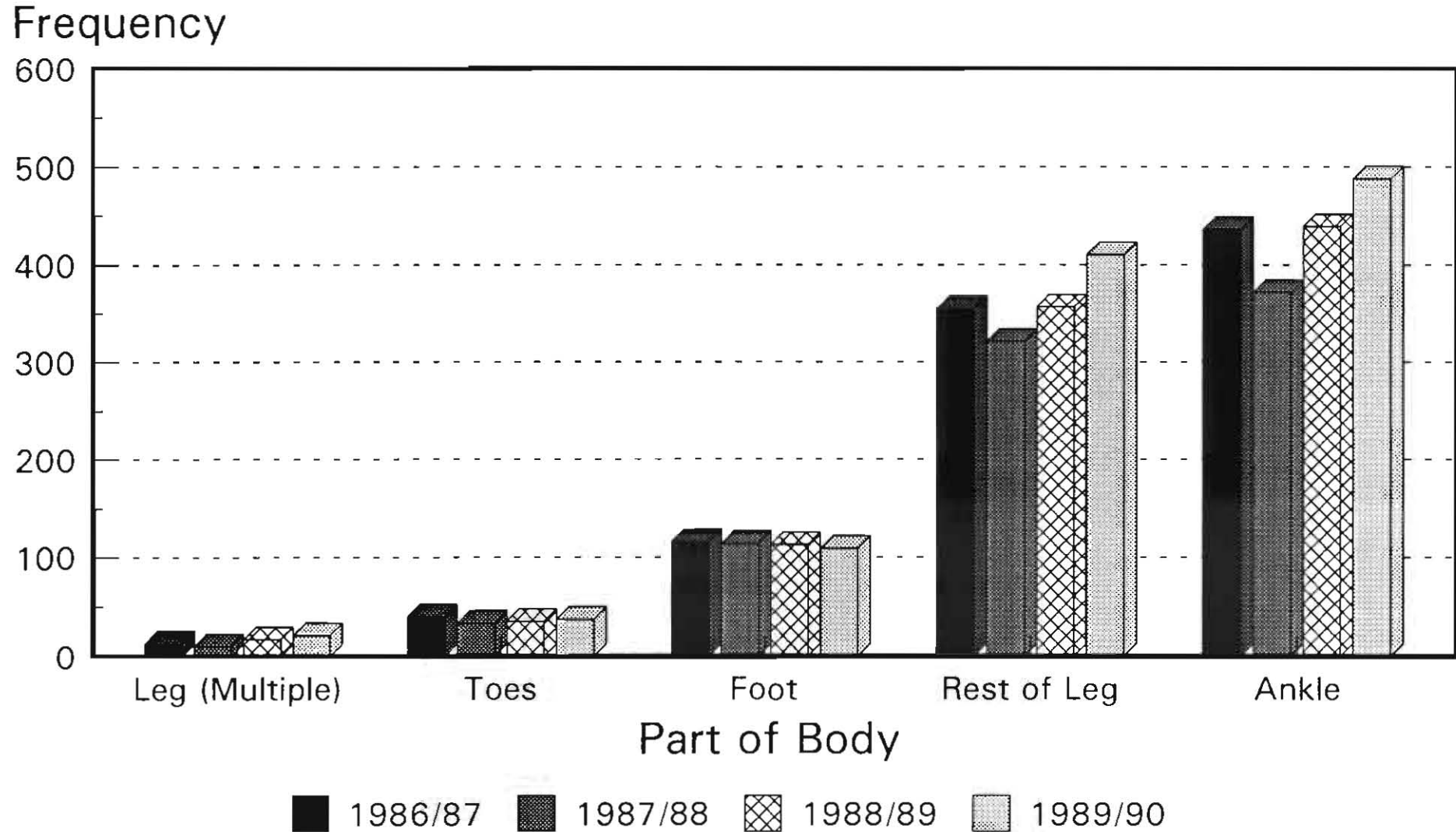




Figure 3.4: Leg Injuries
HSE



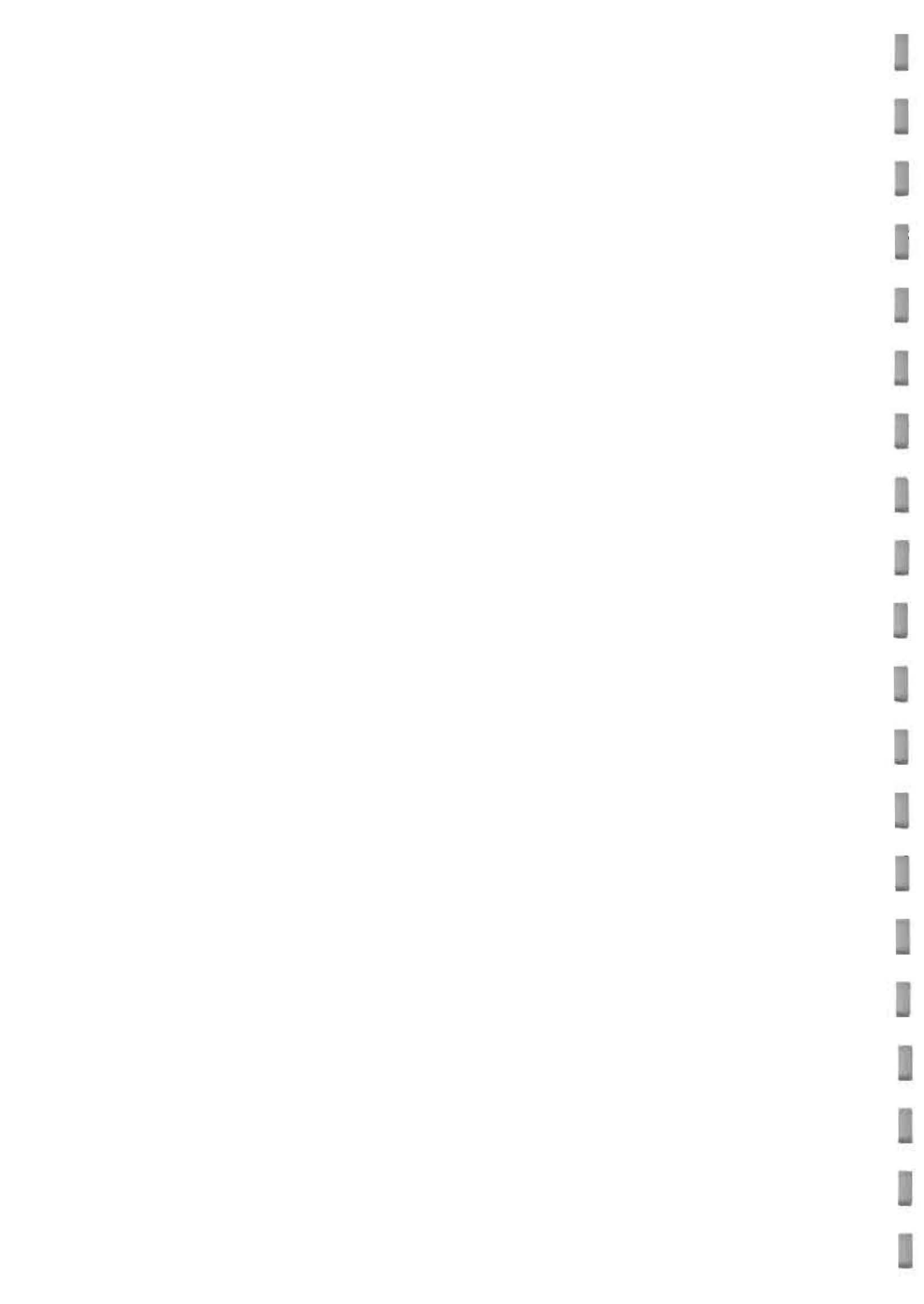
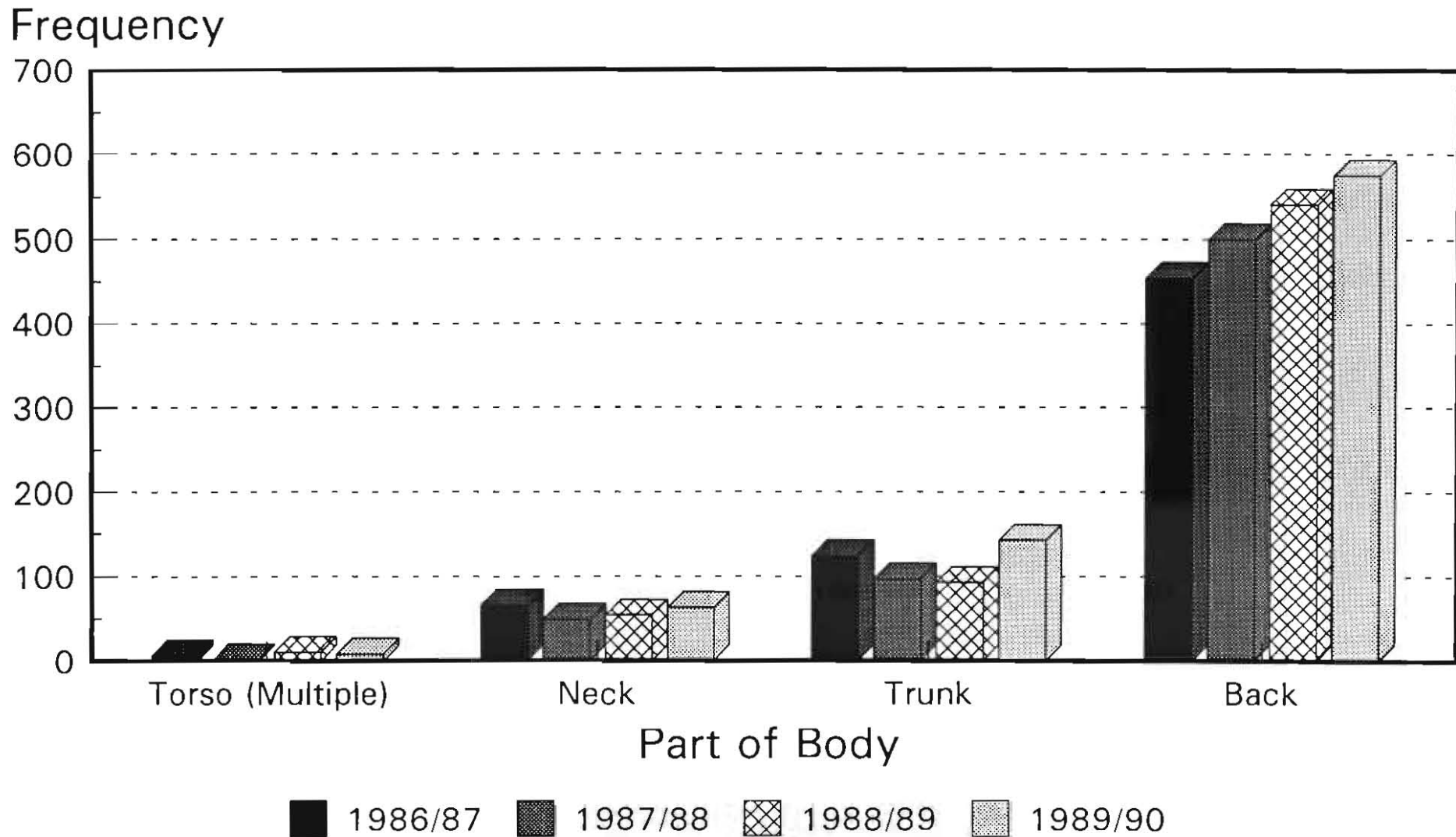


