

A4 Drug misuse in pregnancy

Key Points

- In 2000/01, of a total 51 165 maternities recorded, there were 228 cases (4.4 per 1 000 discharges) where the mother had a diagnosis of drug misuse. Of the 228 cases where a diagnosis of drug misuse was recorded, the majority of the mothers were aged between 20 and 29 (164 cases, 72 per cent). (Table A4.1)
- Of the 228 births where a diagnosis of drug misuse was recorded, the majority were full-term normal birthweight (176 cases, 77 per cent). (Table A4.3)
- Of the 228 births where a diagnosis of drug misuse was recorded, the majority were in deprivation categories 5-7 (158 cases, 69 per cent). (Table A4.4)
- In 2000/01, there were a total of 17 222 neonatal discharges in Scotland, of which 326 included a diagnosis of drug misuse. The rate of discharges recording drug misuse diagnoses (per 1 000 discharges) indicates a steady increase in the occurrence of such cases between 1997/98 and 2000/01, with an increase from 12.6 to 18.9 per 1 000 discharges. (Table A4.5)

Health impact

Introduction

Since 1976 data has been collected on pregnancies relating to antenatal, delivery, postnatal care and abortions managed in Scottish hospitals on the SMR02 (Scottish Morbidity Record – Maternity Discharges). Deliveries account for more than half of SMR02 discharges each year (antenatal, postnatal and abortion episodes make up the remaining discharges) and a national coverage of up to 98% of all births has been achieved (some home births may not be included).

The SMR02 discharge summary is completed at the end of the episode from patient's case notes and hospital discharge letters. Information collected includes: demographics of the mother, details of the delivery (mode, induction, presentation etc) and on the baby (gestation, birth-weight, etc). Details of up to and including three babies are recorded. In addition up to six diagnoses, a main diagnosis and five secondary diagnoses (using the ICD10 coding classification) can also be recorded. Specific questions are asked about the mother smoking prior to and during pregnancy. Drugs misuse is recorded on the SMR02 using the following ICD10 codes:

ICD10 Code	Description
F11	Opioids
F12	Cannabinoids
F13	Sedatives or Hypnotics
F14	Cocaine
F15	Other Stimulants
F16	Hallucinogens
F18	Volatile Solvents
F19	Multiple / Other Psychoactive Substances
O35.5	Maternal care for suspected damage to fetus by drugs

A review of SMR02 has recently taken place, the purpose of which was to address data collection/validation problems and to capture additional information. The revised SMR02 now includes the facility to collect additional data items in priority areas, notably substance misuse and alcohol consumption. These data items however are optional and not mandatory.

The SMR11 records all neonatal discharge information (including from neonatal units and postnatal cots), with records being generated for sick babies who fall into one of the following categories:

- Babies who require medical care (other than resuscitation immediately after birth or routine screening).
- Babies who have a congenital anomaly (whether or not medical treatment is given at that time).

Drugs misuse is recorded on the SMR11 returns using the following ICD10 codes in addition to those listed for SMR02.

ICD10 Code	Description
P04.4	Fetus and newborn affected by maternal use of drugs of addiction
P96.1	Neonatal withdrawal symptoms from maternal use of drugs of addiction

The SMR11 is currently being replaced by the Scottish Birth Record (SBR). Every baby born in Scotland will have one (and only one) SBR. There is the potential to collect more detailed information about maternal drug and alcohol use.

The figures presented here cover the four years, 1997/98 to 2000/01. Data for all years shown are revised, so may be different from previously published figures. Care should be taken when comparing numbers over time, as there has been an improvement in drug misuse recording over the last five years. Also, recording practices of drug misuse diagnoses may vary between hospitals that could explain part of the differences between NHS boards or council areas.

SMR02 information for 1999/00 and 2000/01 are provisional due to shortfalls in data from North Glasgow University Hospitals NHS Trust and Western Isles. ISD are currently working with the Trust/Board to rectify this shortfall.

