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NASDAB  
steering group  
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Amputee  
Statistical Database  
for the  
United Kingdom  
1997/98

# NASDAB

Steering Group

# Amputee Statistical Database for the United Kingdom 1997/98

Information & Statistics Division  
The National Health Service in Scotland

on behalf of

**National Amputee  
Statistical Database (NASDAB)**

Edinburgh 1999

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Paper edition designed and typeset by ISD Scotland Publications.  
Web edition designed and typeset by Chris Dunn.

Internet address — [www.show.scot.nhs.uk/isd/nasdab](http://www.show.scot.nhs.uk/isd/nasdab)

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## Foreword

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It gives me great pleasure to introduce this Annual Report which, for the first time ever, provides data on amputees from all prosthetic centres throughout the United Kingdom. Having successfully established common reporting procedures from each Centre, it is our intention to produce a similar report annually, and to continually seek to enhance the quality, and extend the range, of information collected.

The National Amputee Statistical Database (NASDAB) was conceived in 1993 and, after a considerable amount of exploratory work by a dedicated working party of consultants from the Amputee Medical Rehabilitation Society and by centre managers, it achieved its present structure in May 1997. Its aims were to investigate the feasibility of re-establishing a national amputee database, and of implementing a manageable system of data collection from all prosthetic centres within the UK. A steering group, representing the database manager, consultants, centre managers, and the British Healthcare Trades Association (BHTA), currently manages the scheme. The group's significant achievements include: the active participation of every prosthetic centre in the UK; initial funding from the BHTA; consensus on a minimum dataset; and the facilitation of software programs to ensure the commonality and consistency of data collection.

This report describes all new referrals to prosthetic centres for the year ended 31 March 1998 and is provided to advise and inform clinicians, managers, service providers, companies contracting with the NHS, and those concerned with healthcare commissioning. It is anticipated that the availability of this data will stimulate debate and decision making in delivering the highest possible quality of care to amputees attending prosthetic centres.

We have been extremely fortunate in retaining the services of ISD Scotland for the database management : they have a wealth of experience in processing similar data for the Scottish service, and have used this expertise to great effect in the assimilation and analysis of information from all centres throughout the UK.

This inaugural report represents the fruit of much collaborative labour and I give my heartfelt thanks to all those who have taken part in its development and publication. With apologies to anyone inadvertently omitted, I thank : the original working party and steering group members for their unstinting commitment of time and effort; centre managers for providing the essential recurrent funding and ensuring the submission of accurate data; the BHTA for support and vital initial funding; the software houses for their collaboration in designing and implementing the necessary local software; and ISD Scotland for endless patience and good humour allied to great skill in database management.

I sincerely hope this report will be of interest and value to all those for whom our amputee care services are a concern. The data and analyses contained will permit local, regional, national and international comparisons to similar databases and thereby enhance our understanding of this form of healthcare. This report represents the first attempt at data presentation and analysis : the overall form and content of future reports are in the hands of the contributing centres. Meanwhile, the steering group and ISD Scotland will be happy to discuss requests for *ad hoc* analyses.



Steering Group Chairperson,  
National Amputee Statistical Database

## Current membership of the NASDAB steering group

---

Mr Stuart Baird, ISD Scotland (Secretariat)

Mr Mike Ferguson, NHS Supplies

Mrs Joan Forrest, ISD Scotland

Dr Nick Jayawardhana, Hull Prosthetic Service Centre

Mr Simon Keymer, Cambridge Prosthetic Service Centre

Mr Peter Knight, ISD Scotland

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Dr Sellaiah Sooriakumaran, Roehampton Prosthetic Service Centre

Mrs Kathy Spiller, Wrexham Prosthetic Service Centre

Mr Roger Swain, Nottingham Prosthetic Service Centre (Chairperson)

Mr Simon Webster, British Healthcare Trades Association

Dr Alastair Weir, West of Scotland Mobility and Rehabilitation Centre

## Introduction

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This is the first in a series of Annual Reports based on data provided from prosthetic service centres in the United Kingdom for the year ending 31 March 1998. The information contained in this 1997/98 Annual Report is derived from details supplied by centres in England, Northern Ireland and Scotland. Although the three centres in Wales are now contributing data to the UK database they were unable to do so during 1997/98 - there are approximately two hundred and fifty new referrals per annum in total to the Welsh centres.

Two centres, Plymouth and Manchester were also unable to provide individual patient records and their contribution is limited to the summary information contained in tables 1-3 of this report. For the reasons above, although the term 'All centres', and 'UK' are used in text and tables in this report it should be understood that all figures exclude Wales and, with the exception of tables 1 - 3, Plymouth and Manchester.

### Points of interest

- There were a total of 5896 new referrals to prosthetic service centres in the United Kingdom for the year ending 31 March 1998; nearly two thirds (65 %) were male.
- The median age of all referrals was 68 years of age; for males the median age was 66 years and for females 71 years of age.
- Information on the level of amputation was not always supplied to the UK database during 1997/98: in total, amputation level information was available on 5010 patients (85% of all referrals). Of these, upper limb amputations accounted for around 5 per cent of the total; lower limb amputations around 91 per cent of the total; and congenital absence cases accounted for around 3 per cent.
- The most common level of amputation was at a trans-tibial level accounting for 46 per cent of all referrals (excluding cases which did not specify amputation level). Only very rarely were patients referred with both an upper and a lower limb amputation (6 cases).
- The cause of amputation was provided to the database in nearly three quarters (72%) of cases. The most common cause of amputation of an upper limb was trauma, accounting for 56 percent of cases where the cause was recorded. For lower limb amputations, dysvascularity was the reported cause in two thirds (66%) of cases.
- Overall, 29 per cent of referrals to prosthetic service centres were seen within two weeks of their referral date. This time interval varies from centre to centre reflecting different referring procedures and local practices.

# NEW REFERRALS

The table below shows the total number of referrals to each of the UK's prosthetic service centres for the four quarters ending 31 March 1998. Overall, the number of amputees referred is similar to previously published figures on ALAC's workload: see in particular the 1987 figures for England, Wales and Northern Ireland published in the Department of Health and Social Security Amputation Statistics for England, Wales and Northern Ireland (1987, ISBN 1 85197 387 7). Referral numbers in Scotland have also been consistent in recent years (see for example, ISD Health Briefing 13/97).

The differing sizes of population served by centres accounts for the very large variation in the number of referrals to individual centres, e.g. 19 at Inverness and 414 at Birmingham. Because a small number of centres have encountered difficulties in achieving a complete and accurate return during this first year of data collection, the figures for any particular quarter (and the trend) should be used with caution.

**Table 1 New referrals to prosthetic service centres : 1997/98**

Prosthetic Service Centre	Quarter ending				Total
	30 Jun '97	30 Sep '97	31 Dec '97	31 Mar '98	
Aberdeen	9	15	17	12	53
Belfast	45	40	35	28	148
Birmingham	91	121	103	99	414
Brighton	36	32	33	40	141
Bristol	43	44	26	40	153
Cambridge	31	33	36	24	124
Carlisle	10	8	4	19	41
Cleveland	29	40	33	23	125
Derby	47	30	20	18	115
Dundee	28	28	22	18	96
Edinburgh	17	10	13	21	61
Exeter	33	33	32	37	135
Gillingham	23	-	118	44	185
Glasgow <sup>(Strathclyde University)</sup>	19	12	9	8	48
Glasgow <sup>(Westmarc)</sup>	46	49	43	29	167
Hull	8	28	21	24	81
Inverness	2	6	6	5	19
Leeds	48	59	56	44	207
Leicester	18	12	14	19	63
Liverpool <sup>(Fazackerley)</sup>	13	17	22	31	83
London <sup>(Charing Cross)</sup>	16	-	6	29	51
London <sup>(Harold Wood)</sup>	78	85	62	88	313
London <sup>(Kings)</sup>	48	43	34	34	159
London <sup>(Roehampton)</sup>	60	65	49	38	212
London <sup>(Stanmore)</sup>	21	79	52	47	199
Luton & Dunstable	26	25	38	26	115
Manchester	99	90	93	82	364
Newcastle	59	52	55	54	220
Northampton	16	17	25	24	82
Norwich	33	27	38	32	130
Nottingham	54	41	46	51	192
Oxford	37	53	43	39	172
Plymouth	43	38	41	39	161
Portsmouth	44	31	34	43	152
Preston	56	45	37	35	173
Ringwood	29	28	25	15	97
Sheffield	51	75	57	57	240
Stoke	26	30	33	50	139
Wirral	45	30	34	50	159
Wolverhampton	27	33	27	20	107
<b>All centres</b>	<b>1 464</b>	<b>1 504</b>	<b>1 492</b>	<b>1 436</b>	<b>5 896</b>

**Gender and age**

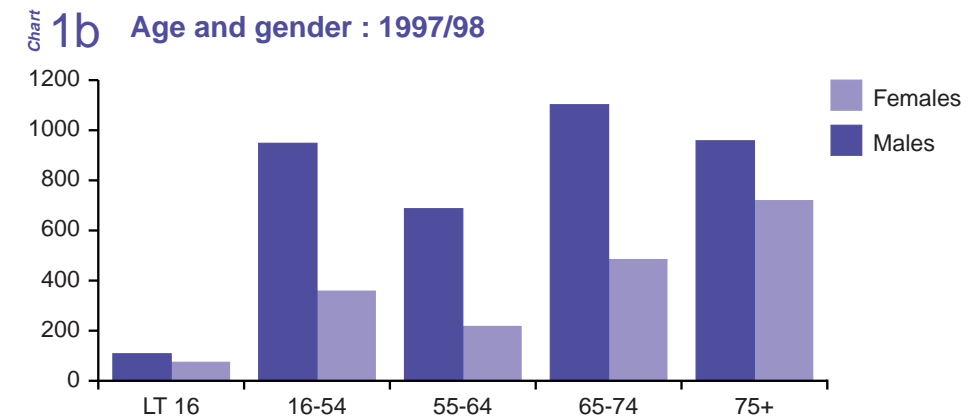
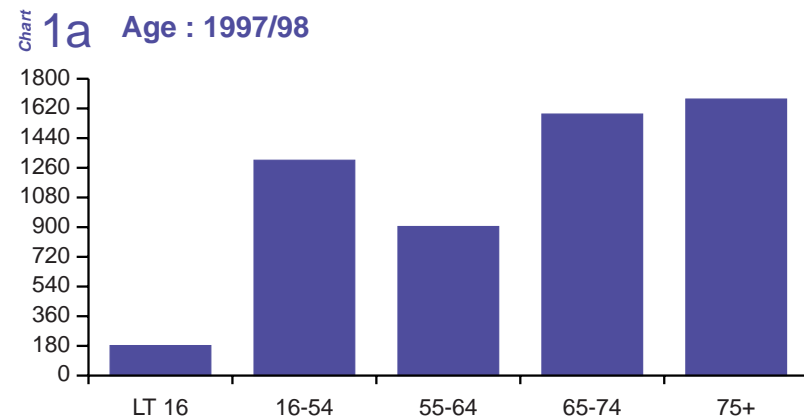
There is a marked gender difference in median age at presentation, the median for males being 66 and for females 71 years of age. There are also marked local variations in the median age: for example the value for males at Exeter was 72; at London (Kings) the median age for males was 55. For females the median age was 76 years at Edinburgh, Luton and Dunstable and 59 years at Liverpool.