Figure 3.5: Torso Injuries
HSE



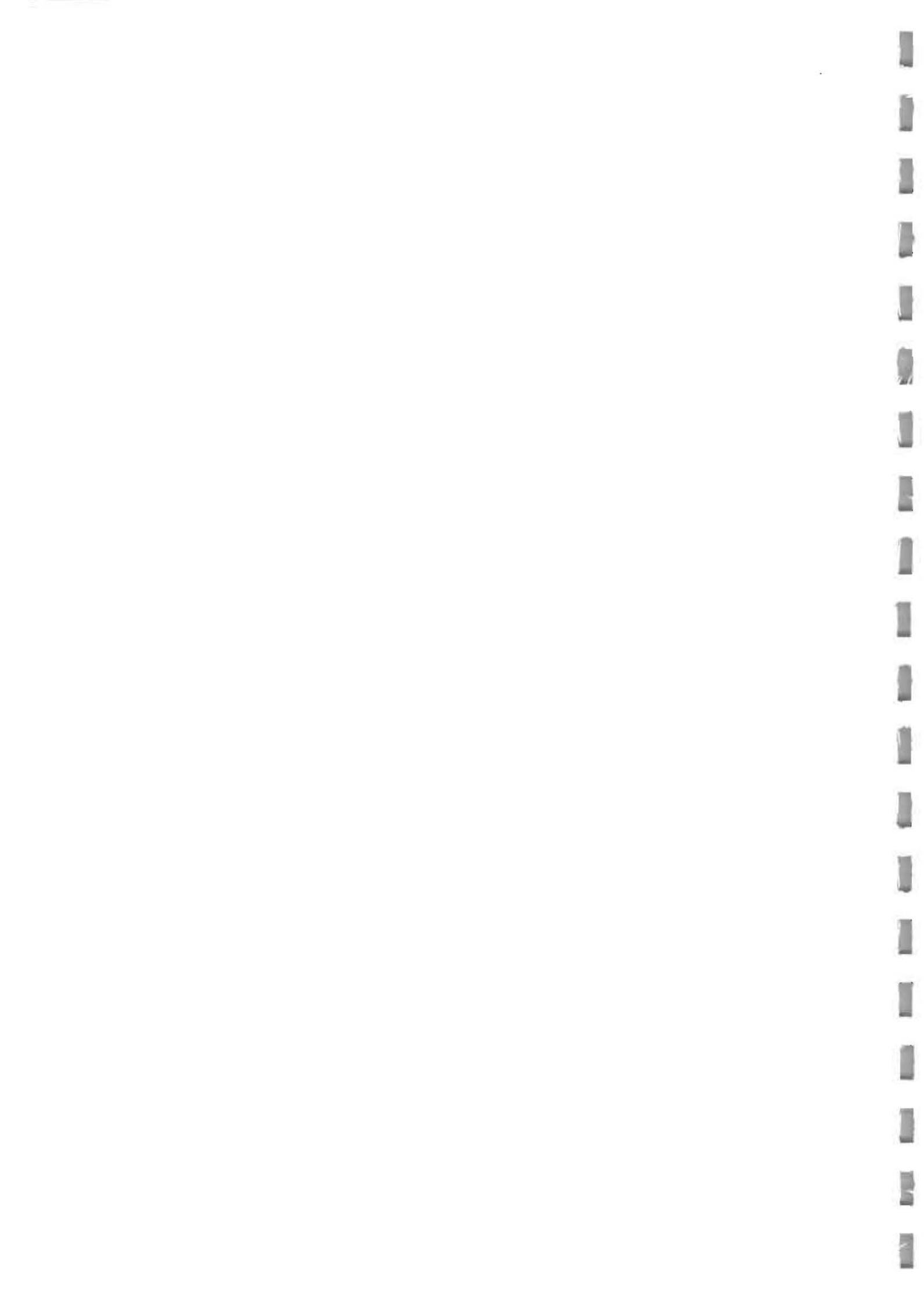


Figure 3.6: Arm Injuries
HSE

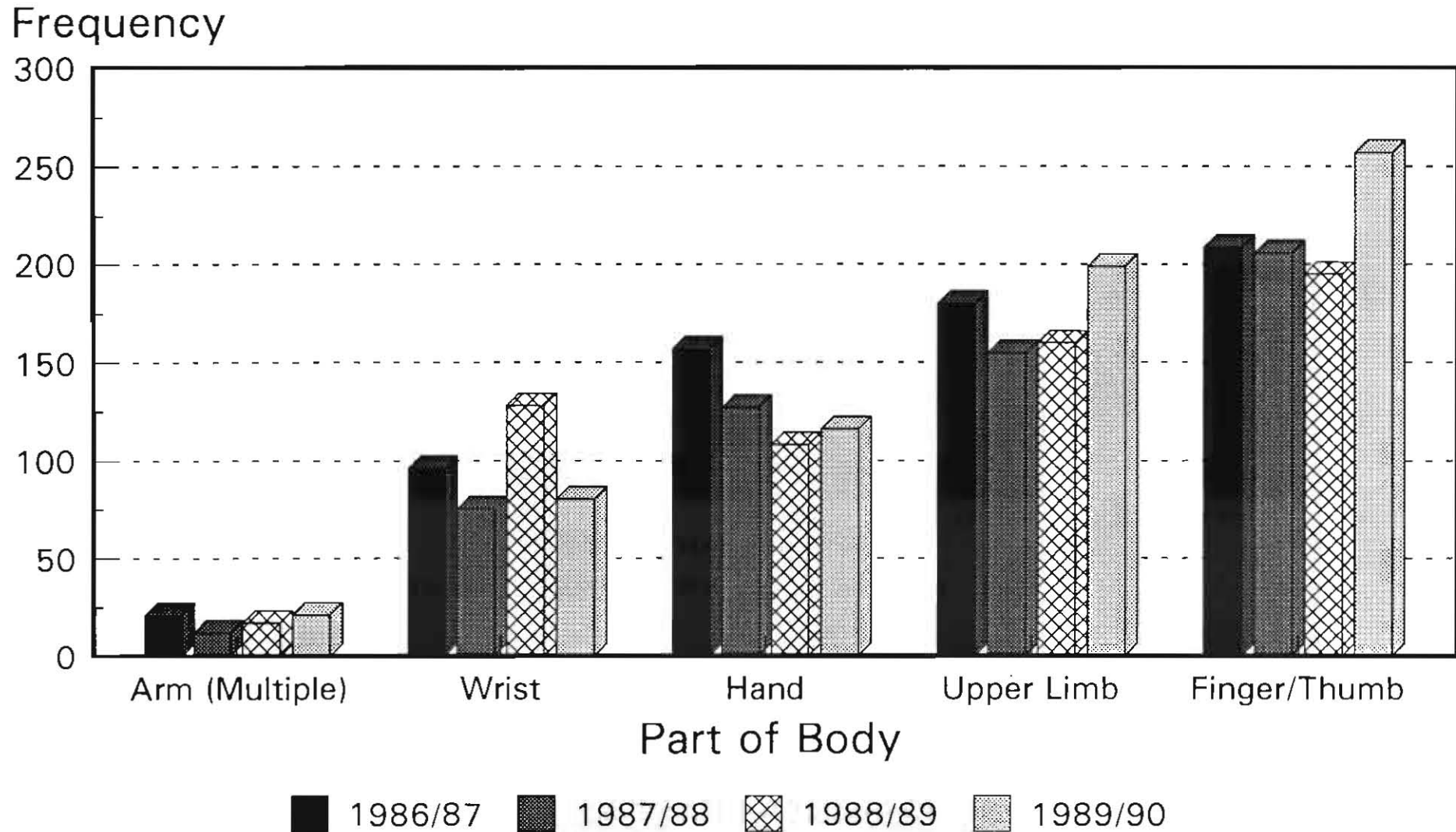
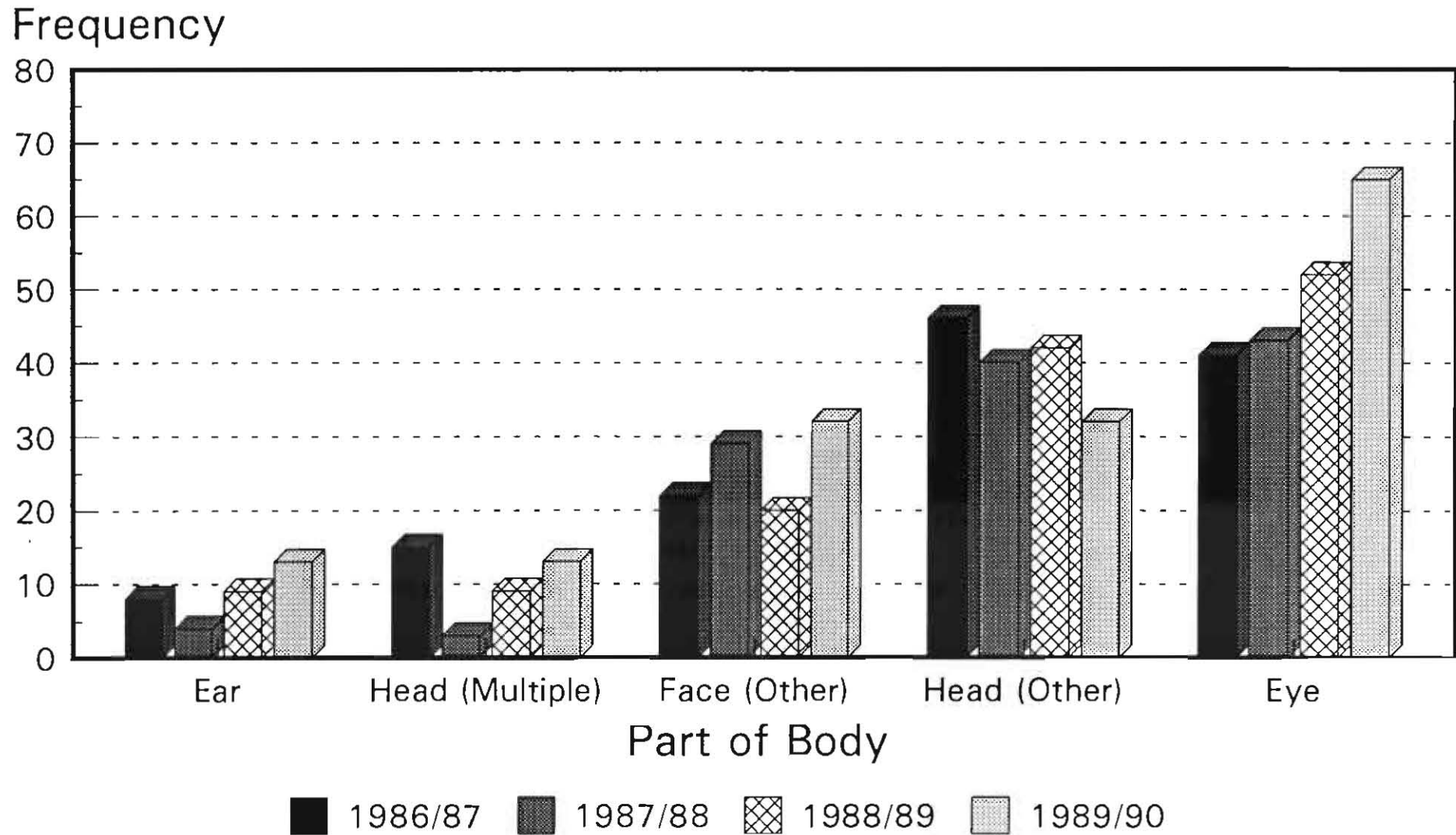