Analysis of the Data

Table A4.1 presents information about maternities (pregnancies which result in a live or still birth) for the four years 1997/98 to 2000/01. In 2000/01, of a total 51 165 maternities recorded, there were 228 cases (4.4 per 1 000 discharges) where the mother had a diagnosis of drug misuse. Of these, 81 cases (36 per cent) were in Greater Glasgow NHS Board area, followed by Grampian (39 cases, 17 per cent). Of the 228 cases where a diagnosis of drug misuse was recorded, the majority of the mothers were aged between 20 and 29 (164 cases, 72 per cent).

Table A4.2 presents the proportion of live births by mode of delivery and percentage induced for the years 1997/98 to 2000/01. In 2000/01, there were 50 171 singletons, of which 226 included a diagnosis of drug misuse. Of these, 80 per cent were spontaneous deliveries.

Table A4.3 shows the number of full-term and premature births by birthweight for years 1997/98 and 2000/01. There were 51 919 births, in 2000/01, of which 228 had a diagnosis of drug misuse. Of the 228 births where a diagnosis of drug misuse was recorded, the majority were full-term normal birthweight (176 cases, 77 per cent).

The data in Table A4.4 shows the number of births by deprivation category for 1997/98 to 2000/01. Of the 228 births where a diagnosis of drug misuse was recorded, the majority were in deprivation categories 5-7 (158 cases, 69 per cent).

The data in Table A4.5 relates to neonatal discharges over the period 1997/98 to 2000/01. In 2000/01, there were a total of 17 222 neonatal discharges in Scotland, of which 326 included a diagnosis of drug misuse. Grampian NHS Board area accounted for the largest share (98 cases, 30 per cent), followed by Greater Glasgow (94 cases, 29 per cent) and Argyll & Clyde (29 cases, 9 per cent). The rate of discharges recording drug misuse diagnoses (per 1 000 discharges) indicates a steady increase in the occurrence of such cases between 1997/98 and 2000/01, with an increase from 12.6 to 18.9 per 1 000 discharges.

