

B2**Prescription statistics****Key Points****Overview of prescription statistics**

- In 2002/03, there was an average of 71 prescriptions of methadone mixture per 1 000 population in Scotland. (Table B2.1)
- The cost of methadone mixture ingredients and dispensing fees for Scotland in 2002/03 was £2 147.58 per 1 000 population. (Table B2.4)
- At a Scotland level, fees make up 63 per cent of the total cost of prescribing methadone mixture. (Table B2.4)
- In 2002/03, 82 per cent of prescriptions were dispensed in instalments (see Instalment dispensings below for definition). (Table B2.5)

5 year trends - 1998/99 to 2002/03

- The rate of prescribing methadone mixture has continued to rise over the past 5 years, from 42 prescriptions per 1 000 population in 1998/99 to 71 prescriptions per 1 000 population in 2002/03. (Table B2.2)
- The rate of prescribing diazepam and dihydrocodeine has increased steadily, while the rate of prescribing temazepam has progressively decreased over the past 5 years. (Table B2.2)

Geographical profile

- Between 1998/99 and 2002/03, the rate of prescriptions for methadone mixture has increased for the majority of health boards. (Table B2.3)
- Prescribing fees as a percentage of total prescribing costs varies considerably by area. In Forth Valley, 75 per cent of total costs were fees, compared to 65 per cent in Greater Glasgow and 51 per cent in Lothian. (Table B2.4)
- The level of instalment dispensings varies by area: 88 per cent in Greater Glasgow dispensed by instalment compared to 64 per cent in Lanarkshire (see Instalment dispensings below for definition). (Table B2.5)
- In 2002/03, the quantity per dispensing was 67mg, this also varies by area. In Lothian the quantity per dispensing was 114mg, compared to 43mg in Dumfries & Galloway and Forth Valley. (Table B2.5)

Background information

Methadone mixture is prescribed mainly as an adjunct in the treatment of opiate dependence. While methadone mixture for the treatment of opioid dependence comprises the majority of methadone prescribing, other formulations of methadone are used in the treatment of severe pain and palliative care. Methadone may also be prescribed as a linctus to control distressful cough in terminal illness, and as tablets and injections to control severe pain in terminal illness.

Temazepam and diazepam are prescribed to sedate, induce sleep, and relieve severe anxiety as well as for substitute medication for their illicit use. Dihydrocodeine is used in the relief of moderate to severe pain. Buprenorphine is used for the relief of moderate to severe pain. It has recently been licensed as a substitute in the treatment of opiate dependence.

Defined Daily Doses

Defined Daily Doses (DDD) cited in the following data are considered to be a more accurate index of prescribing volume than the number of items prescribed alone. A DDD is defined by the World Health Organisation (WHO) as the typical adult daily maintenance dose of a drug (1).

Although DDDs are considered to be superior to number of items as a unit of comparative analysis, difficulties may arise when they are used in estimating disease prevalence, because they correspond to a drug's principal indication (2).

Defined Daily Doses used in the production of the following data are based on the WHO Definitions:

Methadone mixture 25mg;
Dihydrocodeine 120mg;
Buprenorphine 1.2mg;
Diazepam 10mg;
Temazepam 20mg.

Instalment dispensings

Instalment dispensings occur where the prescription item is dispensed in more than one instalment (e.g. in daily doses). Single dispensing occurs where the whole of an item is dispensed on one occasion (e.g. multiple doses).

Where items are dispensed in instalments, the number of dispensings exceeds the number of items, but where items are dispensed singly, the number of dispensings will equal the number of items. For most instalment prescriptions the quantity per dispensing is equivalent to the daily dose of methadone requested. However, it needs to be recognised that there will be a discrepancy between the actual daily dose and the amounts dispensed by instalment. This is because the two doses for Saturday and Sunday are recorded as one dispensing. Public holidays also affect the relationship between dose and volume dispensed on an instalment prescription.

Note

Figures for Orkney and Western Isles NHS boards should be compared with caution, due to the very small numbers involved.

References

- 1 World Health Organisation (WHO) (1991). Guidelines for defined daily doses. WHO Collaborating for Drug Statistics Methodology. Oslo.
- 2 Frischer M, Chapman S (1998). Issues and directions in prescribing analysis. In: Medicines Management. Eds. Panton R, Chapman S. 82-84 BMJ and Ph.Press. London.