Figure 3.7: Head Injuries
HSE



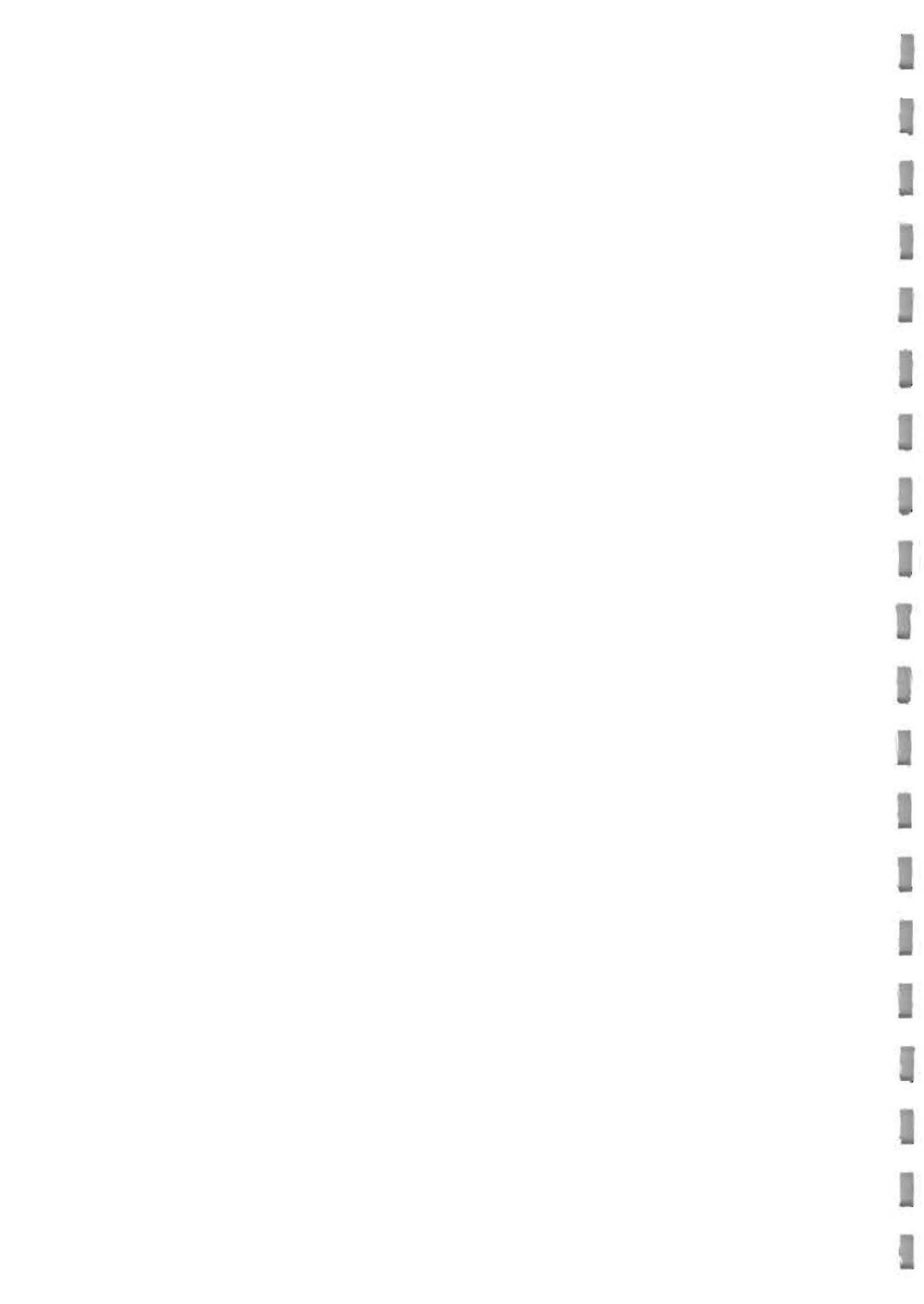
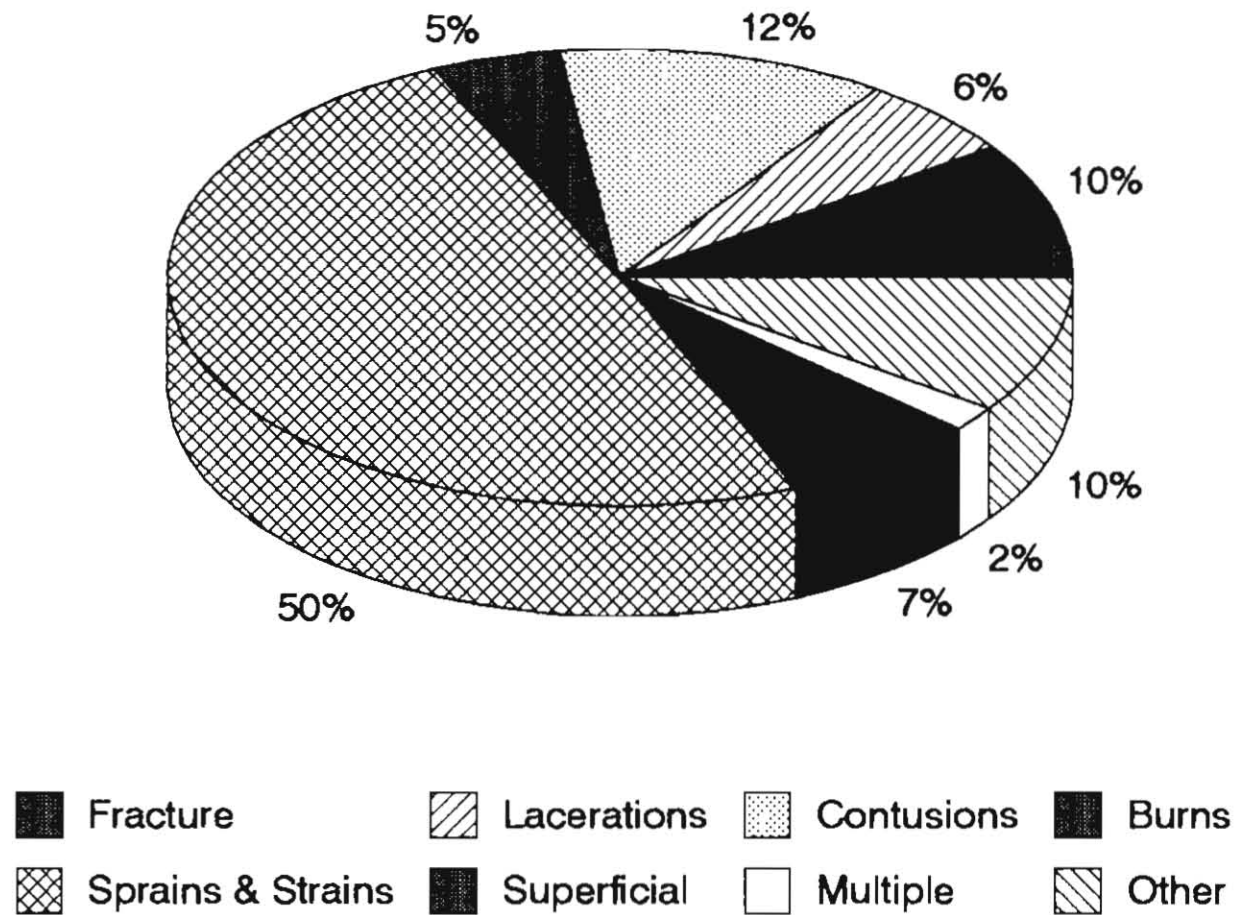
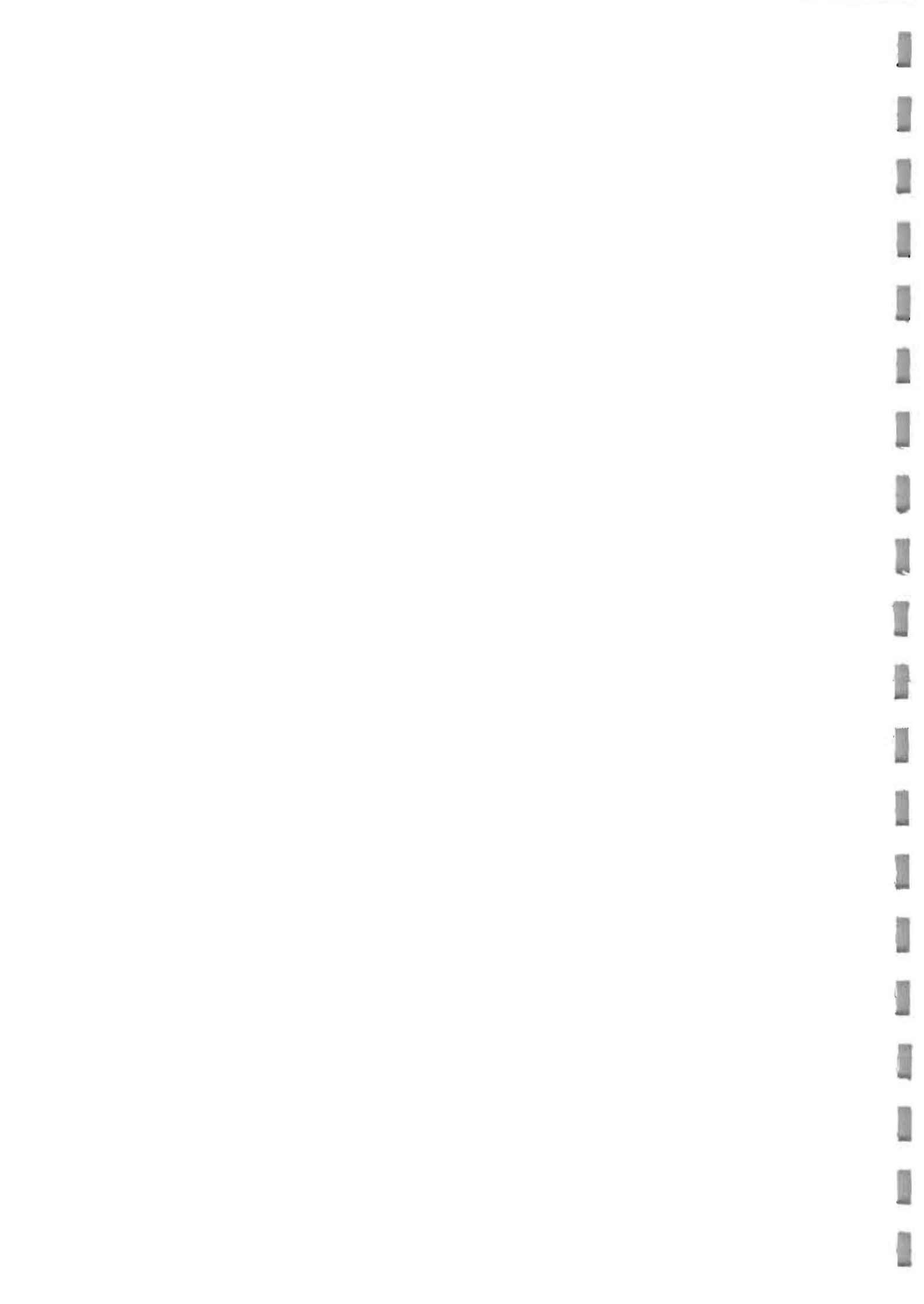


Figure 3.8: Nature of Firefighters Injuries
HSE 1989/90





*Figure 4.1: Total Injuries to Firefighters
Brigade Accident Logs*

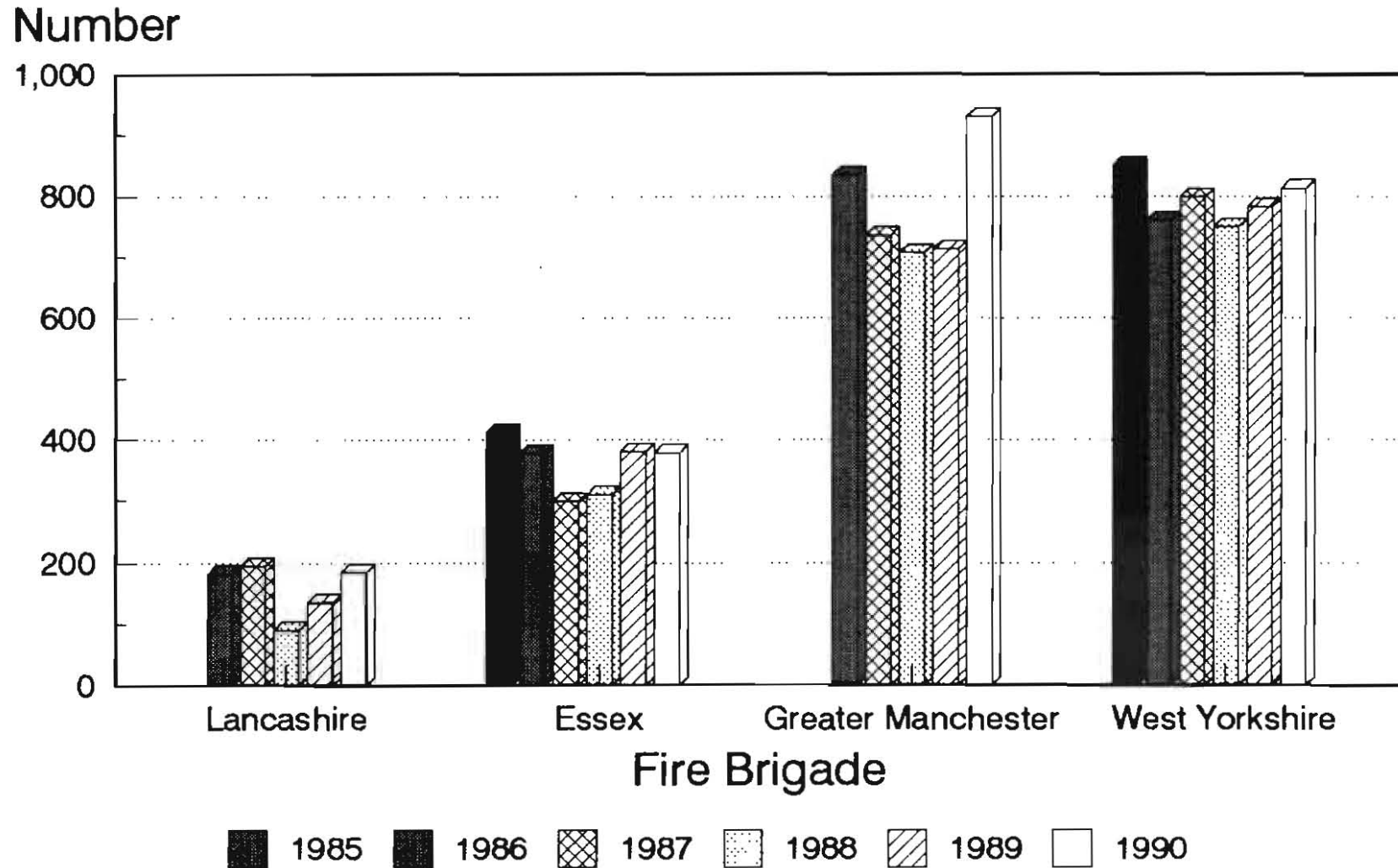
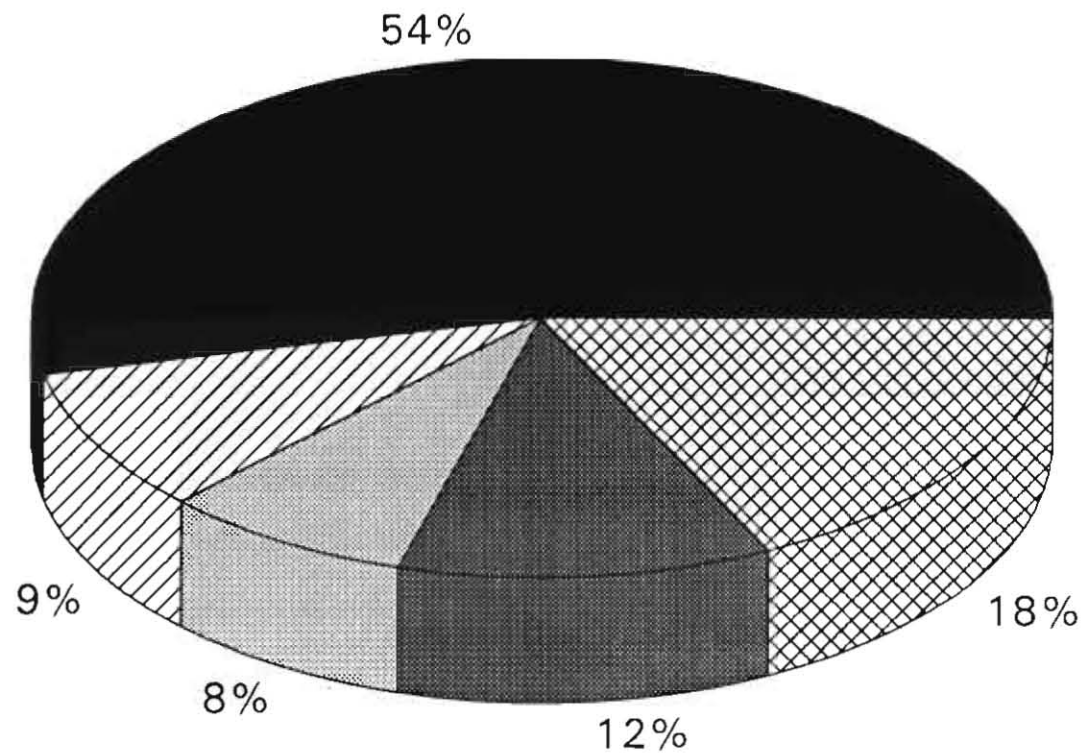