Around one quarter of males, and two in five females, were aged 75 or over at time of referral. The table also highlights the relatively small number of patients aged under 16 years, whose need for support from centres however will extend over a much longer than average time frame than older patients. In general, these children are referred as a result of congenital absence; more detail is provided in [table 13](#).

**Table 2 Gender and age ; by prosthetic service centre : 1997/98**

Prosthetic Service Centre	Males								Females								Gender unspecified	Total	Median Age <sup>1</sup>	Prosthetic Service Centre
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	Median Age <sup>1</sup>	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	Median Age <sup>1</sup>				
Aberdeen	1	10	5	7	9	1	33	64	-	4	1	3	10	2	20	75	-	53	68	Aberdeen
Belfast	3	31	25	29	20	-	108	63	3	3	6	18	10	-	40	72	-	148	66	Belfast
Birmingham	8	74	54	74	78	-	288	66	6	20	15	44	41	-	126	71	-	414	67	Birmingham
Brighton	1	16	13	13	13	-	56	63	-	7	6	13	20	-	46	74	39	141	69	Brighton
Bristol	3	17	11	32	39	-	102	71	2	13	3	10	23	-	51	71	-	153	71	Bristol
Cambridge	3	21	9	18	26	-	77	68	2	12	4	9	20	-	47	73	-	124	69	Cambridge
Carlisle	-	2	8	9	5	-	24	69	-	1	3	8	5	-	17	68	-	41	68	Carlisle
Cleveland	1	10	14	27	24	-	76	70	-	13	4	13	19	-	49	72	-	125	71	Cleveland
Derby	8	22	9	18	11	-	68	59	-	12	1	8	4	-	25	68	22	115	59	Derby
Dundee	-	8	13	27	21	2	71	69	-	-	4	11	10	-	25	73	-	96	70	Dundee
Edinburgh	2	6	16	9	10	1	44	64	-	1	2	3	11	-	17	76	-	61	68	Edinburgh
Exeter	-	14	9	30	29	-	82	72	2	6	4	17	24	-	53	73	-	135	72	Exeter
Gillingham	3	30	21	37	31	-	122	67	-	13	7	16	27	-	63	71	-	185	70	Gillingham
Glasgow (Strathclyde University)	3	12	7	8	4	-	34	58	2	4	2	3	3	-	14	60	-	48	58	Glasgow (Strathclyde University)
Glasgow (Westmarc)	-	19	27	28	30	6	110	68	2	6	12	22	14	1	57	70	-	167	68	Glasgow (Westmarc)
Hull	-	17	8	21	16	-	62	67	1	5	1	6	6	-	19	72	-	81	67	Hull
Inverness	-	3	3	1	6	-	13	68	-	2	-	2	1	1	6	73	-	19	71	Inverness
Leeds	5	46	26	42	20	-	139	61	6	17	6	17	22	-	68	69	-	207	64	Leeds
Leicester	-	13	13	11	9	-	46	61	2	1	2	6	6	-	17	69	-	63	65	Leicester
Liverpool (Fazackerley)	1	14	15	15	11	-	56	64	3	9	5	4	6	-	27	59	-	83	63	Liverpool (Fazackerley)
London (Charing Cross)	-	14	4	10	9	-	37	65	-	3	2	2	7	-	14	75	-	51	68	London (Charing Cross)
London (Harold Wood)	11	62	42	62	54	-	231	65	2	15	7	23	35	-	82	73	-	313	67	London (Harold Wood)
London (Kings)	2	37	13	21	8	-	81	55	7	24	9	15	23	-	78	64	-	159	60	London (Kings)
London (Roehampton)	6	55	20	33	30	-	144	59	4	13	9	13	29	-	68	70	-	212	64	London (Roehampton)
London (Stanmore)	4	48	17	30	34	-	133	64	5	14	6	11	30	-	66	71	-	199	67	London (Stanmore)
Luton & Dunstable	2	13	11	31	16	-	73	69	-	3	4	13	22	-	42	76	-	115	71	Luton & Dunstable
Manchester	10	58	43	69	61	-	241	..	3	21	16	30	53	-	123	..	-	364	..	Manchester
Newcastle	9	30	39	50	44	-	172	67	5	8	5	13	16	-	47	68	1	220	67	Newcastle
Northampton	-	12	11	14	21	-	58	69	-	5	1	8	10	-	24	73	-	82	71	Northampton
Norwich	1	20	19	16	31	-	87	67	-	9	3	10	21	-	43	73	-	130	70	Norwich
Nottingham	4	37	30	39	23	-	133	63	4	8	10	13	24	-	59	72	-	192	66	Nottingham
Oxford	3	21	21	32	30	-	107	67	3	15	5	16	26	-	65	73	-	172	70	Oxford
Plymouth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	161	161	..	Plymouth
Portsmouth	1	23	12	37	28	-	101	68	2	12	6	8	23	-	51	72	-	152	70	Portsmouth
Preston	1	33	25	36	25	2	122	65	-	12	8	14	16	1	51	71	-	173	66	Preston
Ringwood	1	19	13	19	12	-	64	64	4	6	5	6	12	-	33	66	-	97	65	Ringwood
Sheffield	7	36	26	43	43	-	155	66	2	16	11	25	31	-	85	71	-	240	68	Sheffield
Stoke	-	12	15	38	32	-	97	70	1	7	11	6	17	-	42	67	-	139	70	Stoke
Wirral	4	21	14	40	23	-	102	69	1	11	9	14	21	1	57	71	-	159	69	Wirral
Wolverhampton	-	12	6	26	22	-	66	70	-	7	2	11	21	-	41	75	-	107	71	Wolverhampton
<b>All centres</b>	<b>108</b>	<b>948</b>	<b>687</b>	<b>1 102</b>	<b>958</b>	<b>12</b>	<b>3 815</b>	<b>66</b>	<b>74</b>	<b>358</b>	<b>217</b>	<b>484</b>	<b>719</b>	<b>6</b>	<b>1 858</b>	<b>71</b>	<b>223</b>	<b>5 896</b>	<b>68</b>	<b>All centres</b>

1 Excludes Plymouth and Manchester as individual dates of birth were not available.  
.. Not available.



**Level of amputation**

Of the 5010 patients (5896 less 886) whose amputation level was recorded, more than nine out of ten (91.5%) were referred following a lower limb amputation. Isolated upper limb amputation accounted for around 5 per cent and congenital absence accounted for 3.3 per cent of referrals where the level was recorded.

Within the separate patient types of upper and lower amputees, partial hand amputations (26.5%) are relatively more common than partial foot amputation (0.6%). By contrast, digital amputation in the hand and foot show similar incidences (2.4%, and 2.3% respectively). It is important to note that in 1997/98 there were fairly large numbers of cases in which no amputation level was identified to the UK database (886/5896, 15%).