B2.1 Prescriptions & Defined Daily Doses per 1 000 population : 2002/03

NHS board, drug type

	Methadone Mixture	Methadone Other ¹	Dihydro- codeine	Bupren- orphine	Diazepam	Temazepam
<i>Prescriptions per 1 000 population²</i>						
Scotland	71	0	87	1	150	86
Argyll & Clyde	76	0	75	1	149	85
Ayrshire & Arran	111	0	102	1	135	75
Borders	11	0	85	0	124	110
Dumfries & Galloway	54	0	83	2	163	97
Fife	38	0	73	2	129	77
Forth Valley	16	0	81	1	122	95
Grampian	56	0	73	1	112	73
Greater Glasgow	151	1	99	1	205	92
Highland	14	1	85	1	151	78
Lanarkshire	69	0	68	1	163	83
Lothian	45	0	95	1	123	85
Orkney	1	-	50	2	79	61
Shetland	34	0	48	2	123	44
Tayside	56	1	108	0	172	97
Western Isles	0	-	94	3	157	163
<i>Defined Daily Doses per 1 000 population²</i>						
Scotland	2 135	12	2 570	26	3 795	2 180
Argyll & Clyde	2 053	2	1 993	30	3 197	2 059
Ayrshire & Arran	2 124	12	2 662	16	3 316	1 928
Borders	323	21	1 969	5	2 530	2 179
Dumfries & Galloway	815	6	1 956	36	3 229	2 194
Fife	1 098	9	2 186	48	3 476	1 802
Forth Valley	539	2	2 335	20	2 661	2 384
Grampian	1 407	21	2 075	25	2 894	1 834
Greater Glasgow	5 297	19	2 767	26	5 077	2 269
Highland	263	16	1 849	15	2 497	1 648
Lanarkshire	1 268	4	1 945	27	3 637	2 248
Lothian	2 156	10	3 719	30	4 613	2 319
Orkney	19	-	1 184	18	1 132	1 533
Shetland	405	1	962	42	1 559	782
Tayside	1 793	21	3 402	12	4 513	2 939
Western Isles	10	-	2 270	30	2 908	3 453

¹ These figures include linctus, tablets and injections.

² List size inflation is caused by a lag between patients relocating and Community Health Index records being updated. To eliminate variances caused by list size inflation, data is now expressed as per 1 000 population, based on GRO mid year estimates.

- (zero); 0 (>0.0 & <0.5)

Source : ISD Scotland - Prescribing Information System (PIS).

B2.2 Prescriptions & Defined Daily Doses per 1 000 population : 1995/96 - 2002/03

drug type

	1995/96	1998/99	1999/00	2000/01	2001/02	2002/03
<i>Prescriptions per 1 000 population²</i>						
Total	347	363	368	372	383	394
Methadone Mixture	26	42	48	53	62	71
Methadone Other ¹	1	1	0	0	0	0
Dihydrocodeine	69	82	85	86	86	87
Buprenorphine	3	2	1	1	1	1
Diazepam	109	131	133	138	144	150
Temazepam	139	107	101	94	89	86
<i>Defined Daily Doses per 1 000 population²</i>						
Total	8 905	9 345	9 560	9 813	10 152	10 718
Methadone Mixture	596	1 028	1 193	1 415	1 728	2 135
Methadone Other ¹	26	14	12	12	11	12
Dihydrocodeine	1 759	2 164	2 312	2 395	2 472	2 570
Buprenorphine	40	26	24	24	23	26
Diazepam	2 596	3 265	3 353	3 513	3 620	3 795
Temazepam	3 888	2 848	2 666	2 453	2 298	2 180

¹ These figures include linctus, tablets and injections

² List size inflation is caused by a lag between patients relocating and Community Health Index records being updated.

To eliminate variances caused by list size inflation, data is now expressed as per 1 000 population, based on GRO mid year estimates.

- (zero); 0 (>0.0 & <0.5)

Source : ISD Scotland - Prescribing Information System (PIS).

B2.3 Prescriptions for Methadone Mixture : 1998/99 - 2002/03

NHS board of prescription, number and rate per 1000 population¹

	1998/99		1999/2000		2000/01		2001/02		2002/03	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
<i>Methadone Mixture</i>										
Scotland	214 921	42	243 481	48	274 450	53	319 361	62	358 389	71
Argyll & Clyde	18 526	43	21 805	51	24 319	57	27 967	66	31 782	76
Ayrshire & Arran	24 015	64	25 415	68	26 576	71	34 381	92	40 655	111
Borders	474	4	424	4	521	5	691	6	1 161	11
Dumfries & Galloway	7 237	49	6 567	45	7 238	50	7 880	54	8 027	54
Fife	7 703	22	9 537	27	11 398	33	12 159	35	13 432	38
Forth Valley	2 439	9	2 569	9	3 094	11	3 954	14	4 587	16
Grampian	18 325	35	23 017	44	26 931	51	29 917	57	29 388	56
Greater Glasgow	80 901	89	87 369	96	98 897	109	115 049	127	131 186	151
Highland	1 711	8	2 477	12	2 388	11	2 201	11	2 811	14
Lanarkshire	17 886	32	24 956	44	28 940	51	34 560	62	37 982	69
Lothian	19 713	25	23 178	30	26 312	34	30 818	39	34 877	45
Orkney	19	1	16	1	9	-	24	1	17	1
Shetland	425	19	365	16	652	29	723	33	745	34
Tayside	15 537	40	15 775	41	17 172	45	19 035	50	21 734	56
Western Isles	10	0	11	0	3	-	2	-	5	0

¹ List size inflation is caused by a lag between patients relocating and Community Health Index records being updated.