Figure 4.2: Brigade Injuries by Location
Greater Manchester Accident Records



■ Operational ▨ Drill ▩ Non-Uniform ▤ Sport ▦ Miscellaneous

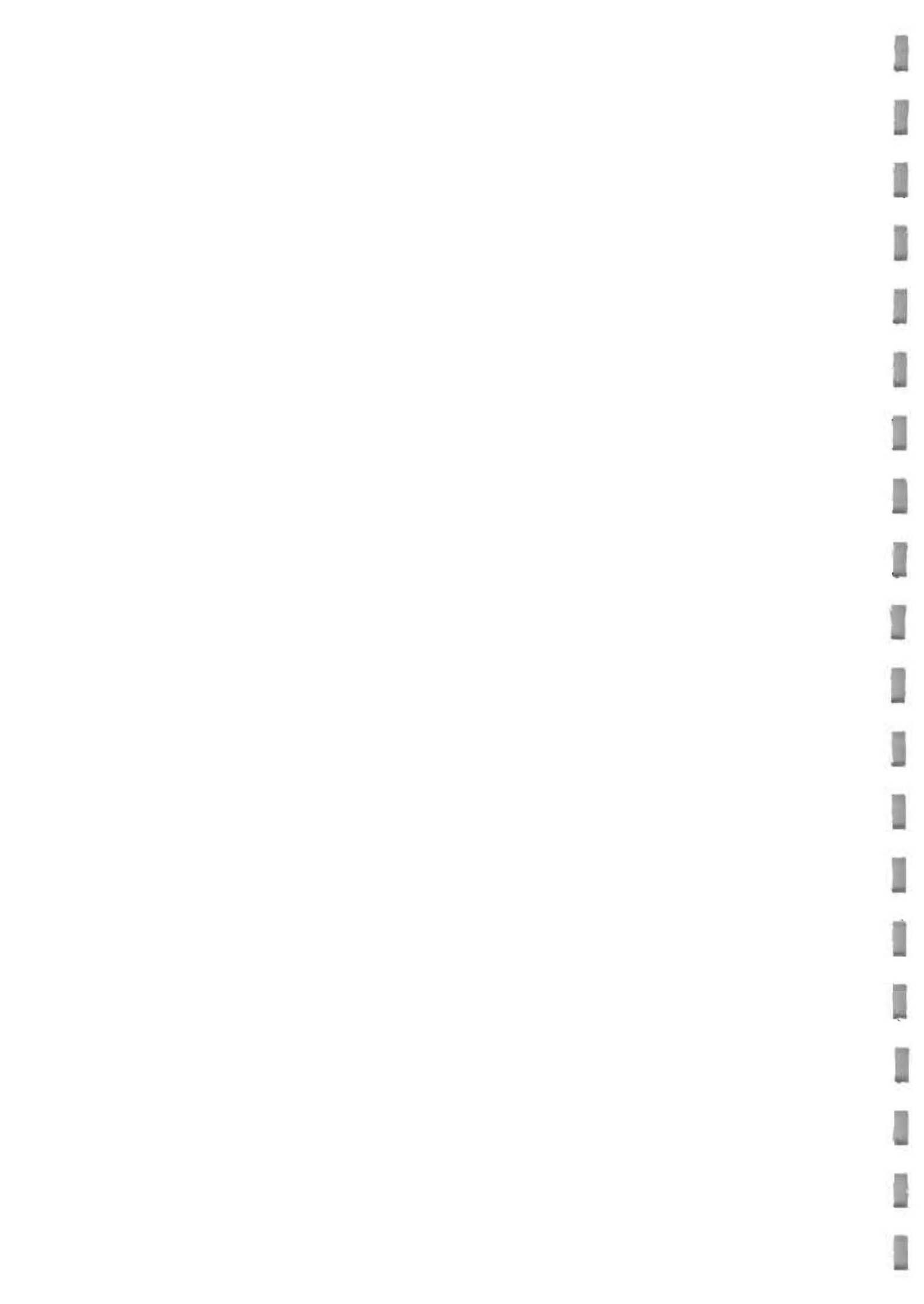
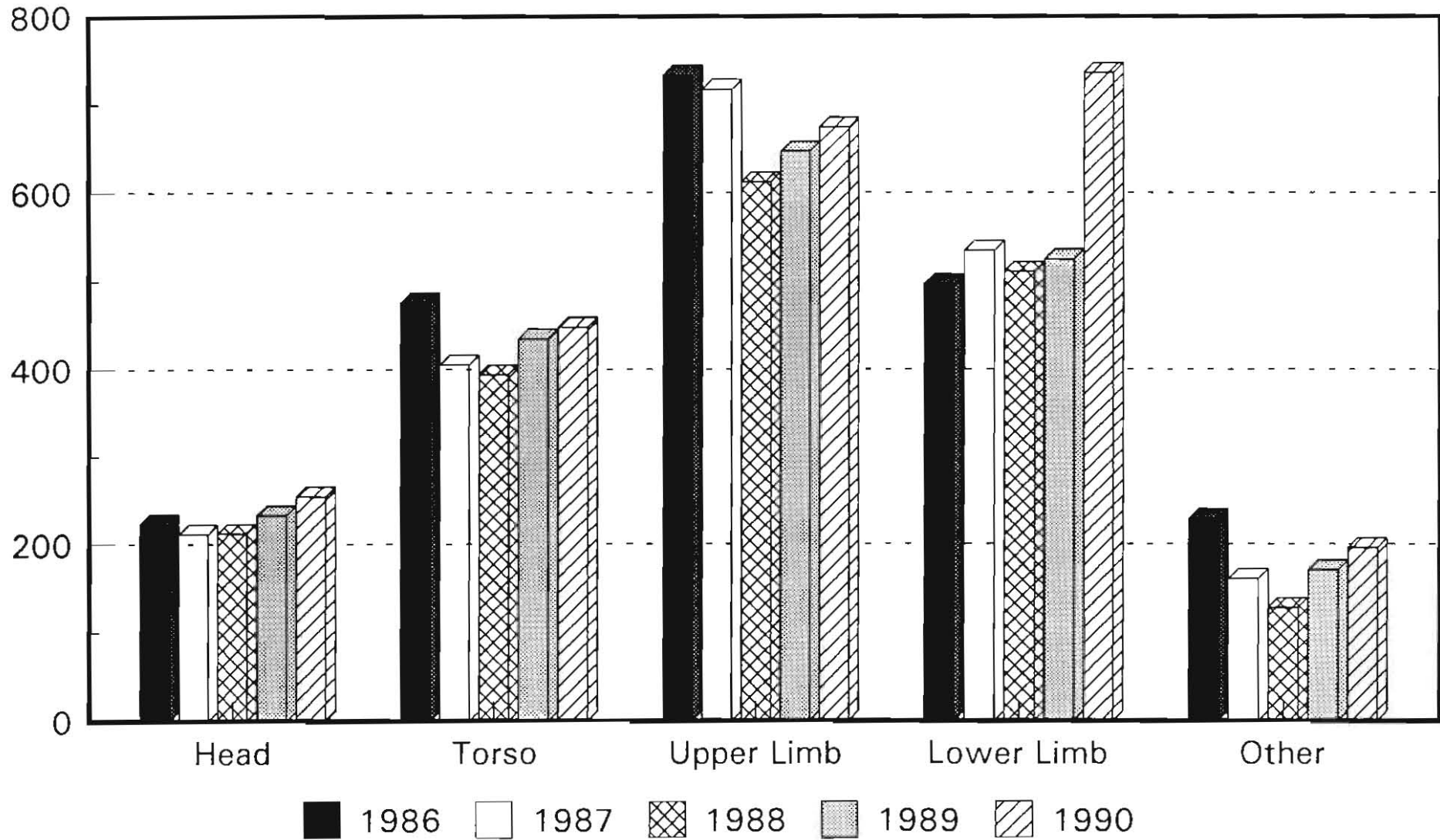


Figure 4.3: Part of Body Injured
Fire Brigade Accident Records



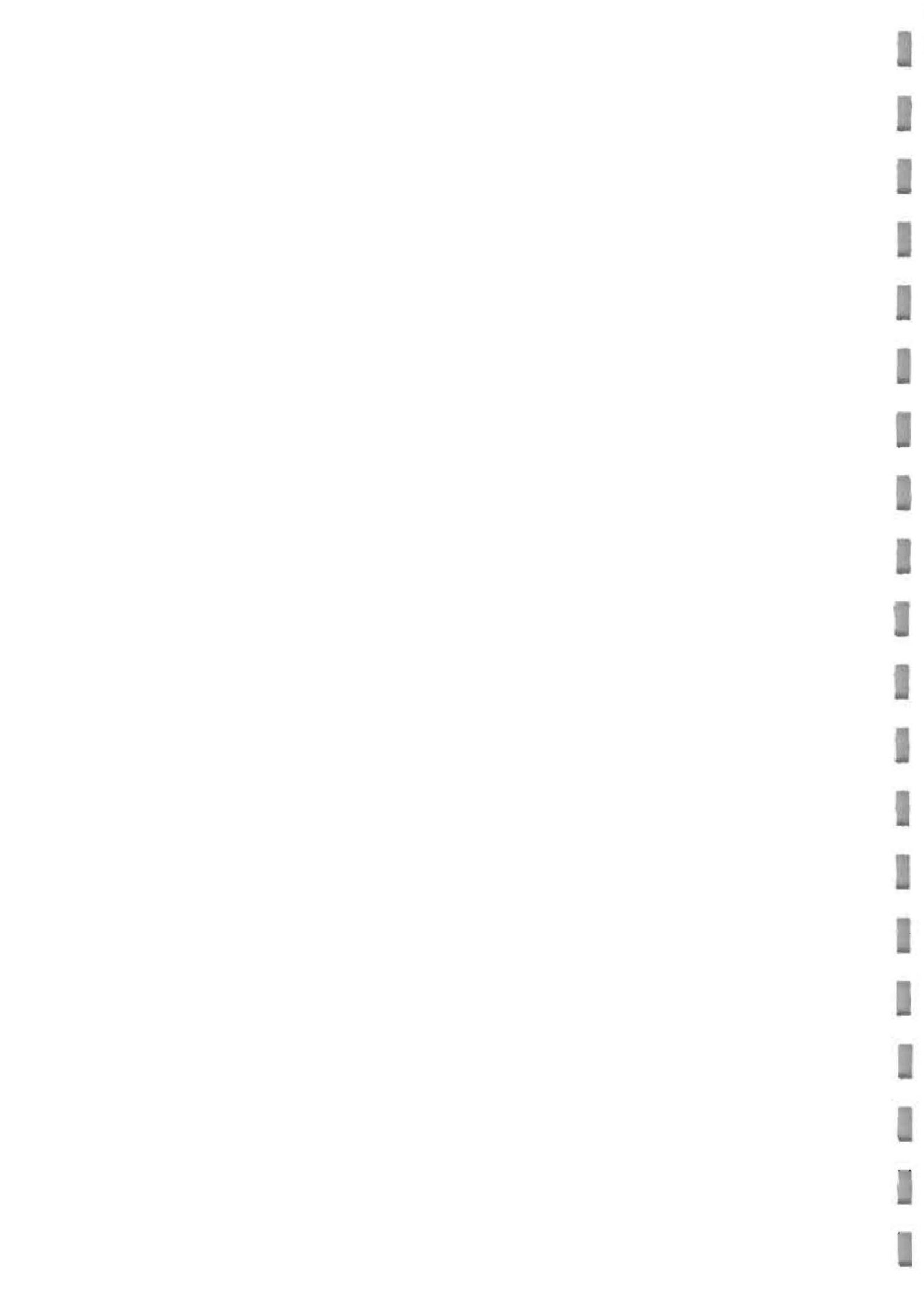
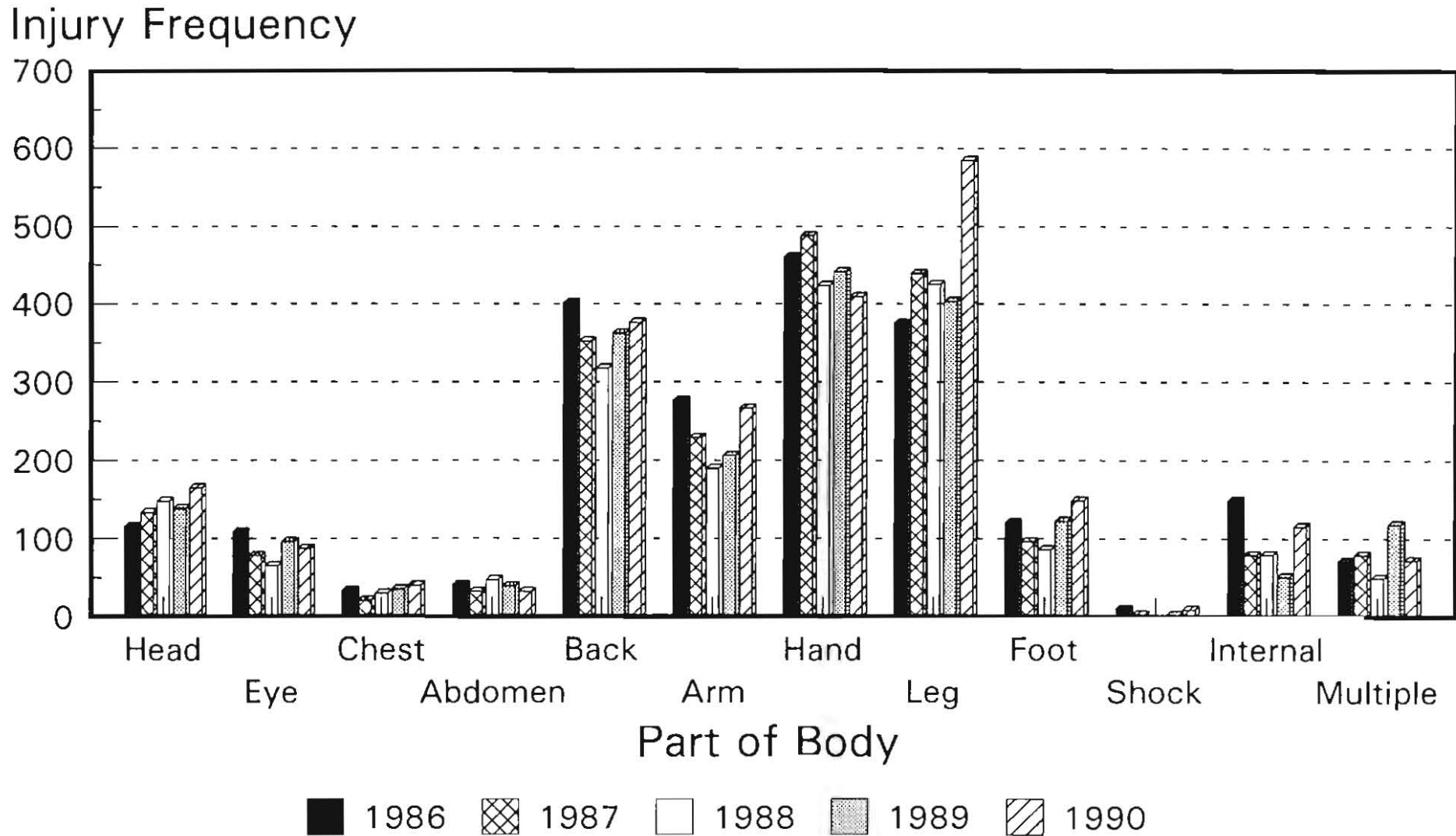