**Table 3 Level of amputation and congenital absence ; by prosthetic service centre : 1997/98**

Prosthetic Service Centre	Upper Limb Amputations <sup>1</sup>										Lower Limb Amputations <sup>2</sup>										Miscellaneous Amputations <sup>3</sup>				Total	Prosthetic Service Centre	
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	Total	Hemi pelvec-tomy	Hip disarticulation	Trans-femoral	Knee disarticulation	Trans-tibial	Ankle disarticulation	Partial foot	Digits	Double lower amp.	Total	Cross-site amp.	Quad-ruple amp.	Con-genital absence	No level			Total
Aberdeen	-	-	1	-	1	-	-	2	-	4	-	-	12	-	32	-	-	-	2	46	-	-	3	-	3	53	Aberdeen
Belfast	-	-	3	-	4	-	1	-	-	8	-	1	52	1	70	2	3	-	5	134	-	-	5	1	6	148	Belfast
Birmingham	2	1	4	2	7	-	14	-	2	32	2	1	168	7	148	3	-	13	25	367	1	-	-	14	15	414	Birmingham
Brighton	-	-	1	-	3	-	-	-	-	4	-	2	57	-	72	-	1	1	-	133	-	-	-	4	4	141	Brighton
Bristol	-	-	2	-	-	1	1	-	-	4	1	-	45	6	78	1	-	-	8	139	-	-	10	-	10	153	Bristol
Cambridge	-	1	2	-	1	-	1	-	-	5	-	1	30	-	73	-	1	-	3	108	-	-	9	2	11	124	Cambridge
Carlisle	1	-	-	-	-	-	-	-	-	1	-	2	8	-	29	-	-	-	1	40	-	-	-	-	-	41	Carlisle
Cleveland	-	-	3	-	1	-	1	-	-	5	-	-	48	5	59	1	-	-	5	118	-	-	2	-	2	125	Cleveland
Derby	-	-	-	-	-	-	-	-	-	-	2	-	24	27	35	2	2	-	-	92	-	-	9	14	23	115	Derby
Dundee	-	-	-	-	-	-	-	-	-	-	-	1	29	-	59	-	1	-	6	96	-	-	-	-	-	96	Dundee
Edinburgh	-	-	1	-	-	-	-	-	-	1	1	-	17	3	37	1	-	-	1	60	-	-	-	-	-	61	Edinburgh
Exeter	1	1	3	-	1	-	-	1	-	7	-	-	48	3	64	1	-	-	5	121	-	-	5	2	7	135	Exeter
Gillingham	-	-	1	-	2	-	2	-	-	5	-	-	65	2	77	3	-	9	12	168	1	-	10	1	12	185	Gillingham
Glasgow (Strathclyde University)	-	-	-	-	1	-	-	-	-	1	-	-	17	1	19	-	1	-	3	42	-	-	5	-	5	48	Glasgow (Strathclyde University)
Glasgow (Westmarc)	-	-	-	1	1	-	-	-	-	2	-	-	53	-	106	-	-	-	4	163	-	-	2	-	2	167	Glasgow (Westmarc)
Hull	-	-	1	-	1	-	2	-	-	4	-	-	28	3	44	1	-	-	1	77	-	-	-	-	-	81	Hull
Inverness	-	-	-	-	-	-	-	-	-	-	-	1	2	-	15	1	-	-	-	19	-	-	-	-	-	19	Inverness
Leeds	3	-	-	1	5	-	4	-	-	13	1	-	85	1	79	-	4	1	11	182	-	-	12	-	12	207	Leeds
Leicester	-	1	-	-	2	-	1	-	-	4	-	-	23	-	32	-	-	-	1	56	-	-	3	-	3	63	Leicester
Liverpool (Fazackerley)	1	-	1	-	1	-	1	-	-	4	-	-	35	1	38	-	2	-	-	76	-	-	3	-	3	83	Liverpool (Fazackerley)
London (Charing Cross)	-	-	-	-	-	-	-	-	-	-	-	-	15	-	33	-	-	2	1	51	-	-	-	-	-	51	London (Charing Cross)
London (Harold Wood)	2	-	8	-	4	1	3	-	-	18	1	1	121	14	141	2	3	2	-	285	-	-	10	-	10	313	London (Harold Wood)
London (Kings)	2	1	-	1	12	-	7	-	-	23	-	2	55	2	58	-	6	-	-	123	-	-	8	5	13	159	London (Kings)
London (Roehampton)	-	-	4	-	5	1	1	-	2	13	-	3	73	1	90	4	1	-	11	183	-	-	15	1	16	212	London (Roehampton)
London (Stanmore)	9	-	-	-	-	-	6	-	1	16	-	-	-	-	-	-	-	70	12	82	-	-	17	84	101	199	London (Stanmore)
Luton & Dunstable	-	-	-	-	-	-	-	-	-	-	-	1	43	1	59	-	1	2	6	113	-	-	2	-	2	115	Luton & Dunstable
Manchester	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	364	364	364	Manchester
Newcastle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220	220	220	Newcastle
Northampton	-	1	-	-	-	-	-	-	-	1	-	-	46	3	27	-	-	1	3	80	-	-	1	-	1	82	Northampton
Norwich	-	-	2	-	1	-	1	-	-	4	-	1	31	-	85	-	-	-	4	121	1	-	3	1	5	130	Norwich
Nottingham	-	-	6	-	4	1	-	3	-	14	-	2	49	4	115	1	-	-	4	175	-	-	3	-	3	192	Nottingham
Oxford	-	-	2	-	1	-	5	-	-	8	1	1	51	5	79	2	-	4	7	150	1	1	12	-	14	172	Oxford
Plymouth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161	161	161	Plymouth
Portsmouth	-	-	2	-	2	-	5	-	-	9	1	3	37	12	74	-	-	-	6	133	1	-	4	5	10	152	Portsmouth
Preston	-	1	7	-	8	-	4	-	-	20	-	1	75	2	64	-	1	-	6	149	-	-	-	4	4	173	Preston
Ringwood	-	-	-	-	1	-	-	-	-	1	1	2	32	4	46	1	2	-	2	90	-	-	4	2	6	97	Ringwood
Sheffield	-	-	3	-	3	-	2	-	-	8	-	1	100	13	109	1	1	-	-	225	-	-	7	-	7	240	Sheffield
Stoke	-	1	-	-	-	-	3	-	-	4	-	-	47	3	73	-	-	10	134	-	-	1	-	1	1	139	Stoke
Wirral	1	-	4	-	2	1	2	-	-	10	-	-	84	3	51	1	-	-	7	146	-	-	2	1	3	159	Wirral
Wolverhampton	-	-	-	-	-	-	-	-	-	-	-	-	51	1	49	-	-	1	5	107	-	-	-	-	-	107	Wolverhampton
<b>All centres</b>	<b>22</b>	<b>8</b>	<b>61</b>	<b>5</b>	<b>74</b>	<b>5</b>	<b>67</b>	<b>6</b>	<b>5</b>	<b>253</b>	<b>11</b>	<b>28</b>	<b>1 756</b>	<b>128</b>	<b>2 319</b>	<b>28</b>	<b>30</b>	<b>107</b>	<b>177</b>	<b>4 584</b>	<b>5</b>	<b>1</b>	<b>167</b>	<b>886</b>	<b>1 059</b>	<b>5 896</b>	<b>All centres</b>

1 See also the Upper Limb Amputation tables on pages 14-17 for additional details.  
 2 See also the Lower Limb Amputation tables on pages 20-23 for additional details.  
 3 See also the Miscellaneous Group of Amputation tables on pages 26-31 for additional details on complex amputations and congenital absence.

# UPPER LIMB AMPUTATIONS

## Level of amputation by centre

In table 4 below, the numbers of referrals to each centre (shown in table 3) are expressed as a percentage according to level of amputation. It is important to note that for some centres the total number of upper limb amputee referral is very small and care should be taken when making comparisons between centres. The more unusual levels of upper limb amputation tend to be referred to centres with special interests.

**Table 4** Level of amputation<sup>1</sup> as a percentage of total number; by prosthetic service centre : 1997/98

Prosthetic Service Centre	Level of amputation									Total no. (=100%)
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	
	Row percentages									
Aberdeen	0	0	25	0	25	0	0	50	0	4
Belfast	0	0	38	0	50	0	13	0	0	8
Birmingham	6	3	13	6	22	0	44	0	6	32
Brighton	0	0	25	0	75	0	0	0	0	4
Bristol	0	0	50	0	0	25	25	0	0	4
Cambridge	0	20	40	0	20	0	20	0	0	5
Carlisle	100	0	0	0	0	0	0	0	0	1
Cleveland	0	0	60	0	20	0	20	0	0	5
Edinburgh	0	0	100	0	0	0	0	0	0	1
Exeter	14	14	43	0	14	0	0	14	0	7
Gillingham	0	0	20	0	40	0	40	0	0	5
Glasgow <sup>(Strathclyde University)</sup>	0	0	0	0	100	0	0	0	0	1
Glasgow <sup>(Westmarc)</sup>	0	0	0	50	50	0	0	0	0	2
Hull	0	0	25	0	25	0	50	0	0	4
Leeds	23	0	0	8	38	0	31	0	0	13
Leicester	0	25	0	0	50	0	25	0	0	4
Liverpool <sup>(Fazackerley)</sup>	25	0	25	0	25	0	25	0	0	4
London <sup>(Harold Wood)</sup>	11	0	44	0	22	6	17	0	0	18
London <sup>(Kings)</sup>	9	4	0	4	52	0	30	0	0	23
London <sup>(Roehampton)</sup>	0	0	31	0	38	8	8	0	15	13
London <sup>(Stanmore)</sup>	56	0	0	0	0	0	38	0	6	16
Northampton	0	100	0	0	0	0	0	0	0	1
Norwich	0	0	50	0	25	0	25	0	0	4
Nottingham	0	0	43	0	29	7	0	21	0	14
Oxford	0	0	25	0	13	0	63	0	0	8
Portsmouth	0	0	22	0	22	0	56	0	0	9
Preston	0	5	35	0	40	0	20	0	0	20
Ringwood	0	0	0	0	100	0	0	0	0	1
Sheffield	0	0	38	0	38	0	25	0	0	8
Stoke	0	25	0	0	0	0	75	0	0	4
Wirral	10	0	40	0	20	10	20	0	0	10
<b>All centres : %</b>	<b>9</b>	<b>3</b>	<b>24</b>	<b>2</b>	<b>29</b>	<b>2</b>	<b>26</b>	<b>2</b>	<b>2</b>	
<b>All centres : total no.</b>	<b>22</b>	<b>8</b>	<b>61</b>	<b>5</b>	<b>74</b>	<b>5</b>	<b>67</b>	<b>6</b>	<b>5</b>	<b>253</b>

<sup>1</sup> Excludes congenital absence cases.

- Not applicable.

.. Not available

Level of amputation by gender

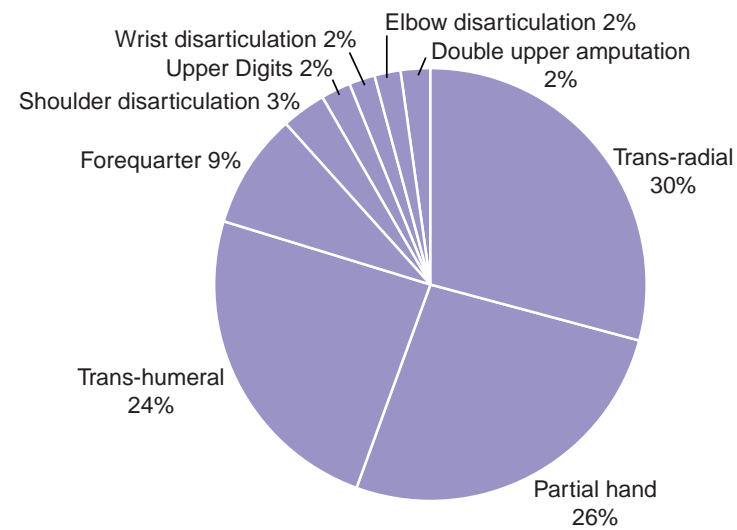
Nearly three quarters of upper limb amputee referrals occur in the 16-64 age range (73.5%) and the majority of these are male (71.5%). The three most common levels of upper limb amputation, trans-humeral, trans-radial and partial hand levels, together account for four in every five of these referrals.

**Table 5** Level of amputation <sup>1</sup> ; by gender and age : 1997/98

Level of amputation	Males						All ages	Females						All ages	Not Specified	Total
	less than 16	16-54	55-64	65-74	75 and over	No age given		less than 16	16-54	55-64	65-74	75 and over	No age given			
Forequarter	1	8	1	3	2	-	15	-	1	1	3	2	-	7	-	22
Shoulder disarticulation	-	1	2	1	-	-	4	-	2	-	1	1	-	4	-	8
Trans-humeral	1	29	8	5	2	-	45	-	9	-	4	3	-	16	-	61
Elbow disarticulation	-	-	2	2	-	-	4	-	1	-	-	-	-	1	-	5
Trans-radial	3	36	4	4	6	-	53	3	12	-	2	4	-	21	-	74
Wrist disarticulation	1	2	-	1	-	-	4	-	1	-	-	-	-	1	-	5
Partial hand	3	32	3	1	2	-	41	1	17	5	1	2	-	26	-	67
Upper Digits	1	2	1	-	-	-	4	-	1	1	-	-	-	2	-	6
Double upper amputation	-	2	-	-	-	-	2	1	1	1	-	-	-	3	-	5
<b>All upper limb amputations</b>	<b>10</b>	<b>112</b>	<b>21</b>	<b>17</b>	<b>12</b>	<b>-</b>	<b>172</b>	<b>5</b>	<b>45</b>	<b>8</b>	<b>11</b>	<b>12</b>	<b>-</b>	<b>81</b>	<b>-</b>	<b>253</b>

<sup>1</sup> Excludes congenital absence cases.

**Chart 2** Level of amputation : 1997/98



## Cause and level

Of the 166 (65.6% of the total) referrals where a cause of limb loss was reported, trauma accounted for 56 per cent and neoplasia for 15.7 per cent.