A4.1 | Number of maternities^{1,2} : 1997/98 - 2000/01^P

NHS board, council area of residence and age of mother

	All maternities				Maternities recording drug misuse ⁵				Rate per 1 000 maternities			
	1997/98 ^r	1998/99 ^r	1999/00 ^{r,P}	2000/01 ^P	1997/98 ^r	1998/99 ^r	1999/00 ^{r,P}	2000/01 ^P	1997/98 ^r	1998/99 ^r	1999/00 ^{r,P}	2000/01 ^P
Scotland	57 605	55 773	53 061	51 165	139	199	188	228	2.4	3.5	3.5	4.4
<i>by NHS board</i>												
Argyll & Clyde	4 821	4 583	4 389	4 229	8	7	14	17	0.2	0.2	0.3	0.4
Ayrshire & Arran	4 004	3 972	3 646	3 623	2	22	23	14	0.0	0.6	0.6	0.4
Borders	1 023	989	1 002	985	-	-	-	-	-	-	-	-
Dumfries & Galloway	1 547	1 406	1 375	1 327	-	-	3	8	-	-	0.2	0.6
Fife	3 657	3 668	3 514	3 469	5	8	10	9	0.1	0.2	0.3	0.3
Forth Valley	3 138	3 098	2 919	2 857	-	-	3	2	-	-	0.1	0.1
Grampian	5 953	5 788	5 643	5 227	33	37	30	39	0.6	0.6	0.5	0.7
Greater Glasgow	10 658	9 932	9 256	8 851	54	91	72	81	0.5	0.9	0.8	0.9
Highland	2 359	2 333	2 107	2 153	-	2	2	4	-	0.1	0.1	0.2
Lanarkshire	6 533	6 395	6 088	6 014	1	3	2	4	0.0	0.0	0.0	0.1
Lothian	8 789	8 695	8 481	8 121	10	10	5	19	0.1	0.1	0.1	0.2
Orkney	210	201	166	143	-	-	-	-	-	-	-	-
Shetland	266	261	277	212	-	-	-	-	-	-	-	-
Tayside	4 259	4 016	3 908	3 780	26	19	24	31	0.6	0.5	0.6	0.8
Western Isles	231	260	151	33	-	-	-	-	-	-	-	-
Other ³	157	176	139	141	-	-	-	-	-	-	-	-
<i>by council area</i>												
Aberdeen City	2 358	2 285	2 286	2 085	25	31	24	29	1.1	1.4	1.0	1.4
Aberdeenshire	2 542	2 512	2 409	2 259	8	5	6	8	0.3	0.2	0.2	0.4
Angus	1 173	1 138	1 035	1 038	3	3	1	3	0.3	0.3	0.1	0.3
Argyll & Bute	892	844	768	748	1	-	4	1	0.1	-	0.5	0.1
Ayrshire East	1 353	1 307	1 233	1 209	1	12	11	6	0.1	0.9	0.9	0.5
Ayrshire North	1 532	1 512	1 385	1 366	1	7	6	5	0.1	0.5	0.4	0.4
Ayrshire South	1 117	1 150	1 027	1 043	-	3	6	3	-	0.3	0.6	0.3
Borders	1 018	985	992	982	-	-	-	-	-	-	-	-
Clackmannanshire	557	531	520	479	-	-	-	-	-	-	-	-
Dumfries & Galloway	1 543	1 405	1 374	1 326	-	-	3	8	-	-	0.2	0.6
Dunbartonshire East	1 159	1 098	926	878	-	-	1	-	-	-	0.1	-
Dunbartonshire West	1 132	1 069	1 034	952	1	2	12	8	0.1	0.2	1.2	0.8
Dundee City	1 648	1 565	1 526	1 421	21	9	19	23	1.3	0.6	1.2	1.6
Edinburgh City	4 904	4 769	4 684	4 443	8	9	4	19	0.2	0.2	0.1	0.4
Eilean Siar ⁴	230	250	150	31	-	-	-	-	-	-	-	-
Falkirk	1 634	1 659	1 540	1 516	-	-	-	-	-	-	-	-
Fife	3 654	3 666	3 511	3 467	5	8	10	9	0.1	0.2	0.3	0.3
Glasgow City	7 419	6 846	6 435	6 091	50	83	63	79	0.7	1.2	1.0	1.3
Highland	2 353	2 335	2 107	2 153	-	2	2	4	-	0.1	0.1	0.2
Inverclyde	953	927	903	864	6	4	1	8	0.6	0.4	0.1	0.9
Lanarkshire North	3 943	3 895	3 626	3 679	-	3	2	4	-	0.1	0.1	0.1
Lanarkshire South	3 379	3 227	3 166	3 027	4	7	3	-	0.1	0.2	0.1	-
Lothian East	986	1 002	953	894	-	-	-	-	-	-	-	-
Lothian West	1 978	1 976	1 926	1 855	1	1	1	-	0.1	0.1	0.1	-
Midlothian	915	937	908	916	1	-	-	-	0.1	-	-	-
Moray	1 033	981	943	880	-	1	-	2	-	0.1	-	0.2
Orkney Islands	209	201	166	143	-	-	-	-	-	-	-	-
Perth & Kinross	1 432	1 311	1 346	1 322	1	7	4	5	0.1	0.5	0.3	0.4
Renfrewshire	2 114	1 988	1 943	1 903	1	1	2	1	0.0	0.1	0.1	0.1
Renfrewshire East	983	981	896	881	-	1	-	-	-	0.1	-	-
Shetland Islands	265	261	277	212	-	-	-	-	-	-	-	-
Stirling	930	907	849	852	-	-	3	2	-	-	0.4	0.2
Other ³	267	253	217	250	1	-	-	1	0.4	-	-	0.4
<i>by age of mother</i>												
Under 20 years	4 859	4 851	4 720	4 572	23	26	33	24	4.7	5.4	7.0	5.2
20 - 24 years	10 241	9 703	9 222	8 849	48	63	63	95	4.7	6.5	6.8	10.7
25 - 29 years	18 228	17 053	15 424	14 251	44	74	58	69	2.4	4.3	3.8	4.8
30 - 34 years	17 372	16 939	16 356	15 834	21	28	26	33	1.2	1.7	1.6	2.1
35 - 39 years	6 739	6 972	6 971	7 254	1	8	8	5	0.1	1.1	1.1	0.7
40 - 44 years	965	1 024	1 082	1 121	2	-	-	2	2.1	-	-	1.8
45 years and over	29	39	32	35	-	-	-	-	-	-	-	-

1 Excludes home births and births at non-NHS hospitals.

2 A maternity is defined as a pregnancy which results in a live or stillbirth; multiple pregnancies are counted only once.