Figure 4.4: Part of Body Injured
Fire Brigade Accident Records



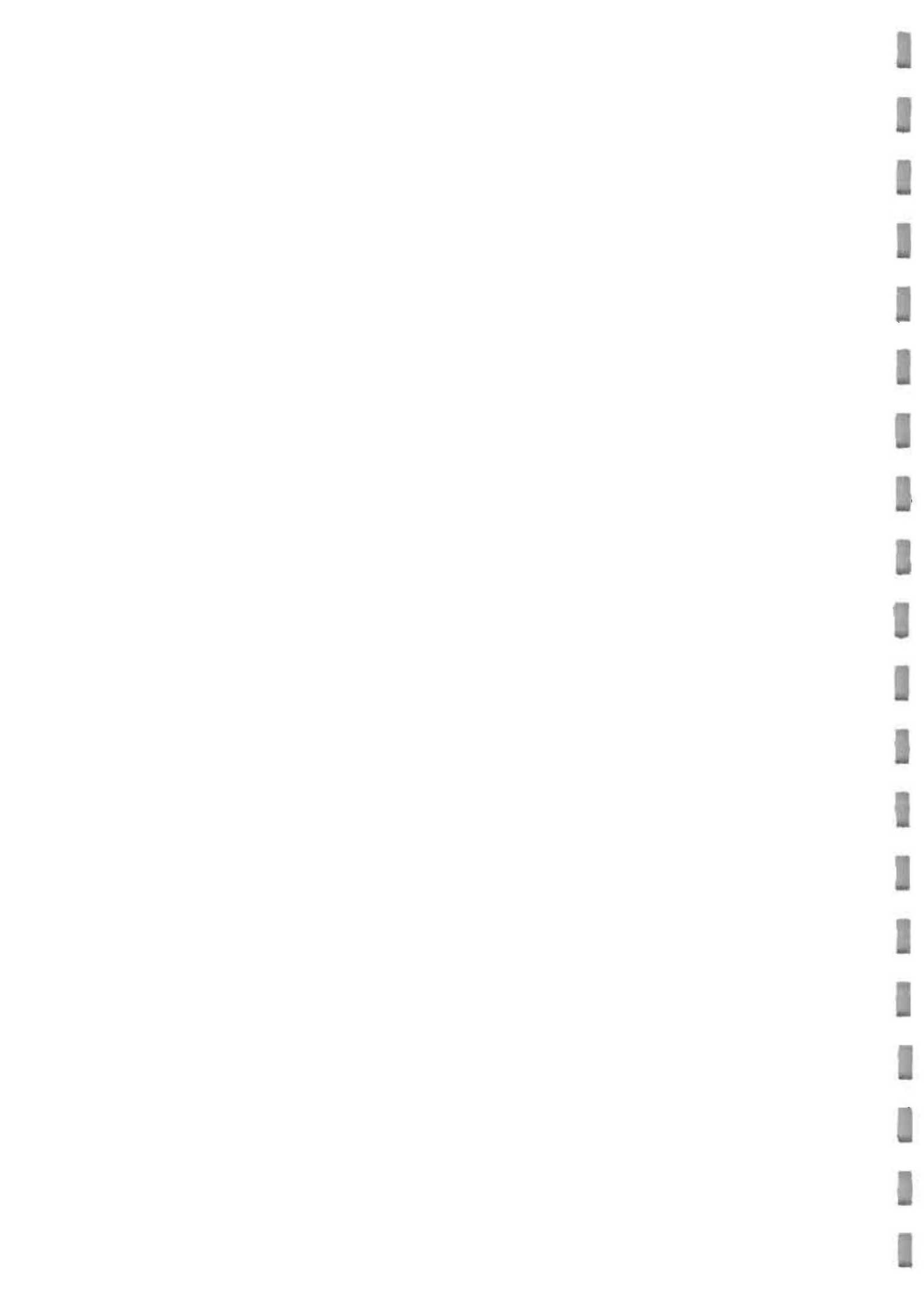
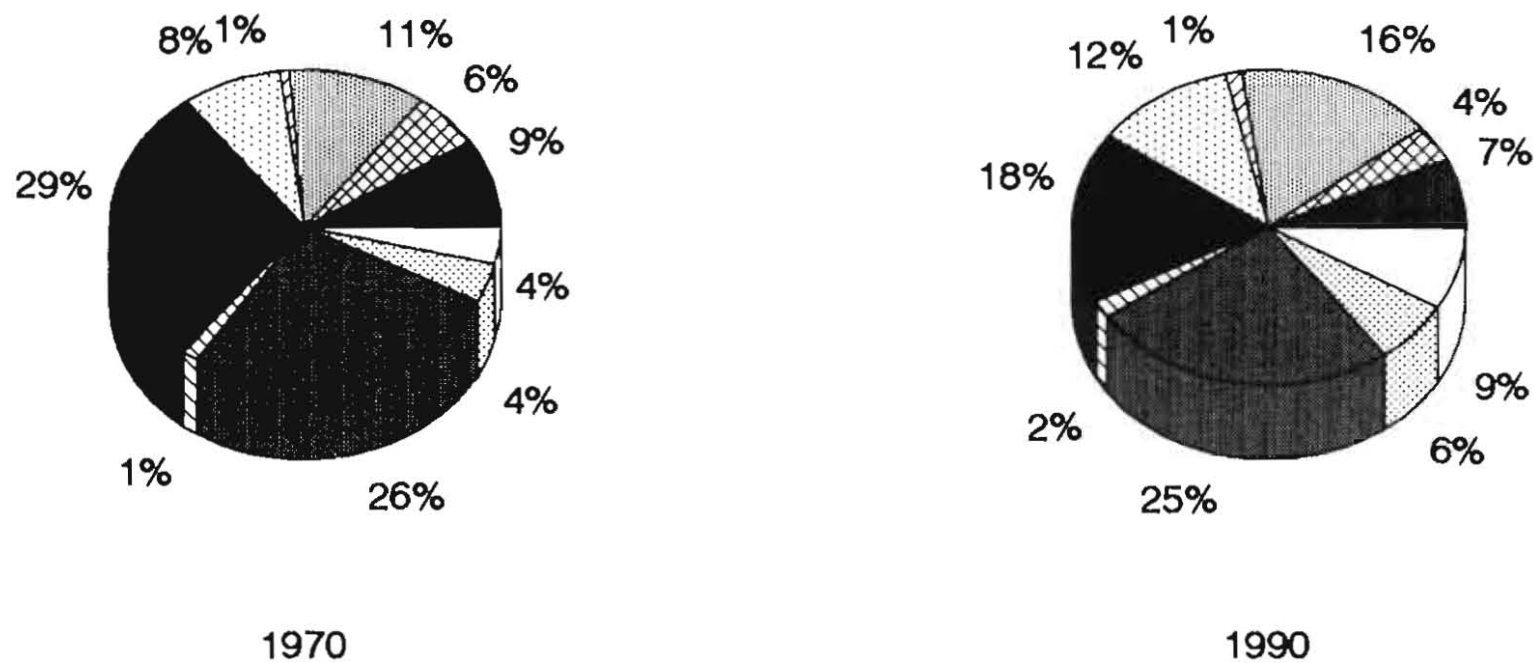
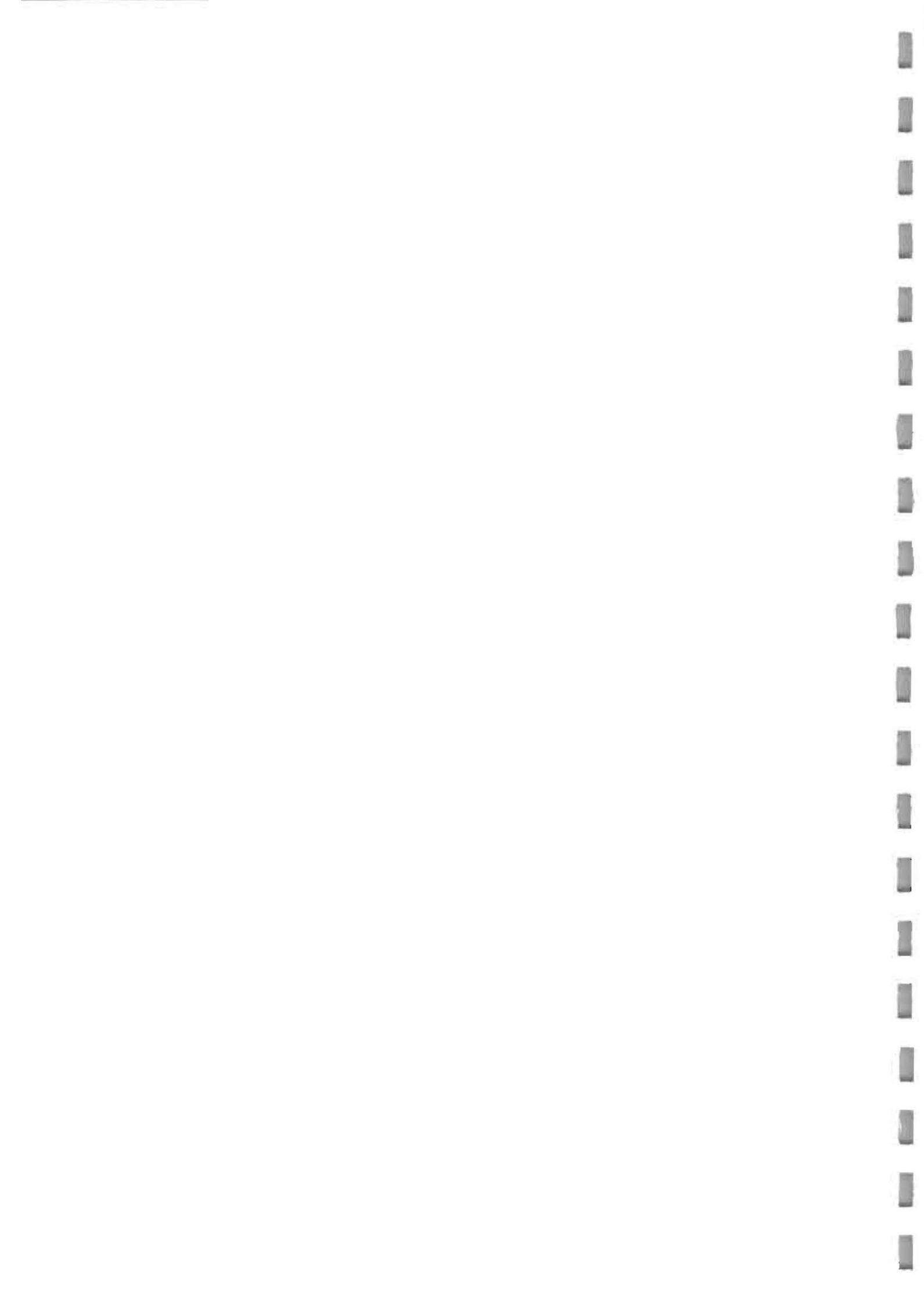


Figure 4.5: Comparison of Injury Statistics 1970 and 1990

Fire Brigade Accident Logs



- Head
- ▩ Eye
- ▨ Back
- ▧ Abdomen
- ▤ Arm
- Hand
- ▩ Chest
- Leg
- ▤ Foot
- Other





Report of an injury or dangerous occurrence

- Full notes to help you complete this form are attached.
- This form is to be used to make a report to the enforcing authority under the requirements of Regulations 3 or 6.
- Completing and signing this form does not constitute an admission of liability of any kind, either by the person making the report or any other person.
- If more than one person was injured as a result of an accident, please complete a separate form for each person.

A Subject of report (tick appropriate box or boxes) – see note 2

Fatality 1 Specified major injury or condition 2 "Over three day" injury 3 Dangerous occurrence 4 Flammable gas incident (fatality or major injury or condition) 5 Dangerous gas fitting 6

B Person or organisation making report (ie person obliged to report under the Regulations) – see note 3

Name and address –

Nature of trade, business or undertaking –

If in construction industry, state the total number of your employees –

and indicate the role of your company on site (tick box) –

Main site contractor 7 Sub contractor 8 Other 9

Name and telephone no. of person to contact –

If in farming, are you reporting an injury to a member of your family? (tick box) Yes No

C Date, time and place of accident, dangerous occurrence or flammable gas incident – see note 4

Date 19 Time –

day month year

Give the name and address if different from above –

Where on the premises or site –

and

Normal activity carried on there

ENV

Complete the following sections D, E, F & H if you have ticked boxes, 1, 2, 3 or 5 in Section A. Otherwise go straight to Sections G and H.

D The injured person – see note 5

Full name and address –

Age Sex (M or F) Status (tick box) – Employee 10 Self employed 11 Trainee (YTS) 12 Trainee (other) 13 Any other person 14

Trade, occupation or job title –

Nature of injury or condition and the part of the body affected –

APPENDIX A (Continued)

E Kind of accident - see note 6

Indicate what kind of accident led to the injury or condition (tick one box) -

Contact with moving machinery or material being machined <input type="checkbox"/> 1	Injured whilst handling lifting or carrying <input type="checkbox"/> 5	Trapped by something collapsing or overturning <input type="checkbox"/> 8	Exposure to an explosion <input type="checkbox"/> 12
Struck by moving, including flying or falling, object. <input type="checkbox"/> 2	Slip, trip or fall on same level <input type="checkbox"/> 6	Drowning or asphyxiation <input type="checkbox"/> 9	Contact with electricity or an electrical discharge <input type="checkbox"/> 13
Struck by moving vehicle <input type="checkbox"/> 3	Fall from a height* <input type="checkbox"/> 7	Exposure to or contact with a harmful substance <input type="checkbox"/> 10	Injured by an animal <input type="checkbox"/> 14
Struck against something fixed or stationary <input type="checkbox"/> 4	*Distance through which person fell <input type="text"/> (metres)	Exposure to fire <input type="checkbox"/> 11	Other kind of accident (give details in Section H) <input type="checkbox"/> 15

Spaces below are for office use only.