It should be noted that the completeness of cause of amputation data was relatively poor, no cause being provided in 34.4 per cent of cases and 'other causes' given for 13.4 per cent. Although it is possible for centres to provide more detailed information on the cause of amputation, in the majority of trauma cases (59.1%) no additional detail was provided.

**Table 6** Level of amputation <sup>1</sup> ; by cause of amputation : 1997/98

Cause of amputation	Level of amputation									Total
	Fore-quarter	Shoulder disarticulation	Trans-humeral	Elbow disarticulation	Trans-radial	Wrist disarticulation	Partial hand	Digits	Double upper amp.	
<b>Trauma</b>	<b>3</b>	-	<b>23</b>	<b>1</b>	<b>25</b>	<b>2</b>	<b>34</b>	<b>3</b>	<b>2</b>	<b>93</b>
No Additional Detail	-	-	17	-	12	1	21	3	1	55
Mechanical	1	-	3	-	3	-	7	-	1	15
Electrical	2	-	3	-	8	1	6	-	-	20
Thermal	-	-	-	-	1	-	-	-	-	1
Chemical	-	-	-	1	1	-	-	-	-	2
<b>Dysvascularity</b>	<b>1</b>	-	<b>2</b>	-	<b>5</b>	-	-	-	-	<b>8</b>
No Additional Detail	1	-	2	-	3	-	-	-	-	6
Endovascular Chemical Trauma	-	-	-	-	1	-	-	-	-	1
Venous Disease	-	-	-	-	1	-	-	-	-	1
<b>Infection</b>	-	-	<b>3</b>	-	<b>1</b>	-	-	-	-	<b>4</b>
No Additional Detail	-	-	-	-	1	-	-	-	-	1
Chronic	-	-	3	-	-	-	-	-	-	3
<b>Neurological Disorder</b>	-	-	-	<b>1</b>	-	-	-	-	-	<b>1</b>
Poliomyelitis	-	-	-	1	-	-	-	-	-	1
<b>Neoplasia</b>	<b>9</b>	<b>4</b>	<b>7</b>	-	<b>4</b>	-	<b>1</b>	<b>1</b>	-	<b>26</b>
No Additional Detail	2	3	4	-	1	-	-	-	-	10
Malignant - Primary	7	1	3	-	3	-	1	1	-	16
<b>Other</b>	<b>6</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>9</b>	<b>1</b>	<b>9</b>	<b>1</b>	-	<b>34</b>
<b>No Cause Provided</b>	<b>3</b>	<b>3</b>	<b>20</b>	<b>2</b>	<b>30</b>	<b>2</b>	<b>23</b>	<b>1</b>	<b>3</b>	<b>87</b>
<b>All causes</b>	<b>22</b>	<b>8</b>	<b>61</b>	<b>5</b>	<b>74</b>	<b>5</b>	<b>67</b>	<b>6</b>	<b>5</b>	<b>253</b>

<sup>1</sup> Excludes congenital absence cases.

Cause and age

Amongst the younger population (16-54) trauma was the most common cause of limb loss accounting for about three quarters of all upper limb cases where the cause of amputation was provided. Although spread across all age categories, the referral incidence as a result of neoplasia is particularly marked in the 65-74 age band accounting for nine of the twenty-eight cases. As a consequence of incomplete or partly specified data, referred to earlier in the text with table 6, the figures can be indicative only.

Table 7 Cause of amputation<sup>1</sup>; by age : 1997/98

Cause of amputation	Age Group					No age given	Total
	less than 16	16-54	55-64	65-74	75 and over		
<b>Trauma</b>	<b>2</b>	<b>70</b>	<b>6</b>	<b>5</b>	<b>10</b>	-	<b>93</b>
No Additional Detail	-	40	3	5	7	-	55
Mechanical	1	12	1	-	1	-	15
Electrical	1	17	1	-	1	-	20
Thermal	-	-	-	-	1	-	1
Chemical	-	1	1	-	-	-	2
<b>Dysvascularity</b>	-	<b>4</b>	<b>2</b>	-	<b>2</b>	-	<b>8</b>
No Additional Detail	-	3	2	-	1	-	6
Endovascular Chemical Trauma	-	1	-	-	-	-	1
Venous Disease	-	-	-	-	1	-	1
<b>Infection</b>	<b>1</b>	<b>2</b>	-	-	<b>1</b>	-	<b>4</b>
No Additional Detail	-	1	-	-	-	-	1
Chronic	1	1	-	-	1	-	3
<b>Neurological Disorder</b>	-	-	-	<b>1</b>	-	-	<b>1</b>
Poliomyelitis	-	-	-	1	-	-	1
<b>Neoplasia</b>	<b>1</b>	<b>9</b>	<b>3</b>	<b>9</b>	<b>4</b>	-	<b>26</b>
No Additional Detail	-	5	1	4	-	-	10
Malignant - Primary	1	4	2	5	4	-	16
<b>Other</b>	<b>4</b>	<b>20</b>	<b>3</b>	<b>5</b>	<b>2</b>	-	<b>34</b>
<b>No Cause Provided</b>	<b>7</b>	<b>52</b>	<b>15</b>	<b>8</b>	<b>5</b>	-	<b>87</b>
<b>All causes</b>	<b>15</b>	<b>157</b>	<b>29</b>	<b>28</b>	<b>24</b>	-	<b>253</b>

1 Excludes congenital absence cases

Chart 3a Cause of amputation : 1997/98 including 'No cause provided'

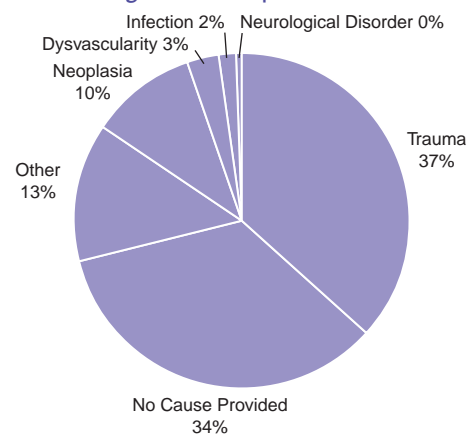
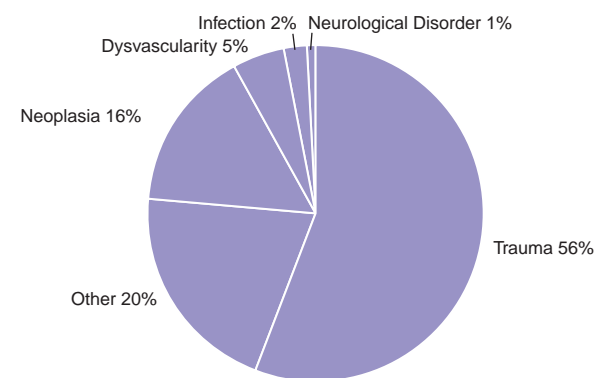


Chart 3b Cause of amputation : 1997/98 excluding 'No cause provided'



# LOWER LIMB AMPUTATIONS

## Level of amputation by centre

Just over half of amputees presented with trans-tibial amputations; trans-femoral amputations accounted for just over one third of the total. There is substantial local variation in trans-tibial and trans-femoral (TT:TF) proportions: at Carlisle the TT:TF ratio is 73%:20%, at Norwich 70%:26% and in contrast at Northampton 34%:58%. Note that Derby has by far the highest proportion of knee disarticulation amputations referred, at 29 per cent, compared to the UK average of 3 per cent. Other amputation levels were relatively uncommon.

**Table 8** Level of amputation<sup>1</sup> as a percentage of total number; by prosthetic service centre : 1997/98

Prosthetic Service Centre	Level of amputation									Total no. (=100%)
	Hemi pelvectomy	Hip disarticulation	Trans-femoral	Knee disarticulation	Trans-tibial	Ankle disarticulation	Partial foot	Digits	Double lower amp.	
	Row percentages									
Aberdeen	0	0	26	0	70	0	0	0	4	46
Belfast	0	1	39	1	52	1	2	0	4	134
Birmingham	1	0	46	2	40	1	0	4	7	367
Brighton	0	2	43	0	54	0	1	1	0	133
Bristol	1	0	32	4	56	1	0	0	6	139
Cambridge	0	1	28	0	68	0	1	0	3	108
Carlisle	0	5	20	0	73	0	0	0	3	40
Cleveland	0	0	41	4	50	1	0	0	4	118
Derby	2	0	26	29	38	2	2	0	0	92
Dundee	0	1	30	0	61	0	1	0	6	96
Edinburgh	2	0	28	5	62	2	0	0	2	60
Exeter	0	0	40	2	53	1	0	0	4	121
Gillingham	0	0	39	1	46	2	0	5	7	168
Glasgow <sup>(Strathclyde University)</sup>	0	2	40	2	45	0	2	0	7	42
Glasgow <sup>(Westmarc)</sup>	0	0	33	0	65	0	0	0	2	163
Hull	0	0	36	4	57	1	0	0	1	77
Inverness	0	5	11	0	79	5	0	0	0	19
Leeds	1	0	47	1	43	0	2	1	6	182
Leicester	0	0	41	0	57	0	0	0	2	56
Liverpool <sup>(Fazackerley)</sup>	0	0	46	1	50	0	3	0	0	76
London <sup>(Charing Cross)</sup>	0	0	29	0	65	0	0	4	2	51
London <sup>(Harold Wood)</sup>	0	0	42	5	49	1	1	1	0	285
London <sup>(Kings)</sup>	0	2	45	2	47	0	5	0	0	123
London <sup>(Roehampton)</sup>	0	2	40	1	49	2	1	0	6	183
London <sup>(Slanmore)</sup>	0	0	0	0	0	0	0	85	15	82
Luton & Dunstable	0	1	38	1	52	0	1	2	5	113
Newcastle	..	..	..	..	..	..	..	..	..	..
Northampton	0	0	58	4	34	0	0	1	4	80
Norwich	0	1	26	0	70	0	0	0	3	121
Nottingham	0	1	28	2	66	1	0	0	2	175
Oxford	1	1	34	3	53	1	0	3	5	150
Portsmouth	1	2	28	9	56	0	0	0	5	133
Preston	0	1	50	1	43	0	1	0	4	149
Ringwood	1	2	36	4	51	1	2	0	2	90
Sheffield	0	0	44	6	48	0	0	0	0	225
Stoke	0	0	35	2	54	0	0	1	7	134
Wirral	0	0	58	2	35	1	0	0	5	146
Wolverhampton	0	0	48	1	46	0	0	1	5	107
<b>All centres : %</b>	<b>0</b>	<b>1</b>	<b>38</b>	<b>3</b>	<b>51</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	
<b>All centres : total no.</b>	<b>11</b>	<b>28</b>	<b>1 756</b>	<b>128</b>	<b>2 319</b>	<b>28</b>	<b>30</b>	<b>107</b>	<b>177</b>	<b>4 584</b>

<sup>1</sup> Excludes congenital absence cases.