To eliminate variances caused by list size inflation, data is now expressed as per 1 000 population, based on GRO mid year estimates.

- (zero); 0 (>0.0 & <0.5)

Source : ISD Scotland - Prescribing Information System (PIS).

B2.4 | Costs and fees¹ for Methadone mixture : 2002/03

NHS board of dispensing

	Cost of ingredients (£)	Cost of fees ¹ (£)	Cost of fees ¹ & ingredients (£)	Cost of fees ¹ as a percentage of total cost	Cost of fees ¹ & ingredients per 1 000 population ² (£)
Scotland	4 065 152.46	6 790 432.14	10 855 584.60	63%	2 147.58
Argyll & Clyde	315 475.66	645 579.18	961 054.84	67%	2 295.06
Ayrshire & Arran	298 147.89	529 710.46	827 858.35	64%	2 255.38
Borders	13 810.17	21 365.75	35 175.92	61%	327.52
Dumfries & Galloway	45 583.96	44 740.88	90 324.84	50%	613.16
Fife	146 530.66	247 931.25	394 461.91	63%	1 125.04
Forth Valley	56 783.79	169 867.95	226 651.74	75%	811.30
Grampian	281 742.71	366 220.37	647 963.08	57%	1 238.25
Greater Glasgow	1 721 762.43	3 154 366.63	4 876 129.06	65%	5 630.11
Highland	21 518.58	30 589.32	52 107.90	59%	250.35
Lanarkshire	262 734.14	500 122.00	762 856.14	66%	1 379.71
Lothian	632 779.85	647 081.55	1 279 861.40	51%	1 642.74
Orkney	136.02	53.80	189.82	28%	9.88
Shetland	3 401.61	3 596.25	6 997.86	51%	318.95
Tayside	264 641.81	429 187.50	693 829.31	62%	1 790.90
Western Isles	103.18	19.25	122.43	16%	4.67

1 Dispensing fees only i.e. excludes supervision and controlled drug fees.

2 List size inflation is caused by a lag between patients relocating and Community Health Index records being updated.
To eliminate variances caused by list size inflation, data is now expressed as per 1 000 population, based on GRO mid year estimates.

Source : ISD Scotland - Prescribing Information System (PIS).

B2.5 Instalment dispensing of methadone mixture : 2002/03¹

NHS board of dispensing

	Qty Disp ² (a)	No. Disps ³ (b)	No. of Items ⁴ (c)	Disps/Item ⁵	Qty Per Item ⁶	Qty Per Disp ⁷	% of total dispensed in instalments ⁸
Scotland	239 763 553	3 595 680	294 555	12	814	67	82%
Argyll & Clyde	19 154 700	378 297	27 315	14	701	51	86%
Ayrshire & Arran	17 122 576	256 076	34 815	7	492	67	86%
Borders	749 632	11 909	941	13	797	63	81%
Dumfries & Galloway	2 625 501	61 532	6 397	10	410	43	80%
Fife	7 989 284	137 782	9 896	14	807	58	74%
Forth Valley	3 160 868	73 159	3 567	21	886	43	78%
Grampian	16 343 498	287 967	24 400	12	670	57	83%
Greater Glasgow	104 481 688	1 565 678	116 059	13	900	67	88%
Highland	852 547	14 117	1 686	8	506	60	60%
Lanarkshire	14 581 366	280 223	24 188	12	603	52	64%
Lothian	37 519 648	328 159	27 393	12	1 370	114	79%
Orkney	5 010	16	7	2	716	313	41%
Shetland	109 347	1 855	422	4	259	59	57%
Tayside	15 067 080	198 902	17 468	11	863	76	80%
Western Isles	810	8	1	8	810	101	20%

- 1 Due to a change in data collection methods, it is not appropriate to compare these figures with those presented in previous years.
- 2 Quantity dispensed in milligrams.
- 3 Number of occasions an item is dispensed.
- 4 Number of prescriptions.
- 5 Number of dispensings per item = (b)/(c).
- 6 Quantity per item = (a)/(c).
- 7 Quantity per dispensing = (a)/(b).
- 8 Percentage of total dispensed (singly and in instalments).

Source : ISD Scotland - Prescribing Information System (PIS).