F Agent(s) involved - see note 7

Indicate which, if any, of the categories of agent or factor below were involved (tick one or more of the boxes) -

Machinery/equipment for lifting and conveying <input type="checkbox"/> 1	Process plant, pipework or bulk storage <input type="checkbox"/> 5	Live animal <input type="checkbox"/> 9	Ladder or scaffolding <input type="checkbox"/> 13
Portable power or hand tools <input type="checkbox"/> 2	Any material, substance or product being handled, used or stored. <input type="checkbox"/> 6	Moveable container or package of any kind <input type="checkbox"/> 10	Construction formwork, shuttering and falsework <input type="checkbox"/> 14
Any vehicle or associated equipment/machinery <input type="checkbox"/> 3	Gas, vapour, dust, fume or oxygen deficient atmosphere <input type="checkbox"/> 7	Floor, ground, stairs or any working surface <input type="checkbox"/> 11	Electricity supply cable, wiring, apparatus or equipment <input type="checkbox"/> 15
Other machinery <input type="checkbox"/> 4	Pathogen or infected material <input type="checkbox"/> 8	Building, engineering structure or excavation/underground working <input type="checkbox"/> 12	Entertainment or sporting facilities or equipment <input type="checkbox"/> 16
			Any other agent <input type="checkbox"/> 17

Describe briefly the agents or factors you have indicated -

G Dangerous occurrence or dangerous gas fitting - see notes 8 and 9

Reference number of dangerous occurrence Reference number of dangerous gas fitting

H Account of accident, dangerous occurrence or flammable gas incident - see note 10

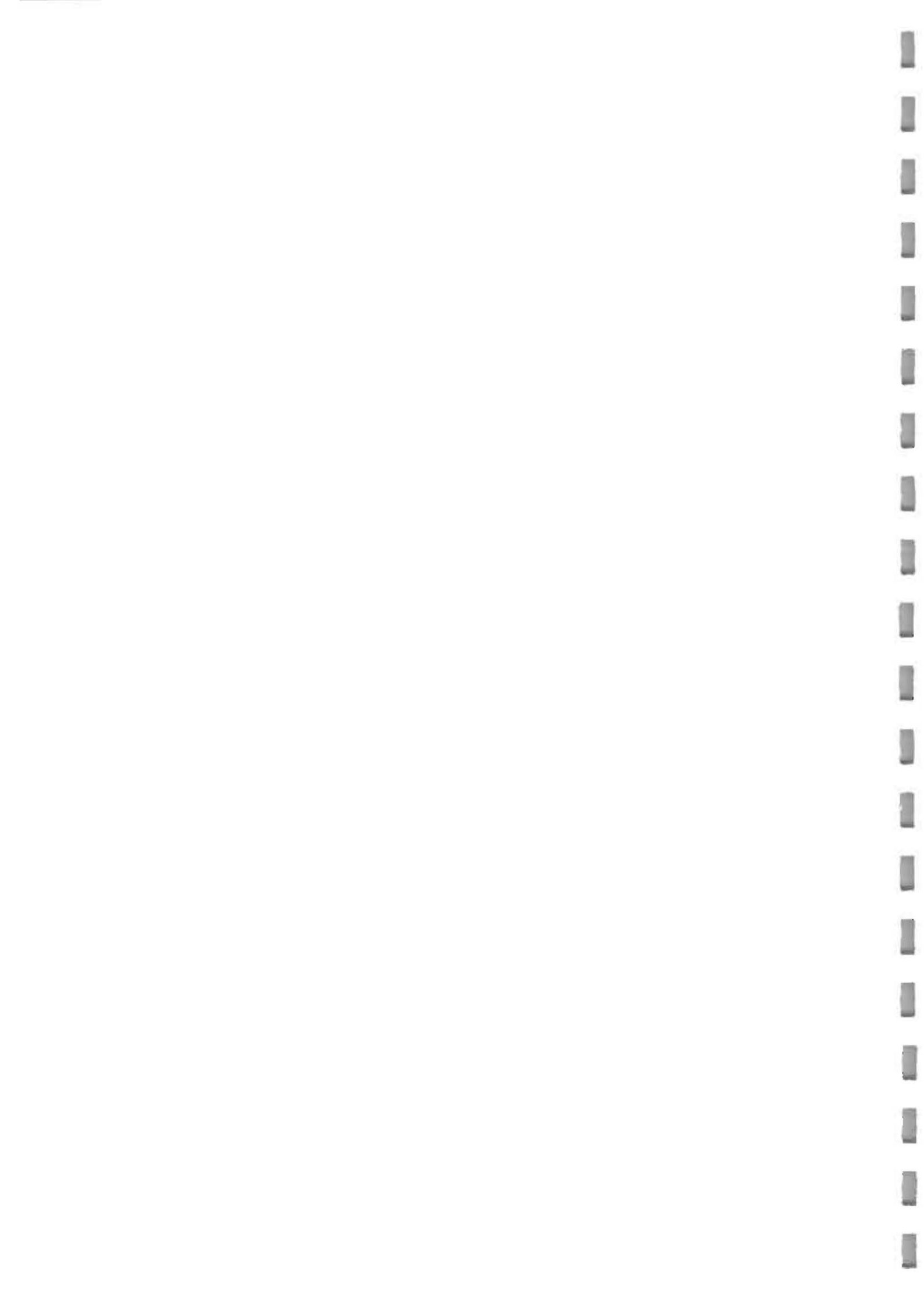
Describe what happened and how. In the case of an accident state what the injured person was doing at the time -

Signature of person making report Date

APPENDIX B

Health and Safety Executive's Categories of Major Injuries Under RIDDOR-Reporting of Diseases and Dangerous Occurrences Regulations 1985

- a. Fracture of the skull, spine or pelvis.
- b. Fracture of any bone:-
 - i. In the arm or wrist, but not a bone in the hand; or
 - ii. in the leg or ankle, but not a bone in the foot.
- c. Amputation of:-
 - i A hand or foot; or
 - ii a finger, thumb or toe, or any part there of if the joint or bone is completely severed.
- d. The loss of sight of an eye, a penetrating injury to an eye, or a chemical or hot metal burn to an eye.
- e. Either injury (Including burns) requiring immediate medical treatment, or loss of consciousness, resulting in either case from an electrical shock from any electrical circuit or equipment, whether or not due to direct contact.
- f. Loss of consciousness resulting from lack of oxygen.
- g. Decompression sickness (unless suffering during an operation to which diving operations at work regulations 1981 (a) apply) requiring immediate medical treatment.
- h. Either acute illness requiring medical treatment, or loss of consciousness resulting in either case from the absorption of any substances by inhalation, ingestion or through the skin.
- i. Acute illness requiring medical treatment where there is reason to believe that this resulted from the exposure to a pathogen or infected material.
- j. Any other injury which results in the person being admitted into hospital for more than 24 hours.



ACCIDENT STATISTICS

injury location

accident agency

department: E.C.F.R.S.

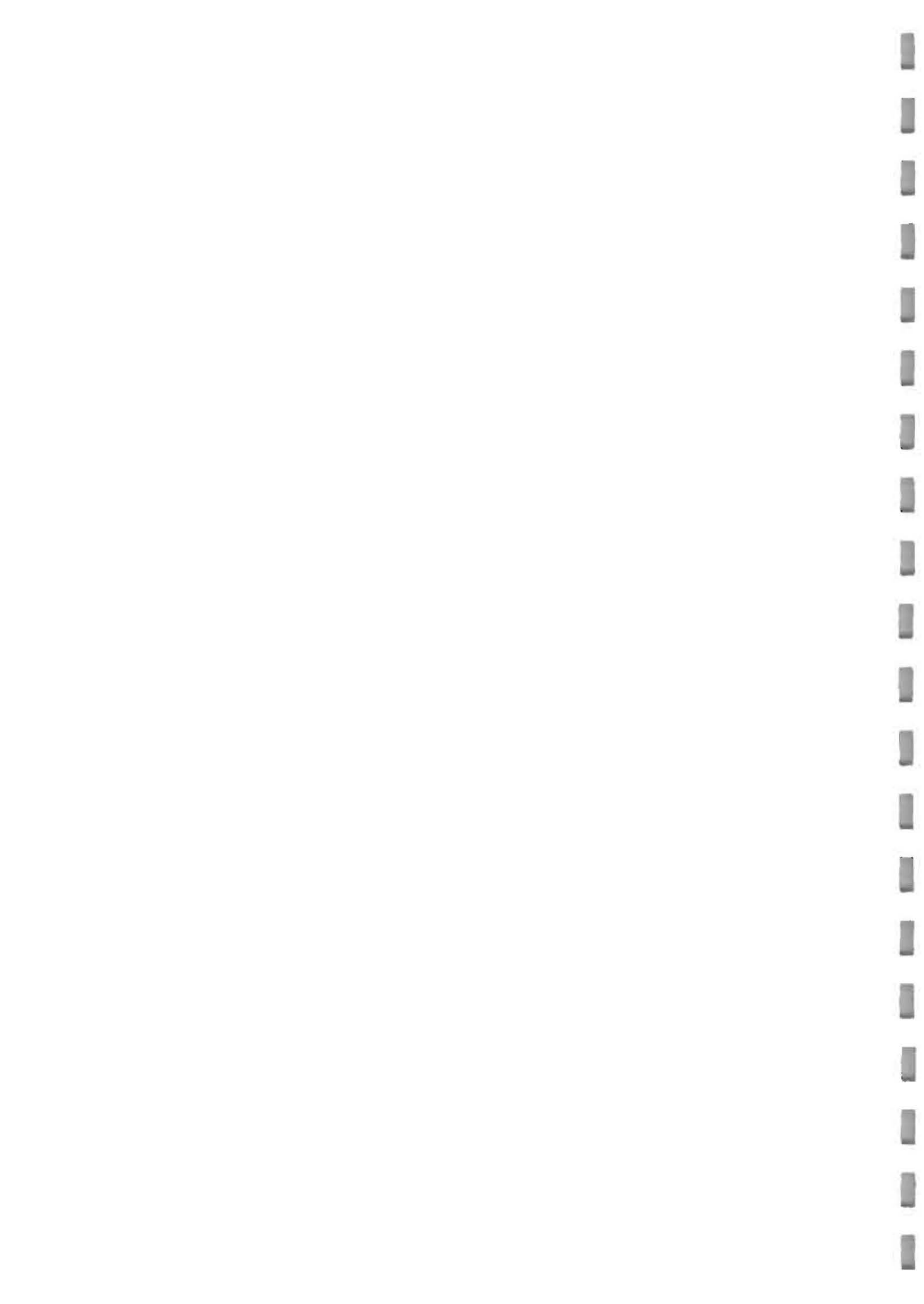
area/college

period: January

sheet no.: 90/1

name	establishment	occupation	date	7 2508	injury location											days lost						
					Head	Eye	Chest	Abdomen	Back	Arm	Hand	Leg	Foot	Shoe	Internal		Multiple					
					Fall on Level	Fall from Height	Striking against	Struck by	Falling Object	Contact: Heat	Contact: Electricity	Contact: Chemical	Contact: Other	Motor Vehicle	Machinery	Hand Tools	Toxic Poisons	Assault	Animals/Insect	Stress	Other	
Gardner P.A.	Chelmsford	Fireman	1.1.90	✓	Back	✓																14
Perry J.	Control	Senior Fire Control Operator	2.1.90	✓	(L) Leg	✓																✓
MacManus W.	Hadleigh	Fireman	2.1.90		(L) arm			✓														2
Wallace W.	Tilbury	Leading Fireman	2.1.90	✓	(R) arm			✓														✓
Warner P.L.	Workshops	Engineering Craftsman	3.1.90		(L) hand												✓					X
Haster C.	Tilbury	Fireman	3.1.90		(R) Eye							✓										X
Beavan R.J.	Hadleigh	Fireman	4.1.90		(R) hand																✓	3
Harris H.	Corringham	Fireman	4.1.90	✓	Ankle	✓																✓
Elston G.A.	Tilbury	Fireman	5.1.90	✓	Back	✓																✓
James M.C.	Training Centre	Fireman	5.1.90		(L) foot																✓	X
Russell D.N.	Leigh	Fireman	6.1.90	✓	(L) knee	✓																✓
Trevillion	Basildon	Fireman	6.1.90		(R) foot																✓	1
James P.	Clacton	Fireman	7.1.90		(L) knee																✓	X
Ball S.D.	Brentwood	Fireman	8.1.90		(R) leg			✓														X
Chaplin V.M.	Headquarters	Cook	8.1.90		(R) foot			✓														X
Deverish A.	Colchester	Leading Fireman	9.1.90		(L) ankle																✓	X
Weddell C.C.	Grays	Fireman	10.1.90	✓	(R) ankle																✓	✓
Storey D.	Workshops	Engineering Craftsman	10.1.90		(R) hand							✓										X
Pope J.A.	Grays	Fireman	12.1.90		Back																✓	3