- Not applicable.

.. Not available

Level of amputation by gender

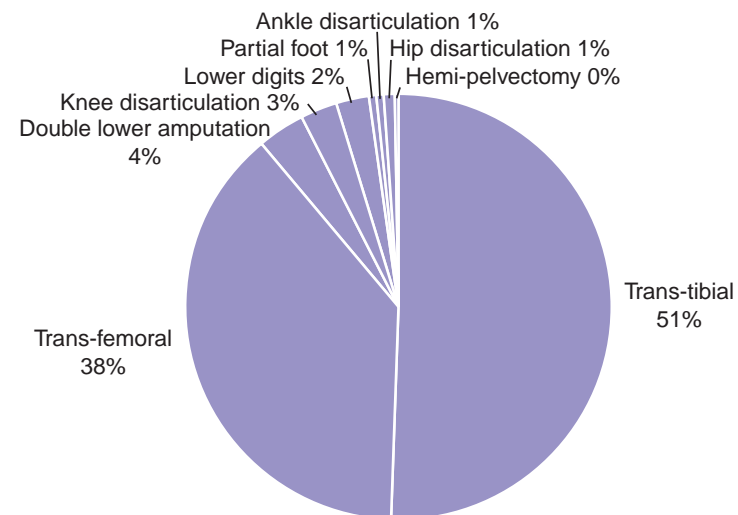
Two thirds of lower limb amputees referred in 1997/98 were male (66.6%). Just over half of all amputations in males were at the trans-tibial level with a slightly lower proportion in females; the great majority of the remaining amputations were at the trans-femoral level (36.4% males and 42.2% females). There is no evidence from these referral data of a trend towards a greater incidence of trans-femoral amputation with increasing age.

Table 9 Level of amputation<sup>1</sup>; by gender and age : 1997/98

Level of amputation	Males						Females						Not Specified	Total		
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	less than 16	16-54	55-64	65-74	75 and over			No age given	All ages
Hemi-pelvectomy	1	3	1	1	-	-	6	-	2	-	3	-	-	5	-	11
Hip disarticulation	1	8	3	6	-	-	18	-	8	1	1	-	-	10	-	28
Trans-femoral	3	213	201	369	320	4	1 110	5	61	63	207	287	1	624	22	1 756
Knee disarticulation	2	15	10	14	26	-	67	3	10	2	11	29	-	55	6	128
Trans-tibial	10	370	312	486	426	8	1 612	4	121	102	175	274	4	680	27	2 319
Ankle disarticulation	1	12	1	3	2	-	19	1	4	-	1	2	-	8	1	28
Partial foot	1	10	4	4	-	-	19	1	6	1	2	1	-	11	-	30
Lower digits	1	26	17	21	13	-	78	-	3	7	4	15	-	29	-	107
Double lower amputation	3	26	20	42	31	-	122	3	16	9	16	11	-	55	-	177
<b>All lower limb amputations</b>	<b>23</b>	<b>683</b>	<b>569</b>	<b>946</b>	<b>818</b>	<b>12</b>	<b>3 051</b>	<b>17</b>	<b>231</b>	<b>185</b>	<b>420</b>	<b>619</b>	<b>5</b>	<b>1 477</b>	<b>56</b>	<b>4 584</b>

1 Excludes cases of congenital absence.

Chart 4 Level of amputation : 1997/98



**Cause and level**

The preponderance of dysvascularity as a cause of amputation is evident, accounting for 48.8 per cent of all amputations; trauma accounts for only 7.2 per cent. Infection, neurological disorders and neoplasia account for most of the other causes of amputation. Although the aim is to collect as much detail as possible on the cause of amputation, only the most basic level of detail was provided in 1997/98 in over 40 per cent of dysvascularity cases, and in over half of trauma cases. There appears to be some difficulty when allocating a patient within the diagnostic groups as they are presently specified and review of the diagnostic sub-groups may be necessary. Note that limb loss from complications of diabetic neuropathy are currently listed as a subgroup under neurological disorders. No cause of amputation was reported in over one quarter of cases (1192/4584).

**Table 10** Level of amputation<sup>1</sup>; by cause of amputation : 1997/98

Cause of amputation	Level of amputation									Total
	Hemi pelvectomy	Hip disarticulation	Trans-femoral	Knee disarticulation	Trans-tibial	Ankle disarticulation	Partial foot	Digits	Double lower amp.	
<b>Trauma</b>	-	<b>3</b>	<b>106</b>	<b>10</b>	<b>178</b>	<b>6</b>	<b>5</b>	<b>10</b>	<b>11</b>	<b>329</b>
No Additional Detail	-	1	51	7	99	2	2	2	5	169
Mechanical	-	2	26	2	51	1	1	8	4	95
Electrical	-	-	27	-	25	1	1	-	1	55
Thermal	-	-	1	-	1	1	-	-	1	4
Chemical	-	-	1	1	2	1	1	-	-	6
<b>Dysvascularity</b>	<b>1</b>	<b>4</b>	<b>848</b>	<b>62</b>	<b>1 182</b>	<b>4</b>	<b>13</b>	<b>46</b>	<b>78</b>	<b>2 238</b>
No Additional Detail	1	-	372	31	494	1	5	3	26	933
Diabetes Mellitus	-	1	142	13	380	1	5	13	17	572
Non-diabetic Arteriosclerosis	-	3	219	15	194	2	2	26	17	478
Embolism	-	-	9	1	11	-	1	-	1	23
Vasospastic Conditions	-	-	1	-	3	-	-	-	-	4
Disseminated Intravascular Coagulation	-	-	1	-	-	-	-	2	1	4
Buerger's Disease	-	-	4	-	4	-	-	-	2	10
Iatrogenic Vascular Trauma	-	-	2	-	2	-	-	-	-	4
Arteritis	-	-	3	-	1	-	-	-	1	5
Venous Disease	-	-	95	2	93	-	-	2	13	205
<b>Infection</b>	-	-	<b>57</b>	<b>3</b>	<b>63</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>8</b>	<b>141</b>
No Additional Detail	-	-	21	2	25	1	-	1	-	50
Acute	-	-	10	1	7	-	1	4	5	28
Chronic	-	-	26	-	31	-	-	3	3	63
<b>Neurological Disorder</b>	-	-	<b>35</b>	-	<b>96</b>	<b>1</b>	<b>1</b>	<b>15</b>	<b>6</b>	<b>154</b>
No Additional Detail	-	-	20	-	40	-	1	13	4	78
Diabetic Neuropathy	-	-	13	-	50	1	-	1	1	66
Infective	-	-	-	-	4	-	-	-	-	4
Spina Bifida	-	-	-	-	1	-	-	1	1	3
Poliomyelitis	-	-	1	-	1	-	-	-	-	2
Peripheral Nerve Injury	-	-	1	-	-	-	-	-	-	1
<b>Neoplasia</b>	<b>3</b>	<b>12</b>	<b>55</b>	<b>2</b>	<b>39</b>	<b>2</b>	<b>3</b>	<b>7</b>	-	<b>123</b>
No Additional Detail	1	5	27	2	16	2	1	-	-	54
Benign	-	-	-	-	-	-	1	-	-	1
Malignant - Primary	2	7	25	-	22	-	1	6	-	63
Malignant - Secondary	-	-	3	-	1	-	-	1	-	5
<b>Other</b>	<b>1</b>	<b>4</b>	<b>140</b>	<b>18</b>	<b>215</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>15</b>	<b>407</b>
<b>No Cause Provided</b>	<b>6</b>	<b>5</b>	<b>515</b>	<b>33</b>	<b>546</b>	<b>8</b>	<b>5</b>	<b>15</b>	<b>59</b>	<b>1 192</b>
<b>All causes</b>	<b>11</b>	<b>28</b>	<b>1 756</b>	<b>128</b>	<b>2 319</b>	<b>28</b>	<b>30</b>	<b>107</b>	<b>177</b>	<b>4 584</b>

<sup>1</sup> Excludes congenital absence cases.

Cause and age

The majority of amputations that occur as a result of trauma are in the relatively young (<55, 61.4%). The figures also demonstrate the strong association between dysvascularity as a cause of limb loss, and increasing age.

Table 11 Cause of amputation<sup>1</sup>; by age: 1997/98

Cause of amputation	Age Group						Total
	less than 16	16-54	55-64	65-74	75 and over	No age given	
<b>Trauma</b>	<b>4</b>	<b>202</b>	<b>42</b>	<b>41</b>	<b>37</b>	<b>3</b>	<b>329</b>
No Additional Detail	-	97	24	21	24	3	169
Mechanical	1	60	13	13	8	-	95
Electrical	2	39	5	6	3	-	55
Thermal	-	2	-	1	1	-	4
Chemical	1	4	-	-	1	-	6
<b>Dysvascularity</b>	<b>3</b>	<b>259</b>	<b>387</b>	<b>744</b>	<b>826</b>	<b>19</b>	<b>2 238</b>
No Additional Detail	3	98	171	301	346	14	933
Diabetes Mellitus	-	77	113	205	172	5	572
Non-diabetic Arteriosclerosis	-	46	69	154	209	-	478
Embolism	-	4	1	8	10	-	23
Vasospastic Conditions	-	-	-	2	2	-	4
Disseminated Intravascular Coagulation	-	1	-	1	2	-	4
Buerger's Disease	-	6	1	3	-	-	10
Iatrogenic Vascular Trauma	-	2	-	-	2	-	4
Arteritis	-	-	2	-	3	-	5
Venous Disease	-	25	30	70	80	-	205
<b>Infection</b>	<b>4</b>	<b>33</b>	<b>26</b>	<b>40</b>	<b>38</b>	<b>-</b>	<b>141</b>
No Additional Detail	-	15	9	14	12	-	50
Acute	4	5	9	6	4	-	28
Chronic	-	13	8	20	22	-	63
<b>Neurological Disorder</b>	<b>-</b>	<b>22</b>	<b>32</b>	<b>58</b>	<b>41</b>	<b>1</b>	<b>154</b>
No Additional Detail	-	8	17	34	19	-	78
Diabetic Neuropathy	-	9	13	23	21	-	66
Infective	-	1	2	1	-	-	4
Spina Bifida	-	3	-	-	-	-	3
Poliomyelitis	-	-	-	-	1	1	2
Peripheral Nerve Injury	-	1	-	-	-	-	1
<b>Neoplasia</b>	<b>3</b>	<b>46</b>	<b>17</b>	<b>28</b>	<b>29</b>	<b>-</b>	<b>123</b>
No Additional Detail	2	22	8	9	13	-	54
Benign	-	-	1	-	-	-	1
Malignant - Primary	1	23	5	18	16	-	63
Malignant - Secondary	-	1	3	1	-	-	5
<b>Other</b>	<b>13</b>	<b>100</b>	<b>58</b>	<b>108</b>	<b>126</b>	<b>2</b>	<b>407</b>
<b>No Cause Provided</b>	<b>13</b>	<b>252</b>	<b>192</b>	<b>347</b>	<b>340</b>	<b>48</b>	<b>1 192</b>
<b>All causes</b>	<b>40</b>	<b>914</b>	<b>754</b>	<b>1 366</b>	<b>1 437</b>	<b>73</b>	<b>4 584</b>