3 Includes births where health board of residence and/or council area is unknown or outside Scotland.

4 Formerly Western Isles.

5 Drug misuse is defined using the following International Classification of Disease (10th Revision) codes : 035.5, F11, F12, F13, F14, F15, F16, F18 and F19.

r Revised.

p Information for 1999/2000 and 2000/01 are provisional due to shortfalls in data from North Glasgow University Hospitals NHS Trust and Western Isles. ISD are currently working with the Trust/Board to rectify this shortfall.

Source : Scottish Morbidity Record (SMR02).

A4.2 Proportion of live births^{1,2} (singletons and multiples) by mode of delivery³ and percentage induced: 1997/98 - 2000/01^{r,p}

Health impact

	1997/98 ^r		1998/99 ^r		1999/00 ^{r,p}		2000/01 ^p	
	Singleton	Multiple	Singleton	Multiple	Singleton	Multiple	Singleton	Multiple
<i>All live births</i>								
Number of Live Births	Number		Number		Number		Number	
	56 505	1 623	54 692	1 567	52 104	1 468	50 171	1 471
Mode of delivery	<i>Percentage</i>							
Spontaneous	70.4	30.4	68.8	30.4	67.3	26.8	66.4	26.6
Forceps	7.2	7.8	7.1	5.9	7.1	5.9	6.9	6.7
Vacuum	4.3	4.9	4.9	5.4	5.3	6.5	5.4	5.7
Breech	0.4	9.4	0.3	9.4	0.4	8.4	0.3	7.6
Caesarean - Elective	6.7	16	6.9	20.5	7	20.6	7.5	21.4
Caesarean - Emergency	11	31.5	12	28.5	12.8	31.7	13.5	32
Induced	25.4	29.7	27	30.3	27.4	27.2	26.8	28.6
<i>Live births recording drugs misuse⁴</i>								
Number of Live Births	Number		Number		Number		Number	
	137	-	196	2	188	-	226	-
Mode of delivery	<i>Percentage</i>							
Spontaneous	74.5	-	79.1	-	77.1	-	80.1	-
Forceps	5.1	-	5.6	-	3.2	-	7.1	-
Vacuum	8	-	6.6	-	5.3	-	3.5	-
Breech	-	-	1	-	1.1	-	-	-
Caesarean - Elective	2.9	-	2	-	4.3	-	1.3	-
Caesarean - Emergency	9.5	-	5.6	100	9	-	8	-
Induced	22.6	-	27.6	100	21.3	-	25.7	-

1 Excludes home births and births at non-NHS hospitals.

2 From 1998, where four or more babies are involved in a delivery, birth details are recorded only for the first three babies delivered. Prior to 1998, birth details were recorded only for the first two babies delivered.

3 Individual babies within multiple delivery may have different modes of delivery.

4 Drug misuse is defined using the following International Classification of Disease (10th Revision) codes : 035.5, F11, F12, F13, F14, F15, F16, F18 and F19.

r Revised.

p Information for 1999/00 and 2000/01 are provisional due to shortfalls in data from North Glasgow University Hospitals NHS Trust and Western Isles. ISD are currently working with the Trust/Board to rectify this shortfall.

Source : Scottish Morbidity Record (SMR02).