APPENDIX C



APPENDIX D

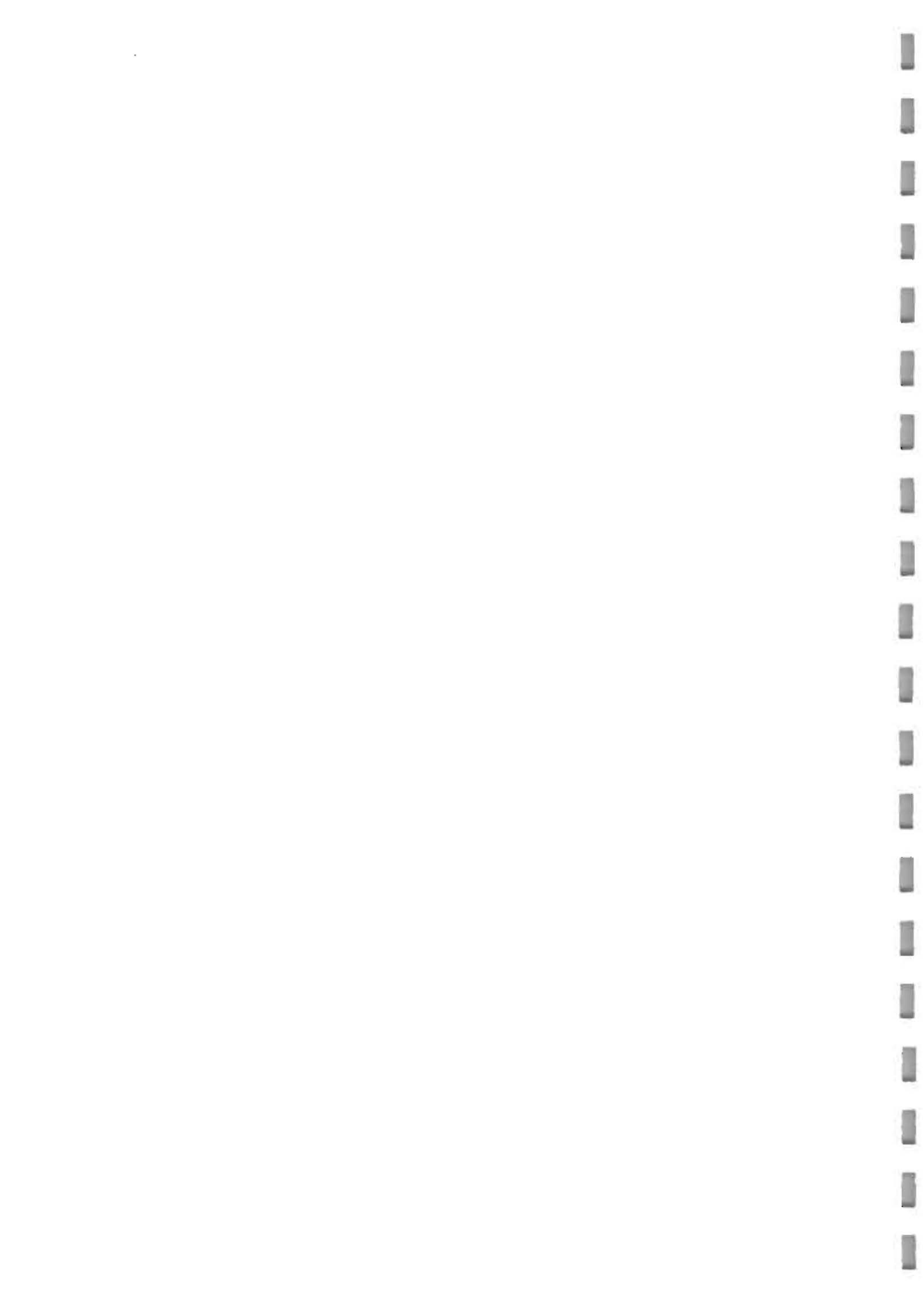
12/20/2016

COPY

NATURE OF INJURY

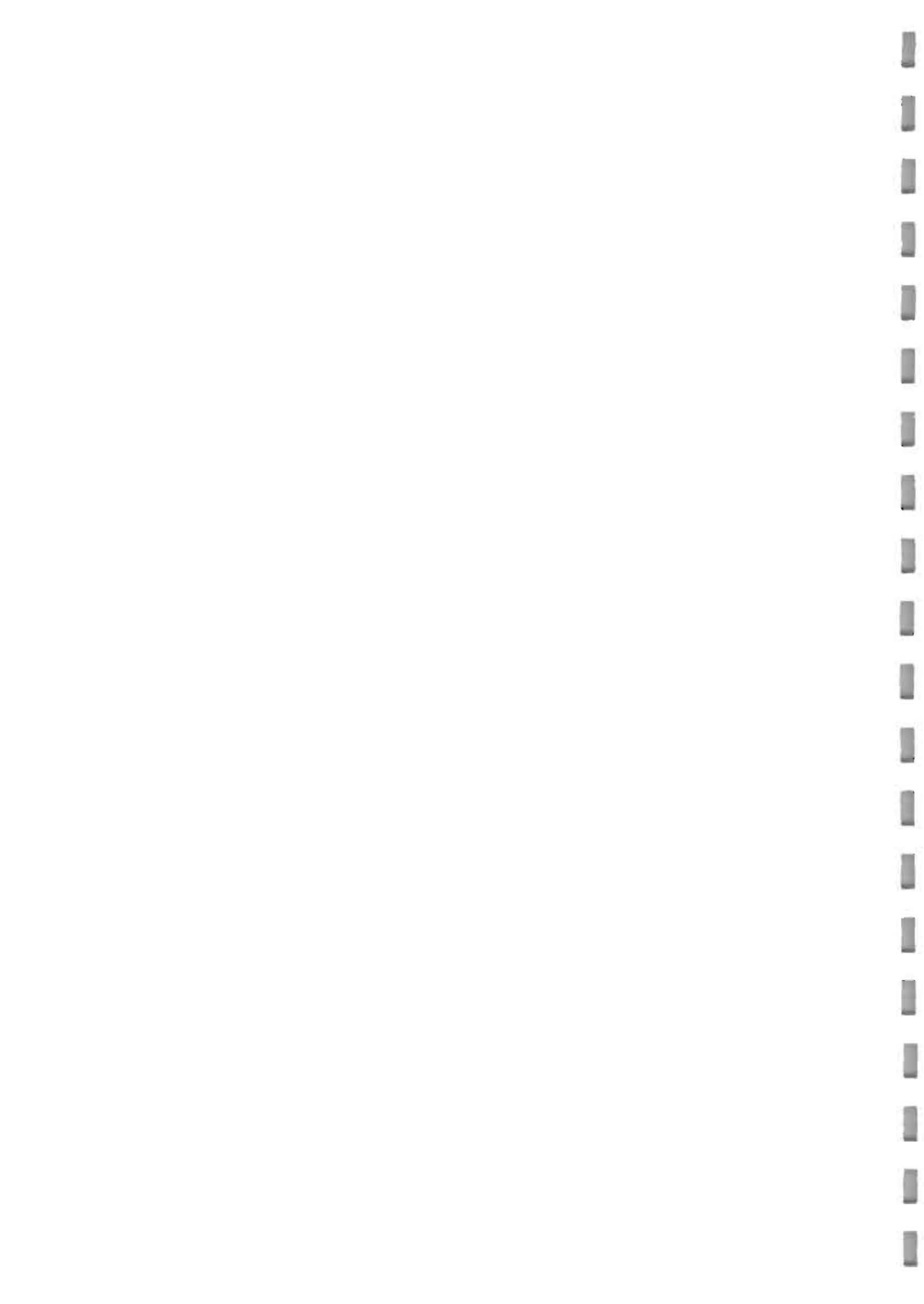
OCTOBER - MARCH 91

STN:	CATEGORY: FIREFIGHTING	NO OF DAYS:
A37	Gaining entry through broken window, small pieces of glass remained after clearing frame causing lacerations to thumb, forefinger and little finger of left hand.	0
A37	Moving debris for damping down, moving display cabinet lost footing and cabinet fell onto right foot bruising it.	0
C55	Carrying out salvage work, roof collapsed injuring neck and head.	179
C55	Rescueing Subo Kirkham, ceiling fell onto his back bruising base of neck.	0
B73	Slipped on plastic tread on stairs with wet boots and landed on right elbow.	0
C56	Attempting to gain access to the first floor to search for a casualty when the heat build up from the fire caused burns to his right ear and cheek.	0
B70	Approaching incident carrying equipment, route illuminated by torches, he stumbled on wooden steps and bruised fingers and cut fingers on right hand.	15
C50	Holding hose, shelving behind him in shop collapsed and as he grabbed a shelf his ring cut into his finger.	0
C55	Muscle strain occurred whilst carrying out fire-fighting duties.	0
C55	Removing dishwasher from scene of fire, debris from pipe made splinter enter left hand.	12
A36	Clearing debris after fire, fell through inspection pit boards and suffered back pain and left leg pain.	
C55	Searching for the seat of the fire, felt a burning sensation to the back of his neck, on inspection slight burns to nape of neck.	0
C55	The ladder was used to ventilate the room, and when it broke the window, a piece of the falling glass hit him in the face cutting it.	0
B94	Whilst firefighting, hot debris fell from ceiling and lodged on his clothing causing a burn to the left side of his neck.	9
B90	Advancing into fire, knelt on floorboards which had been subjected to extreme heat and so caused a burn to his left knee.	0
B70	Hot substance fell from ceiling when jet was aimed at it, it fell on right wrist burning it.	0
C56	Climbing the extension ladder, stepped onto hose reel tubing and twisted right ankle. The light was poor.	10



EMPNO	RANK	WORK	STOREA	AVY	AHM	LOCH	INJURY	WDESCR	LDESCR	CAUSE	CDESCR	GDESCR	TIME
671013	112	01	337	86	7	337	07	OP - KITCHEN DUTIES	RIGHT FOREARM	12	X HOT FAT	CARRYING CHIP PAN HOT FAT BURNT ARH	03
830040	111	01	335	86	6	330	08	FIREFIGHTING	PALM OF LEFT HAND		X BROKEN GLASS	DIRECTING JET THROUGH WINDOW CUT HAND	03
810005	112	01	442	86	5	442	08	fire	left hand		X climbing thru door	climbing thru door, out hand on glass	01
678006	111	01	114	86	8	114	05	FIREFIGHTING	LEFT KNEE		X KNELT ON GLASS	KNELT ON GLASS AT INCIDENT CUTTING KNEE	01
624382	112	01	351	86	3	551	07	FIREFIGHTING	RIGHT ELBOW		X CLIMBING OVER FENCE	CLIMBING OVER FENCE INJURED RIGHT ELBOW	01
505039	112	01	330	86	8	330	08	ATTACKING FIRE	SECOND FINGER L/HAND		X GLASS FRAGMENT	CAUGHT FINGER ON GLASS IN WINDOW	01
706405	112	01	441	86	6	444	08	TURNING OUT	R MIDDLE FINGER		X AP DOOR SHUT ON HAND	APPLIANCE DOOR SHUT ON HAND	04
748039	110	01	112	86	9	337	08	MOUNTING APPLIANCE	LEFT MIDDLE FINGER		X DOOR CLOSED ON HAND	TRAPPED FINGER IN APPLIANCE DOOR	01
683024	112	01	440	86	9	440	08	FIREFIGHTING	LEFT INDEX FINGER		X UNKNOWN	RUNNING OUT HOSE NOTICED CUT TO HAND	01
895054	110	01	603	86	8	550	05	FIREFIGHTING	UPPER RIGHT LEG		X GLASS IN WINDOW	CUT LEG ENTERING PREMISES THROUGH WINDOW	01
828004	112	01	224	86	10	224	05	FIREFIGHTING	RIGHT KNEE		X GETTING DNTO LADDER	CLIMBING FRDM GANTRY ONTO LADDER INJ KNE	01
242012	111	01	552	89	4	553	08	MOVING DOORFRAME	MID FNGR LEFT HAND		X PROTRUDING NAIL	HAND SLIPPED REMOVING DOOR FRAME	03
202029	112	01	442	88	9	441	06	JUMPING OFF APPL	RIGHT FOOT		X LANDING ANKWARDLY	JUMPED OFF APPLIANCE & LANDED ANKWARDLY	03
482016	109	01	335	88	10	555	08	SLIPPED ON GRASS	PALM LEFT HAND		X NAIL PUNCTURED PALM	NAIL EMBEDDED IN PALM OF HAND AFTER SLIP	01
403000	111	01	552	88	10	552	05	HOVING ROOF SLATES	RIGHT KNEE		X KNELT ON NAIL	KNELT ON NAIL MOVING SLATES FROM ROOF	01
327008	112	01	440	88	10	440	05	SEWER RESCUE	LOWER LEGS		X SEWER EFFLUENT	SLIPPED OFF LADDER INTO SEWER EFFLUENT	01
358023	112	01	227	88	10	227	08	CUTTING AWAY TIMBER	THUMB ON LEFT HAND		X TRAPPED THUMB	TRAPPED THUMB BETWEEN AXE SHAFT & TIMBER	03
107074	112	01	444	89	5	444	03	RESPONDING TO F CALL	SHOULDER		X OPENING APP ROOM DR	APPL ROOM DOOR NOT FITTED CORRECTLY	01
467153	112	01	110	88	9	446	01	ASCENDING STAIRS	BOTH EARS & LEFT ARM		X HEAT INTENSITY	HEAT INTENSITY ON STAIRS BURNED HIM	03
474000	112	01	446	88	9	446	01	ASCENDING STAIRS	BOTH EARS & LEFT ARM		X HEAT INTENSITY	HEAT INTENSITY ON STAIRS BURNED HIM	03
218252	112	01	111	89	4	111	08	FIREFIGHTING	MIDDLE FINGER R HAND		X CHEMICAL IN FINGER	FINGER BECAME CONTAMINATED WITH CHEMICAL	01
151206	112	01	227	88	9	227	05	HOSE RUNNING	R THIGH & KNEE		X SKIPS METAL BRACKET	RUNNING OUT HOSE CAUGHT LEG AGAINST SKIP	03
465032	112	01	338	88	10	337	08	RELEASING CASUALTY	LEFT HAND		X CUT HAND ON GLASS	CUT HAND RELEASING CASUALTY FROM CAR	01
352001	110	01	333	89	1	333	08	OPNG GATE/REMOVING WND	PALM L HND/R HND FNG		X HOT GATE/TIMBER WNDW	OPENING METAL GATE/REMOVING WINDOW FRAME	03
213004	112	01	440	88	9	442	07	REMOVING CASUALTY	LEFT WRIST & FOREARM		X UNKNOWN	REMOVING CASUALTY FROM VEHICLE CUT WRIST	01
444015	111	01	220	88	12	553	01	BA FIREFIGHTER	RIGHT SIDE EAR		X SCALDED BY STEAM	SCALDED BY STEAM WHILST FIREFIGHTING	02
349007	112	01	224	89	2	224	08	USING WATER JET	RIGHT INDEX FINGER		X BROKEN GLASS	CUT FINGER-BROKEN GLASS IN WINDOWFRAME	01
453012	112	01	114	89	2	114	08	ENTERING HOUSE	PALM OF RIGHT HAND		X BROKEN GLASS PANEL	ENTERING HOUSE THROUGH GLASS DOOR PANEL	03
272457	112	01	444	88	11	444	04	SPRAYING WATER ON CAR	LOWER L RIB CAGE		X LEANING OVER FENCE	LEANT OVER FENCE WHILST FFIGHTING	04
319026	110	01	222	88	12	222	09	FIRE FIGHTING	CHEST		X CHANGE IN WIND	INHALED SMOKE AT INCIDENT	01
470065	112	01	221	88	11	336	01	FIRE FIGHTING	TOP OF HEAD		X BANGED HEAD ON DOOR	PICKING UP HELMET STOOD UP+BANGED HEAD	01
493088	112	01	553	88	9	553	05	ENTERING FRONT DOOR	RIGHT ANKLE		X HOSE KNOCKED HIM OVER	LEGS KNOCKED FROM UNDER HIM BY HOSE	04
457001	109	01	110	88	11	110	03	PROC TO APPLIANCE	NECK BACK+SHOULDER		X APPL WENT OVER BUMP	IN APPL IT HIT BUMP+THREW HIM TO ROOF	01
194003	109	01	116	88	11	102	08	BREAKING INTO HOUSE	3RD FINGER R HAND		X GLASS FROM DOOR	USING LUMP HAMMER ON DOOR GLASS BROKE	01
312000	112	01	335	89	3	335	01	FIREFIGHTING	LEFT SIDE OF FACE		X IGNITED EMULSION	EMULSION OF OIL & WATER BURNT HIS FACE	01
176005	112	01	442	88	10	442	07	DESCENDING FROM APPL	L WRIST & FOREARM		X HAND STUCK IN HANDLE	JUMPING FROM APPL HAND WEDGED IN HANDLE	03
202027	112	01	224	88	8	223	04	RESCUE FROM CANAL	LOWER BACK/ABDOMINAL		X BRAMBLES ON BANK	RESCUE FROM CANAL RECEIVED ABRASIONS	01
343029	112	01	113	89	3	113	02	WALKING UPSTAIRS	LEFT EYE		X DEBRIS WENT IN EYE	FORCE OF EXPLOSION PUSHED HIM DOWNSTAIRS	01
362003	112	01	330	90	9	330	07	RETURNING TO STATION	HANDS & ARMS ETC		X UNKNOWN	EXTENSIVE SEVERE SKIN RASH	03
334007	108	01	440	90	10	440	05	ATTENDING FIRE CALL	LEFT ANKLE		X ANKLE TURNED OVER	WALKING ON PAVEMENT TURNED ON ANKLE	03
218020	112	01	226	91	4	226	02	DIGGING OUT AT INCID	LEFT EYE		X BLEACH SPLASHED UP	DIGGING OUT BLEACH SPLASHED INTO EYE	01
344023	108	01	604	90	9	550	08	SPEC SERVICE CALL	RIGHT HAND		X CUT BY SHARP OBJECT	CUT CONTAMINATED BY DIRTY WATER	01
150007	112	01	336	90	9	336	03	DRIVING TTL	RIGHT OF NECK		X HIT HOLE IN ROAD	DRIVING TTL HIT A DEPRESSION ON ROAD	03
493008	110	01	225	91	2	225	10	OPERATIONAL SUBO	BOTH HANDS		X HEPATITIS CARRIER	CONTACT WITH HEPATITIS CARRIER	01
104003	112	01	225	91	2	225	10	PUMP OPERATOR	BOTH HANDS		X HEPATITIS CARRIER	CONTACT WITH HEPATITIS CARRIER	01
344005	112	01	225	91	2	225	10	BA WEARER	BOTH HANDS		X HEPATITIS CARRIER	RESCUE OF HEPATITIS CARRIER	01
127011	112	01	441	90	12	441	04	EN ROUTE TO CALL	LOWER BACK		X UNKNOWN	DONNING BA TO FIRE FELT PAIN IN BACK	03
268005	112	01	441	90	2	441	09	ATT TO RESCUE BODY	SWALLOWED WATER		X STRENGTH OF CARRANT	RESC BODY FROM RIVER WENT UNDER WATER	01
168027	112	01	226	90	1	226	09	RECOVERING BODY	TETANUS INJECTION		X RECOVERING BODY	RECOVERING BODY FROM POLLUTED LODGE	01