1 Excludes congenital absence cases.  
 - Not applicable.  
 .. Not available

Chart 5a Cause of amputation: 1997/98 including 'No cause provided'

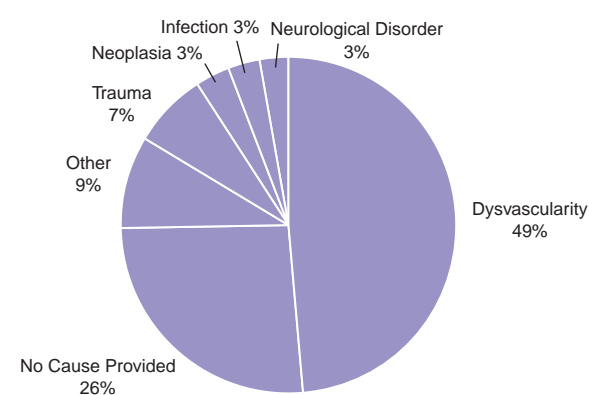
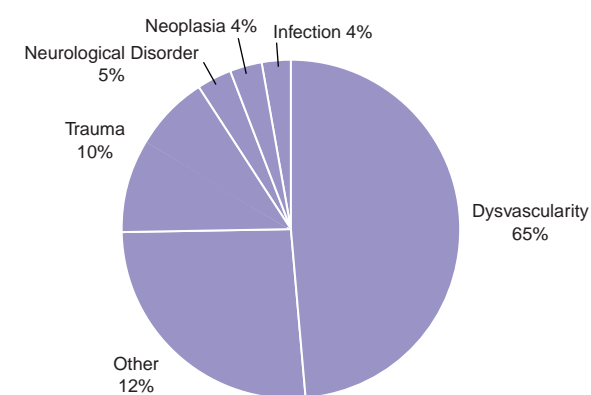


Chart 5b Cause of amputation: 1997/98 excluding 'No cause provided'



# MISCELLANEOUS

## Multiple amputations

A cross site presentation is defined as the synchronous presentation of upper and lower limb deficiencies. The numbers are small but this subgroup is important to identify since the care costs for each case can be substantial. Although it is possible for centres to provide further diagnostic information to the UK database, in only a small number of cases was the additional detail given.

**Table 12 Multiple amputation ; by prosthetic service centre, cause of amputation<sup>1</sup>, gender and age : 1997/98**

Prosthetic Service Centre	Cause of amputation	Males			Females		Total	
		16 - 54	75 and over	No age given	No age given	Total		
<b>Cross-site amputation</b>								
Birmingham	No Cause Provided	1	-	-	1	-	-	1
Gillingham	Trauma - No Additional Detail	1	-	-	1	-	-	1
Norwich	Dysvascularity - No Additional Detail	-	-	-	-	1	1	1
Oxford	Neoplasia - Malignant - Primary	-	1	-	1	-	-	1
Portsmouth	Other - No Additional Detail	-	-	-	-	1	1	1
<b>Quadruple amputation</b>								
Oxford	Infection - Acute	-	-	-	-	1	1	1
<b>Total</b>		<b>2</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>6</b>

<sup>1</sup> Excludes congenital absence cases.

## Congenital absence

Overall, males accounted for over half of new cases with congenital limb loss (54.5% for both levels). However, among patients with an upper limb congenital absence there were more women than men referred. Although patients with congenital limb loss may typically be referred at a young age a sizable proportion presented aged 16 or greater. It is interesting to note that 60.3 per cent of cases of congenital lower limb deficiency are recorded as presenting aged 16 or greater whereas the majority of cases of congenital upper limb deficiency patients presents age less than 16. The total represents on average just over four cases per centre per annum and clearly some centres receive very few new cases of congenital absence in any year.

Table 13 Congenital absence ; by prosthetic service centre, gender and age : 1997/98

Prosthetic Service Centre	Males						Females						Total		
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	less than 16	16-54	55-64	65-74	75 and over		No age given	All ages
<b>Upper limb</b>															
Aberdeen	1	-	-	-	-	-	1	-	1	-	-	-	1	2	3
Belfast	1	-	-	-	-	-	1	2	-	-	-	-	-	2	3
Bristol	3	1	-	-	-	-	4	-	1	-	-	-	-	1	5
Cambridge	-	3	-	-	-	-	3	-	1	-	-	-	-	1	4
Cleveland	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Derby	3	-	-	-	-	-	3	-	-	-	-	-	-	-	3
Exeter	-	-	-	-	-	-	-	1	-	-	1	-	-	2	2
Gillingham	2	-	-	-	-	-	2	-	1	-	-	-	-	1	3
Glasgow (Strathclyde University)	-	-	-	-	-	-	-	2	-	-	-	-	-	2	2
Glasgow (Westmarc)	-	-	1	-	-	-	1	-	-	-	1	-	-	1	2
Leeds	1	2	-	-	-	-	3	6	1	-	-	-	-	7	10
Leicester	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1
Liverpool (Fazackerley)	1	-	-	-	-	-	1	2	-	-	-	-	-	2	3
London (Harold Wood)	2	-	-	-	-	-	2	1	1	-	-	-	-	2	4
London (Kings)	-	1	-	-	-	-	1	4	-	-	-	-	-	4	5
London (Roehampton)	5	2	-	-	-	-	7	3	1	-	-	1	-	5	12
London (Stanmore)	2	1	-	-	-	-	3	5	1	-	-	-	-	6	9
Norwich	1	-	-	-	-	-	1	-	2	-	-	-	-	2	3
Nottingham	-	-	-	-	-	-	-	2	-	-	-	-	-	2	2
Oxford	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Portsmouth	-	1	-	-	-	-	1	2	-	-	-	-	-	2	3
Ringwood	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Sheffield	3	1	-	-	-	-	4	1	-	-	-	-	-	1	5
Stoke	-	-	-	-	-	-	-	1	-	-	-	-	-	1	1
Wirral	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
<b>Total</b>	<b>27</b>	<b>12</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>33</b>	<b>12</b>	<b>-</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>49</b>	<b>89</b>
<b>Lower limb</b>															
Belfast	1	-	-	-	-	-	1	-	1	-	-	-	-	1	2
Bristol	-	1	1	-	-	-	2	1	2	-	-	-	-	3	5
Cambridge	3	1	-	-	-	-	4	1	-	-	-	-	-	1	5
Cleveland	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Derby	5	-	-	-	-	-	5	-	1	-	-	-	-	1	6
Exeter	-	-	-	-	-	-	-	1	1	-	-	1	-	3	3
Gillingham	1	2	-	-	-	-	3	-	2	2	-	-	-	4	7
Glasgow (Strathclyde University)	2	-	-	-	-	-	2	-	1	-	-	-	-	1	3
Leeds	1	1	-	-	-	-	2	-	-	-	-	-	-	-	2
Leicester	-	1	-	-	-	-	1	1	-	-	-	-	-	1	2
London (Harold Wood)	5	1	-	-	-	-	6	-	-	-	-	-	-	-	6
London (Kings)	-	1	-	-	-	-	1	-	2	-	-	-	-	2	3
London (Roehampton)	-	3	-	-	-	-	3	-	-	-	-	-	-	-	3
London (Stanmore)	1	5	-	-	1	-	7	-	1	-	-	-	-	1	8
Luton & Dunstable	2	-	-	-	-	-	2	-	-	-	-	-	-	-	2
Northampton	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Nottingham	1	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Oxford	2	4	-	-	-	-	6	2	3	-	-	-	-	5	11
Portsmouth	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
Ringwood	-	2	-	1	-	-	3	-	-	-	-	-	-	-	3
Sheffield	-	1	-	-	-	-	1	-	1	-	-	-	-	1	2
Wirral	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1
<b>Total</b>	<b>25</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>51</b>	<b>6</b>	<b>18</b>	<b>2</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>27</b>	<b>78</b>
<b>All congenital absence</b>	<b>52</b>	<b>35</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>91</b>	<b>39</b>	<b>30</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>76</b>	<b>167</b>

## No level of amputation

This table identifies some of the problems with data quality with, for example, particular difficulties at London (Stanmore) and at Newcastle. This highlights the importance of due care in drawing conclusions from the figures presented in this report. Advice on specific comparisons can be sought from ISD, or directly from relevant centres.

**Table 14** Cases where no level of amputation<sup>1</sup> was provided ; by prosthetic service centre, gender and age : 1997/98