A4.3 Number of Term and Premature births (live and still) by Very Low, Low and Normal birthweight: 1997/98 - 2000/01^{1,2}

	All Births				Births recording drug misuse ⁴			
	1997/98 ^r	1998/99 ^r	1999/00 ^{r,p}	2000/01 ^p	1997/98 ^r	1998/99 ^r	1999/00 ^{r,p}	2000/01 ^p
Total Births (live and still)³	58 439	56 587	53 807	51 919	139	200	188	228
<i>Preterm</i>								
Very low (<1500g)	697	714	655	700	2	5	6	6
Low (1500g - 2499g)	2 050	1 967	1 937	1 817	11	27	12	21
Normal (2500g+)	1 527	1 556	1 455	1 446	6	5	7	8
<i>Term</i>								
Very low (<1500g)	9	14	3	5	-	-	-	-
Low (1500g - 2499g)	1 451	1 448	1 396	1 304	10	22	21	17
Normal (2500g+)	52 704	50 887	48 361	46 646	110	143	142	176

1 Excludes home births and births at non-NHS hospitals.

2 From 1998, where four or more babies are involved in a delivery, birth details are recorded only for the first three babies delivered. Prior to 1998, birth details were recorded only for the first two babies delivered.

3 Includes multiple deliveries not recorded elsewhere. See note 2.

4 Drug misuse is defined using the following International Classification of Disease (10th Revision) codes : 035.5, F11, F12, F13, F14, F15, F16, F18 and F19.

r Revised.

p Information for 1999/00 and 2000/01 are provisional due to shortfalls in data from North Glasgow University Hospitals NHS Trust and Western Isles. ISD are currently working with the Trust/Board to rectify this shortfall.

Source : Scottish Morbidity Record (SMR02).

A4.4 | Number of births (live and still) by deprivation category: 1997/98 - 2000/01^{1,2,3}

	All Births				Births recording drugs misuse ⁵			
	1997/98 ^r	1998/99 ^r	1999/00 ^{r,p}	2000/01 ^p	1997/98 ^r	1998/99 ^r	1999/00 ^{r,p}	2000/01 ^p
All births (live and still)	58 439	56 587	53 807	51 919	139	200	188	228
<i>Deprivation Category⁴</i>								
1 - 2	11 216	11 009	10 572	10 374	9	10	10	13
3 - 4	26 746	25 967	24 820	23 536	31	44	52	57
5 - 7	20 285	19 426	18 268	17 821	99	146	126	158

1 Excludes home births and births at non-NHS hospitals.

2 From 1998, where four or more babies are involved in a delivery, birth details are recorded only for the first three babies delivered. Prior to 1998, birth details were recorded only for the first two babies delivered.

3 Excludes births where deprivation category was not known or not recorded.

4 Deprivation categories are based on data collected in the 1981 and 1991 census. A number of measures (over-crowding, male unemployment, low social class, no car) are combined to give a composite score for postcode sectors. There are seven categories ranging from 1 (least deprived) to 7 (most deprived).

5 Drug misuse is defined using the following International Classification of Disease (10th Revision) codes : 035.5, F11, F12, F13, F14, F15, F16, F18 and F19.

^r Revised.

^p Information for 1999/2000 and 2000/01 are provisional due to shortfalls in data from North Glasgow University Hospitals NHS Trust and Western Isles. ISD are currently working with the Trust/Board to rectify this shortfall.

Source : Scottish Morbidity Record (SMR02).