***** CONFIDENTIAL INFORMATION - COVERED BY THE DATA PROTECTION ACT *****



FIRE SERVICE DEPARTMENT.

TO BE KEPT FOR AT LEAST 3 YEARS FROM FIRST ENTRY DATE

(a) DATE OF ACCIDENT OR D.O.	(b) WHERE THERE IS AN ACCIDENT, DETAILS OF INJURED PERSON	SEX		AGE LAST BIRTHDAY	OCCUPATION	NATURE OF INJURY	(c) LOCATION OF ACCIDENT OR D.O.	(d) BRIEF DESCRIPTION OF CIRCUMSTANCES	DETAILS OF NOTIFICATION TO THE HEALTH EXECUTIVE, OF ACCIDENT OR DANGER		
		M	F						SIGNATURE OF PERSON GIVING NOTIFICATION	NAME AND POSITION OF PERSON ACC. NOTIFICATION	DATE & TIME OF NOTIFICATION
19.1.89	FM 1994 BRIAN SIBSON	M	-	39	WT FM	BRUISE TO LEFT SHIN ABOVE ANKLE	TOTAL OIL, SOUTH ACCOMMODATION ROAD WEEDS	CARRYING OUT DRILL, OPERATING LADDER, HE CAUGHT HIS SHIN ON METAL RACKING LADDER, BRUISED LEFT ANKLE			
19.1.89	FM 2919 STUART WILSON	M	-	28	WT FM	CUT TO RIGHT THUMB BELLEVUE WALL	TOTAL OIL AT ABOVE	WHILE PLACING ROSE IN LOCKER OF W/L CAUGHT THUMB ON SIDE OF LOCKER CAUSING CUT.			
23.1.89	HC JASON ROBERTS	✓	-	15	Handic	Between 2 knees to (C) of Joints.	C.H.G. Wicks/Hops.	AFTER WORKING IN A JERSEY, HE JERSED AWAY AND SLIGHT KNEE AND RECEIVING B.L.			
24.1.89	HC JASON MICHAEL HANLEY	✓	-	19	Handic	Cut Bouncing under nail inner finger (R) hand.	C.H.G. Wicks/Hops.	WHILE FIXING ROSE ON WALL "ROSE CUT" IN S.W. CORNER, FOOT SLIPPED FROM SURF, AND CAUSE TO INDEX FINGER			
23.1.89	FM 51706 HARRY CONROY	✓	-	47	DRILL YARD OTLEY.	Cut to (C) hand thumb.	RAINED Fy	DURING DRILL, CAUGHT (C) HAND THUMB IN BRUSH OF MASTERS/ENGINE'S H.P.P.			
22.1.89	S.S. 1433 DAVID JAMES MARSHALL	✓	-	42	W.T. S.S.	WRENCHED (R) ARM.	ARM AND SHOULDER STRUCK BY SPARKS.	WHILE ATTEMPTING TO FIT B.L. SET ON ARM WAS WRENCHED BY MOVEMENT OF APPLICATOR AND TIGHT SPOKES. STRAP			
18.1.89	Fy 2915 GAIL DORRY	✓	-	28	W.T. Fy	SWUNG TO (C) HEEL.	18, Sunny Hill Court, Wakefield	TRIPPED OVER FENCING BANSARD (R) ARM AGAINST HOUSE WALL.			
17.1.89	Fy 2005 GEOFFREY JAMES DOUGLAS	✓	-	37	H.T. Fy	SOFT'S HAMMER STRUCK FINGER (R) HAND.	FY 45, St Nicholas Way, Wakefield	USING WIRE AIR TO FINE AWAY TO LAMP'S. WIRE CAUGHT FINGER WAS CAUSING PAIN WHEN GRIPPING STRUTS.			
17.1.89	S.S. 2022 MICHAEL JOHN MC DONALD	✓	-	37	H.T. S.S.	RIPPER OF SPUR IMPARTATION.	FY 45, St Nicholas Way, Wakefield	DURING TRAILING OPERATIONS IMPACTED WITH ANCHOR OF SPUR. WHILE GRIPPING THE PULLEY PART OF COUNTER TO THE WALL, COLLIDED WITH CABLES RESULTING IN THE IMPACTING AGAINST LIFTING S.S.F. BEARING DOWN ON THE PULLEY BEARING SYSTEM. HE FELT A PAIN BEHIND HIS RIGHT EYE			
12.1.89	HC PATRICIA ALANNE BARKER	✓	-	26	DINING ROOM ASSISTANT.	SLIPPED TO (C) KNEE AND UPPER ARM.	KIRKSTALL F.S.H.O.	WHILE LIFTING S.S.F. BEARING DOWN ON THE PULLEY BEARING SYSTEM. HE FELT A PAIN BEHIND HIS RIGHT EYE			
11.1.89	HC PATRICIA ANTHONY SINGH	✓	-	43	Handic	WRENCHED (R) KNEE.	Wicks/Hops.	WHILE LIFTING S.S.F. BEARING DOWN ON THE PULLEY BEARING SYSTEM. HE FELT A PAIN BEHIND HIS RIGHT EYE			
10.1.89	Fy 2756 JIM HARSHAN SIECZYKIEL	✓	-	26	H.T. Fy	SLIPPED WRENCHED TO SHOULDER (R) HAND.	3, TREE AVENUE, YEASDALE, BARNOLD	RECEIVED CUT THROUGH HIS S.P. GLOVES.			
9.1.89	Fy 2724 ALISTAIR H'IRAY	✓	-	28	H.T. Fy	SPIN CUT TO INDEX FINGER (R) HAND.	150, BARNSLEY TERE BARNSLEY.	DURING SEARCH OF PREMISES FOR PROBLEMS REPAIRING CABLE TO COMPART WITH SMALL GLASS PLY BRACKETING WIRELESS.			
5.1.89	FCCP 2247 ROBERT JOHN THURGOOD	✓	-	35	W.T. FCCP.	PULLER WRENCHED (R) SUBARAR BLADE.	BENGAPE CATHRAL F.S.H.O.	STRETCHED TO ANSWER FIRE CALL REPAIRING TO PULLEY (R) SUBARAR			
4.1.89	HC RICHARD DONNELLY	✓	-	42	COOK	Cut to (C) THUMB.	Langford P/S. Kirkstall.	WHILE PACKAGING LUNCH SUSTAINED CUT TO (C) THUMB.			
24.1.89	FM 158 RICHARD HAYDEN STEAD	✓	-	41	WT-FM	WHILE GOING TO BOARD (C) TRUCK, WRENCHED (R) KNEE	ROBERT WILKINSON POLICE BRIGADE	DURING FIREFIGHTING OPERATIONS TRIPPED UP ON AND FELL ONTO			
								SOME CONCRETE REINFORCING STEEL MESH LING ON GROUND.			
15.1.89	FM 2033 DAVID RUDJINSON	✓	-	30	WT-FM	MINOR BURNING OF VISION FOR A SHORT WHILE + LOCALISED SWELLING (C) EYE.	DNU YARD ELLAND F.S.	WHILE OPENING LOCKER DOOR ON THE HOSE WAGON, ONE DISLOCATED			
								FOR FASTENING SPRING FROM US SECURING CHUCK, CAUSING HIM TO FALL			
2.1.89	FM 3237 CHRISTOPHER THOMPSON	✓	-	24	WT FM	PUNCTURE WOUND 1" DEEP IN (C) ARM NEAR THUMB	ASSEMBLY HALL WEEDS STATION	WHILE TAKING PART IN FOOTBALL FALL CAUGHT HAND AGAINST WOODEN DOOR - FOOT INTO DOOR AND CAUSE			
11.1.89	FM 2327 LEE DAVID SCHOLLES	✓	-	28	WT. FM.	STRAIN TO LUMBAR REGION OF BACK.	OUTSIDE - REAR BARTLEY STATION	4 PERSONS REMOVED FEET FROM DOOR OF VAN. LUMBAR SHOLES REPORTED HIS BACK WAS SORE.			
26.1.89	FM 2191 STEPHEN PHILIP GINLEY	✓	-	36	WT. FM	BRUISED (C) THUMB.	DNU YARD Halifax.	WHILE BRING CYCLOPS IN A FIRE A SMOKE METER NO ALARM SOUND TO CALLER HALL WHICH PERSON WAS (C) THUMB GOX IN TO US SCOUT.			
21.1.89	FM 3210 TRULICK REIDINSON	✓	-	27	WT-FM	PULLED MUSCLE IN (C) BICEP.	DRILL YARD PATERFOOT	WHILE ASSIGNED TO TIGHTEN ONE COUPLINGS OF SUBSTANTIALLY SECTION, PULLED A MUSCLE IN (C) BICEP			
10.1.89	SUB. 60 KEITH HAWLEY SINDH	✓	-	37	H.T. SUB.	FRAGMENT IN GUSSET IN (C) RYE.	WELDED IN ALL PARTS OF THE BRIGADE	WHILE BEARING WINDOW IN BRIGADE 4 PERSONS WITH AIR FILL SYSTEMS ENTER IN FIRE TO BE REPAIRING VAN			
	Fy 2191							WHILE LIFTING WINDOW FROM AFTER WELDED TEST, SLIPPED ON BRIGADE AND			

APPENDIX F