	Males						Females						Not specified	Total		
	less than 16	16-54	55-64	65-74	75 and over	No age given	All ages	less than 16	16-54	55-64	65-74	75 and over			No age given	All ages
Belfast	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Trauma - No Additional Detail	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Birmingham	4	4	1	-	-	-	9	4	1	-	-	-	-	5	-	14
Trauma - No Additional Detail	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
No Cause Provided	4	3	1	-	-	-	8	4	1	-	-	-	-	5	-	13
Brighton	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	4
No Cause Provided	-	-	-	-	-	-	-	-	2	-	-	-	-	2	2	4
Cambridge	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Trauma - No Additional Detail	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Derby	-	2	1	4	1	-	8	-	3	-	-	-	-	3	3	14
No Cause Provided	-	2	1	4	1	-	8	-	3	-	-	-	-	3	3	14
Exeter	-	1	-	-	1	-	2	-	-	-	-	-	-	-	-	2
Dysvascularity	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
- No Additional Detail	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
Other - No Additional Detail	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	1
Gillingham	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
Neoplasia - Malignant - Primary	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
London <sup>(Kings)</sup>	-	-	2	-	-	-	2	-	2	-	1	-	-	3	-	5
Trauma - Chemical	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1
Dysvascularity - Diabetes Mellitus	-	-	2	-	-	-	2	-	-	-	1	-	-	1	-	3
Other - No Additional Detail	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1
London <sup>(Roehampton)</sup>	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
Other - No Additional Detail	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
London <sup>(Stanmore)</sup>	-	15	6	14	18	-	53	-	8	-	7	16	-	31	-	84
Trauma - No Additional Detail	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Trauma - Mechanical	-	3	1	-	1	-	5	-	3	-	-	1	-	4	-	9
Dysvascularity	-	1	-	-	2	-	3	-	-	-	-	-	-	-	-	3
- No Additional Detail	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-	2
- Diabetes Mellitus	-	-	1	1	2	-	4	-	-	-	1	1	-	2	-	6
- Non-diabetic Arteriosclerosis	-	2	-	4	9	-	15	-	1	-	3	11	-	15	-	30
- Embolism	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
- Vasospastic Conditions	-	-	-	-	-	-	-	-	-	-	1	1	-	2	-	2
- Disseminated Intravascular Coagulation	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1
Infection	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	2
- Acute	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	2
- Chronic	-	-	1	1	-	-	2	-	1	-	-	1	-	2	-	4
Neurological Disorder	-	2	1	2	1	-	6	-	-	-	1	-	-	1	-	7
- No Additional Detail	-	2	1	2	1	-	6	-	-	-	1	-	-	1	-	7
Neoplasia	-	3	1	3	1	-	8	-	2	-	1	-	-	3	-	11
- Malignant - Primary	-	3	1	3	1	-	8	-	2	-	1	-	-	3	-	11
- Malignant - Secondary	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
Other - No Additional Detail	-	1	-	3	1	-	5	-	-	-	-	-	-	-	-	5
Newcastle	9	30	39	50	44	-	172	5	8	5	13	16	-	47	1	220
No Cause Provided	9	30	39	50	44	-	172	5	8	5	13	16	-	47	1	220
Norwich	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
Other - No Additional Detail	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1
Portsmouth	-	3	-	-	-	-	3	-	1	-	-	1	-	2	-	5
Other - No Additional Detail	-	3	-	-	-	-	3	-	1	-	-	1	-	2	-	5
Preston	-	-	-	1	1	-	2	-	2	-	-	-	-	2	-	4
No Cause Provided	-	-	-	1	1	-	2	-	2	-	-	-	-	2	-	4
Ringwood	-	-	1	-	-	-	1	1	-	-	-	-	-	1	-	2
No Cause Provided	-	-	1	-	-	-	1	1	-	-	-	-	-	1	-	2
Wirral	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1
No Cause Provided	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1
<b>Total</b>	<b>13</b>	<b>58</b>	<b>52</b>	<b>69</b>	<b>65</b>	<b>-</b>	<b>257</b>	<b>10</b>	<b>28</b>	<b>6</b>	<b>21</b>	<b>33</b>	<b>-</b>	<b>98</b>	<b>6</b>	<b>361</b>

<sup>1</sup> Excludes congenital absence cases.

**Time interval**

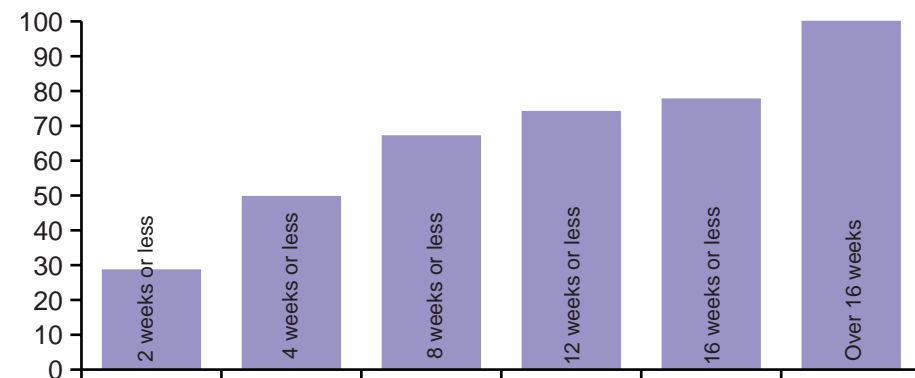
The table below illustrates the variation from centre to centre in the time interval between date of amputation and referral. Much of the local variation is accounted for by differences in surgical and physiotherapy practice, and the operational policies of centres.

**Table 15 Time interval between date of amputation and referral ; by prosthetic service centre : 1997/98 (cumulative percentage)**

Prosthetic Service Centre	Time interval <sup>1</sup>						Total no. (= 100%)	No Wait Calculated	Total
	2 weeks or less	4 weeks or less	8 weeks or less	12 weeks or less	16 weeks or less	Over 16 weeks			
	Cumulative percentages								
Aberdeen	46.9	79.6	93.9	95.9	95.9	100.0	49	4	53
Belfast	36.5	54.7	66.9	71.6	77.0	100.0	148	-	148
Birmingham	51.9	66.9	76.3	80.2	81.4	100.0	414	-	414
Brighton	2.7	28.8	60.3	74.0	78.1	100.0	73	68	141
Bristol	24.2	50.3	68.6	73.9	78.4	100.0	153	-	153
Cambridge	43.5	63.7	74.2	80.6	82.3	100.0	124	-	124
Carlisle	58.5	73.2	78.0	85.4	85.4	100.0	41	-	41
Cleveland	37.6	61.6	73.6	79.2	84.8	100.0	125	-	125
Derby	1.0	1.0	15.8	21.8	24.8	100.0	101	14	115
Dundee	46.9	71.9	80.2	85.4	88.5	100.0	96	-	96
Edinburgh	36.2	74.1	93.1	94.8	96.6	100.0	58	3	61
Exeter	43.7	60.7	70.4	74.8	77.0	100.0	135	-	135
Gillingham	32.4	43.2	57.3	65.9	72.4	100.0	185	-	185
Glasgow (Strathclyde University)	40.9	63.6	77.3	79.5	86.4	100.0	44	4	48
Glasgow (Westmarc)	38.7	63.8	87.7	93.3	94.5	100.0	163	4	167
Hull	14.8	40.7	59.3	69.1	74.1	100.0	81	-	81
Inverness	42.1	63.2	89.5	94.7	94.7	100.0	19	-	19
Leeds	2.4	11.1	42.5	64.3	72.0	100.0	207	-	207
Leicester	7.9	15.9	28.6	57.1	66.7	100.0	63	-	63
Liverpool (Fazackerley)	36.1	63.9	79.5	83.1	84.3	100.0	83	-	83
London (Charing Cross)	3.9	15.7	33.3	52.9	64.7	100.0	51	-	51
London (Harold Wood)	30.0	55.6	72.2	79.9	82.7	100.0	313	-	313
London (Kings)	25.2	47.8	59.1	64.2	64.8	100.0	159	-	159
London (Roehampton)	2.4	13.7	42.0	52.4	56.1	100.0	212	-	212
London (Stanmore)	17.1	40.2	57.8	65.3	70.9	100.0	199	-	199
Luton & Dunstable	26.1	60.0	73.9	80.0	85.2	100.0	115	-	115
Newcastle	19.5	53.2	72.7	78.6	82.3	100.0	220	-	220
Northampton	4.9	19.5	59.8	74.4	80.5	100.0	82	-	82
Norwich	8.5	37.7	63.8	70.0	74.6	100.0	130	-	130
Nottingham	26.6	50.0	70.8	76.0	78.6	100.0	192	-	192
Oxford	23.8	54.1	70.9	76.7	79.1	100.0	172	-	172
Portsmouth	25.0	52.6	69.7	75.7	82.9	100.0	152	-	152
Preston	-	-	-	-	-	-	-	173	173
Ringwood	43.3	54.6	68.0	72.2	72.2	100.0	97	-	97
Sheffield	48.8	68.3	80.4	83.3	84.6	100.0	240	-	240
Stoke	26.6	47.5	68.3	74.1	78.4	100.0	139	-	139
Wirral	50.9	70.4	81.1	82.4	82.4	100.0	159	-	159
Wolverhampton	5.6	31.8	64.5	72.9	84.1	100.0	107	-	107
<b>All centres : %</b>	<b>28.6</b>	<b>49.7</b>	<b>67.1</b>	<b>74.1</b>	<b>77.7</b>	<b>100.0</b>			
<b>All centres : total no.</b>	<b>1 459</b>	<b>1 076</b>	<b>887</b>	<b>357</b>	<b>187</b>	<b>1 135</b>	<b>5 101</b>	<b>270</b>	<b>5 371</b>

<sup>1</sup> 2 weeks or less equals 0-14 days; 4 weeks or less equals 15-28 days; etc.

**Chart 6 Percentage of time taken from amputation to date of referral : 1997/98**



### Ethnic origin

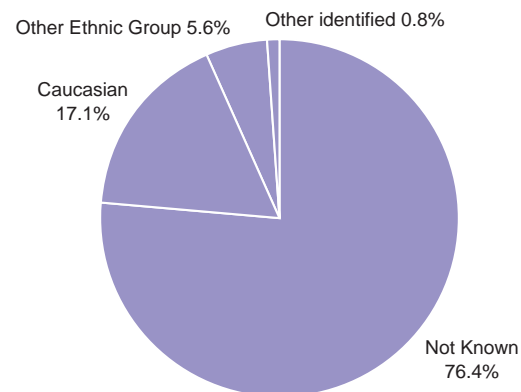
This shows the recorded ethnic mix of new patients referred to centres. Accurate data can help to ensure that amputees from ethnic minorities have access to appropriate services and prostheses. This table illustrates the need to improve the quality of this data if it is to become useful. In some cases, inability to provide the data may be a consequence of local trust policy.

**Table 16 Ethnic origin<sup>1,2</sup> ; by prosthetic service centre : 1997/98**

Prosthetic Service Centre	Ethnic Origin									Total
	Caucasian	Black Caribbean	Black African	Black other	Indian	Pakistani	Chinese	Other Ethnic Group	Not Known	
Aberdeen	-	-	-	-	-	-	-	-	53	53
Belfast	-	-	-	-	-	-	-	-	148	148
Birmingham	-	-	-	-	-	-	-	-	414	414
Brighton	102	-	-	-	-	-	-	-	39	141
Bristol	86	1	-	-	-	-	-	9	57	153
Cambridge	-	-	-	-	-	-	-	-	124	124
Carlisle	-	-	-	-	-	-	-	-	41	41
Cleveland	-	-	-	-	-	-	-	-	125	125
Derby	91	2	-	-	-	-	-	-	22	115
Dundee	-	-	-	-	-	-	-	-	96	96
Edinburgh	-	-	-	-	-	-	-	-	61	61
Exeter	135	-	-	-	-	-	-	-	-	135
Gillingham	-	-	-	-	-	-	-	-	185	185
Glasgow (Strathclyde University)	-	-	-	-	-	-	-	-	48	48
Glasgow (Westmarc)	-	-	-	-	-	-	-	-	167	167
Hull	-	-	-	-	-	-	-	-	81	81
Inverness	-	-	-	-	-	-	-	-	19	19
Leeds	-	-	-	-	-	-	-	-	207	207
Leicester	-	-	-	-	-	-	-	-	63	63
Liverpool (Fazackerley)	60	-	-	-	-	-	-	-	23	83
London (Charing Cross)	-	-	-	-	-	-	-	-	51	51
London (Harold Wood)	69	7	1	1	1	1	1	226	6	313
London (Kings)	69	14	4	1	2	1	2	66	-	159
London (Roehampton)	-	-	-	-	-	-	-	-	212	212
London (Stanmore)	-	-	-	-	1	1	-	-	197	199
Luton & Dunstable	-	-	-	-	-	-	-	-	115	115
Newcastle	206	-	-	-	3	-	-	-	11	220
Northampton	-	-	-	-	-	-	-	-	82	82
Norwich	-	-	-	-	-	-	-	-	130	130
Nottingham	-	-	-	-	-	-	-	-	192	192
Oxford	-	-	-	-	-	-	-	-	172	172
Portsmouth	51	-	-	-	-	-	-	-	101	152
Preston	-	-	-	-	-	-	-	-	173	173
Ringwood	-	-	-	-	-	-	-	-	97	97
Sheffield	-	-	-	-	-	-	-	-	240	240
Stoke	-	-	-	-	-	-	-	-	139	139
Wirral	-	-	-	-	-	-	-	-	159	159
Wolverhampton	51	1	-	-	-	-	-	-	55	107
<b>Total</b>	<b>920</b>	<b>25</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>301</b>	<b>4 105</b>	<b>5 371</b>

1 Scottish centres do not record ethnic origin.  
 2 Note that local IT systems default to other ethnic group or not known if no entry is made.

**Chart 7 Ethnic Origin**



## Ethnic origin

The real potential of these data for epidemiological purposes is weakened by the large number (76%) of cases where ethnic group was recorded as 'not known' (see footnote 2).

**Table 17 Cause of amputation (including congenital absence) ; by ethnic origin <sup>1,2</sup> : 1997/98**

	Ethnic Origin								Total	
	Caucasian	Black Caribbean	Black African	Black other	Indian	Pakistani	Chinese	Other Ethnic Group		Not Known
<b>Trauma</b>	<b>95</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>45</b>	<b>291</b>	<b>439</b>
No Additional Detail	66	-	-	-	-	-	-	-	165	231
Mechanical	2	-	-	-	1	1	-	-	115	119
Electrical	23	-	1	-	3	1	-	41	6	75
Thermal	-	-	-	-	-	-	-	-	5	5
Chemical	4	1	-	-	-	-	-	4	-	9
<b>Dysvascularity</b>	<b>402</b>	<b>19</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>150</b>	<b>1 717</b>	<b>2 294</b>
No Additional Detail	106	1	-	-	-	-	-	3	834	944
Diabetes Mellitus	145	11	1	1	-	-	2	74	347	581
Non-diabetic Arteriosclerosis	101	5	1	-	-	-	1	42	358	508
Embolism	7	-	-	-	-	-	-	3	14	24
Vasospastic Conditions	1	-	-	-	-	-	-	1	4	6
Disseminated										
Intravascular Coagulation	-	-	-	-	-	-	-	-	5	5
Endovascular Chemical Trauma	-	-	-	-	-	-	-	1	-	1
Buerger's Disease	2	-	-	-	-	-	-	3	5	10
Iatrogenic Vascular Trauma	2	-	-	-	-	-	-	-	2	4
Arteritis	-	-	-	-	-	-	-	1	4	5
Venous Disease	38	2	-	-	-	-	-	22	144	206
<b>Infection</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>26</b>	<b>105</b>	<b>152</b>
No Additional Detail	6	-	-	-	-	-	-	8	37	51
Acute	2	-	-	-	-	-	-	7	22	31
Chronic	13	-	-	-	-	-	-	11	46	70
<b>Neurological Disorder</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>159</b>	<b>162</b>
No Additional Detail	-	-	-	-	-	-	-	-	85	85
Diabetic Neuropathy	1	-	-	-	-	1	-	-	64	66
Infective <small>(inc. Leprosy, Madura Foot)</small>	-	-	-	-	-	-	-	-	4	4
Spina Bifida	-	-	-	-	-	-	-	-	3	3
Poliomyelitis	-	-	-	-	-	-	-	-	3	3
Peripheral Nerve Injury	1	-	-	-	-	-	-	-	-	1
<b>Neoplasia</b>	<b>31</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9</b>	<b>123</b>	<b>163</b>
No Additional Detail	13	-	-	-	-	-	-	-	51	64
Benign	1	-	-	-	-	-	-	-	-	1
Malignant - Primary	17	-	-	-	-	-	-	8	67	92
Malignant - Secondary	-	-	-	-	-	-	-	1	5	6
<b>Congenital Absence</b>	<b>25</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>128</b>	<b>167</b>
<b>Other - No Additional Detail</b>	<b>69</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>59</b>	<b>325</b>	<b>456</b>
<b>No Cause Provided</b>	<b>275</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1 257</b>	<b>1 538</b>
<b>Total</b>	<b>920</b>	<b>25</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>301</b>	<b>4 105</b>	<b>5 371</b>

1 Scottish centres do not record ethnic origin.

2 Note that local IT systems default to other ethnic group or not known if no entry is made.

# APPENDICES

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## Appendix 1

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### — Minimum Dataset Fields

#### — Field Name

Patient Number  
Date of Birth  
Purchaser Code  
Centre Code  
Gender  
Is this a New Amputee  
Ethnic Origin

#### — Left Upper Limb Amputation Details

Date of Referral following a Left Upper Amputation  
Date of Amputation  
Level of Amputation  
Cause of Amputation (Aetiology)

#### — Right Upper Limb Amputation Details

Date of Referral following a Right Upper Amputation  
Date of Amputation  
Level of Amputation  
Cause of Amputation (Aetiology)

#### — Left Lower Limb Amputation Details

Date of Referral following a Left Lower Amputation  
Date of Amputation  
Level of Amputation  
Cause of Amputation (Aetiology)

#### — Right Lower Limb Amputation

Date of Referral following a Right Lower Amputation  
Date of Amputation  
Level of Amputation  
Cause of Amputation (Aetiology)

### List of Level and Cause of Amputation Codes

#### Level of Amputation — Codes used in the Minimum Dataset

##### Upper Limb

01	Forequarter
02	Shoulder Disarticulation
03	Trans-humeral
04	Elbow Disarticulation
05	Trans-radial
06	Wrist Disarticulation
07	Partial Hand
08	Digits

##### Lower Limb

09	Hemi-pelvectomy
10	Hip Disarticulation
11	Trans-femoral
12	Knee Disarticulation
13	Trans-tibial
14	Ankle Disarticulation (SYMES)
15	Partial Foot
16	Digits

#### Cause of Amputation (Aetiology) — Codes used in the Minimum Dataset

##### Trauma

1.0	No Additional Detail
1.1	Mechanical
1.2	Electrical
1.3	Thermal
1.4	Chemical

##### Dysvascularity

2.0	No Additional Detail
2.1	Diabetes Mellitus
2.2	Non-diabetic Arteriosclerosis
2.3	Embolism
2.4	Vasospastic Conditions (inc. Raynaud's)
2.5	Disseminated Intravascular Coagulation
2.6	Endovascular Chemical Trauma (= Substance Abuse)
2.7	Buerger's Disease
2.8	Iatrogenic Vascular Trauma
2.9	Arteritis (inc. Rheumatoid Arthritis, Autoimmune Disease)
2.A	Venous Disease

##### Infection

3.0	No Additional Detail
3.1	Acute
3.2	Chronic

##### Neurological Disorder

4.0	No Additional Detail
4.1	Diabetic Neuropathy
4.2	Infective (inc. Leprosy, Madura Foot)
4.3	Spina Bifida
4.4	Poliomyelitis
4.5	Peripheral Nerve Injury

##### Neoplasia

5.0	No Additional Detail
5.1	Benign
5.2	Malignant - Primary
5.3	Malignant - Secondary

##### Congenital Absence

6.0	No Additional Detail
-----	----------------------

##### Other

7.0	No Additional Detail
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### List of prosthetic service centres (PSC) submitting data

Aberdeen	Grampian Healthcare NHS Trust
Belfast	Musgrave Park Hospital
Birmingham	Oak Tree Lane Centre
Brighton	Sussex Rehabilitation Centre
Bristol	Southmead Hospital
Cambridge	Cambridge PSC
Cardiff	Rookwood Artificial Limb Appliance Centre
Carlisle	Carlisle PSC
Charing Cross	Holderness Limb Fitting Centre
Cleveland	Cleveland PSC
Crystal Palace	Kings Healthcare Rehabilitation Centre
Derby	Derby Limb Centre
Dundee	Dundee Limb Fitting Centre
Edinburgh	Rehabilitation Engineering Services
Exeter	Exeter Mobility Centre
Gillingham	Gillingham PSC
Glasgow	University of Strathclyde
Glasgow	Westmarc
Harold Wood	Harold Wood PSC
Hull	East Yorkshire Artificial Limb Unit
Inverness	Medical Physics Dept.
Leeds	Prosthetic Dept.
Leicestershire	Leicestershire PSC
Liverpool	The Donald Tod Rehabilitation Centre
Luton & Dunstable	Luton & Dunstable Limb Fitting Centre
Manchester	Manchester PSC
Newcastle	Newcastle PSC
Northampton	Northampton Artificial Limb Service
Norwich	Norwich PSC
Nottingham	Nottingham Mobility Centre
Oxford	The Mary Marlborough Centre
Plymouth	Plymouth PSC
Portsmouth	Portsmouth PSC
Preston	Preston PSC
Ringwood	Dorset Artificial Limb Centre
Roehampton	Roehampton Rehabilitation Centre
Sheffield	Sheffield Mobility & Specialised Rehabilitation Centre
Stanmore	Stanmore PSC
Stoke	North Midlands Limb Fitting Centre
Swansea	Morrison Artificial Limb & Appliance Centre
Wirral	Wirral Limb Centre
Wolverhampton	Maltings Mobility Centre
Wrexham	Wrexham Artificial Limb & Appliance Centre

### Additional information

- 1 The collecting, recording and coding of the data has been a laborious and daunting exercise. Since the integration of the Disablement Service Centres into the National Health Service, record keeping has been more or less confined to those activities relevant to each centre. Due to this diversification and the submission of incomplete records from centres, the accuracy of the first presentation of the National Database is somewhat limited.
- 2 Forty centres in the UK have been included in the analysis. Twenty four sites use the Limbsys system, nine use Dataease, and seven use independent systems (including paper). The three centres in Wales have not been able to provide information for all the current year but will be incorporated in the year ahead; the next presentation of the database will thus truly represent the UK.
- 3 Data from several centres is incomplete. When possible the information provided has been verified and assimilated into the analysis. The following limitations are identified:
  - The data refers to the number of new referrals to each centre.
  - The Date of Birth has not been provided in some records (Tables 2, 9, 11,12 and 13).
- 4 The data in Upper Limb and Lower Limb Amputation tables does not include cases of congenital absence. Only those cases who had a surgical amputation are presented in the analysis.