A4.5 Neonatal discharges¹ : 1997/98 - 2000/01

NHS board and council area of residence

Health impact

	All Discharges				Discharges Recording Drug Misuse ⁵				Rate per 1 000 Discharges			
	1997/98 ^r	1998/99 ^r	1999/00 ^r	2000/01 ^p	1997/98 ^r	1998/99 ^r	1999/00 ^r	2000/01 ^p	1997/98 ^r	1998/99 ^r	1999/00 ^r	2000/01 ^p
Scotland²	17 269	17 808	18 265	17 222	217	241	324	326	12.6	13.5	17.7	18.9
by NHS Board												
Argyll and Clyde	1 302	1 126	1 164	1 079	11	22	34	29	8.4	19.5	29.2	26.9
Ayrshire and Arran	995	887	684	695	17	23	28	19	17.1	25.9	40.9	27.3
Borders	238	250	273	239	1	-	2	-	4.2	-	7.3	-
Dumfries and Galloway	314	284	301	303	3	5	7	13	9.6	17.6	23.3	42.9
Fife	525	533	506	489	6	10	15	8	11.4	18.8	29.6	16.4
Forth Valley	675	610	695	650	7	2	12	15	10.4	3.3	17.3	23.1
Grampian	3 935	3 831	3 997	3 492	60	42	67	98	15.2	11.0	16.8	28.1
Greater Glasgow	3 464	3 852	4 058	4 185	66	96	109	94	19.1	24.9	26.9	22.5
Highland	591	541	603	591	4	5	6	5	6.8	9.2	10.0	8.5
Lanarkshire	1 390	1 576	1 556	1 391	2	3	10	14	1.4	1.9	6.4	10.1
Lothian	2 403	3 073	3 459	3 182	16	19	29	18	6.7	6.2	8.4	5.7
Orkney	142	121	104	81	-	-	-	-	-	-	-	-
Shetland	127	144	152	116	-	-	1	1	-	-	6.6	8.6
Tayside	1 101	904	661	673	24	13	4	12	21.8	14.4	6.1	17.8
Western Isles	27	29	17	20	-	-	-	-	-	-	-	-
Other ³	40	47	35	36	-	1	-	-	-	21.3	-	-
by council area												
Aberdeen City	1 681	1 683	1 870	1 569	43	36	49	62	25.6	21.4	26.2	39.5
Aberdeenshire	1 972	1 936	1 939	1 687	15	6	13	33	7.6	3.1	6.7	19.6
Angus	289	250	143	152	3	2	1	1	11.2	8.0	7.0	6.6
Argyll and Bute	285	261	252	228	-	3	8	4	-	11.5	31.7	17.5
Ayrshire East	351	284	255	212	9	12	12	7	25.6	42.3	47.1	33.0
Ayrshire North	372	353	239	270	4	8	11	8	10.8	22.7	46.0	29.6
Ayrshire South	271	248	186	199	4	3	5	4	14.8	12.1	26.9	20.1
Borders	238	250	264	228	1	-	2	-	4.2	-	7.6	-
Clackmannanshire	148	142	148	138	-	1	1	6	-	7.0	6.8	43.5
Dumfries and Galloway	313	284	298	301	3	5	7	13	9.6	17.6	23.5	43.2
Dunbartonshire East	397	424	427	429	-	2	3	-	-	4.7	7.0	-
Dunbartonshire West	410	451	503	480	4	6	14	7	9.8	13.3	27.8	14.6
Dundee City	447	396	228	246	16	9	1	8	35.8	22.7	4.4	32.5
Edinburgh City	1 535	1 953	2 176	2 014	15	14	27	13	9.8	7.2	12.4	6.5
Eilean Siar ⁴	27	29	17	20	-	-	-	-	-	-	-	-
Falkirk	268	193	228	231	5	-	4	8	18.7	-	17.5	34.6
Fife	524	532	486	447	6	10	15	6	11.5	18.8	30.9	13.4
Glasgow City	2 523	2 705	2 798	2 898	59	86	99	88	23.4	31.8	35.4	30.4
Highland	590	540	571	513	4	5	3	3	6.8	9.3	5.3	5.8
Inverclyde	191	158	228	173	5	6	9	14	26.2	38.0	39.5	80.9
Lanarkshire North	920	984	889	801	2	3	4	10	2.2	3.0	4.5	12.5
Lanarkshire South	643	788	894	737	4	5	9	8	6.2	6.3	10.1	10.9
Lothian East	159	420	487	410	-	-	1	2	-	-	2.1	4.9
Lothian West	422	309	338	314	1	5	1	2	2.4	16.2	3.0	6.4
Midlothian	287	375	413	378	-	-	-	1	-	-	-	2.6
Moray	280	187	87	78	2	-	-	1	7.1	-	-	12.8
Orkney Islands	142	121	103	81	-	-	-	-	-	-	-	-
Perth and Kinross	385	255	267	257	5	2	2	3	13.0	7.8	7.5	11.7
Renfrewshire	517	446	422	418	1	7	6	2	1.9	15.7	14.2	4.8
Renfrewshire East	256	299	282	334	4	3	1	4	15.6	10.0	3.5	12.0
Shetland Islands	127	144	151	115	-	-	1	1	-	-	6.6	8.7
Stirling	261	274	306	264	2	1	7	1	7.7	3.6	22.9	3.8
Other ³	58	134	370	600	-	1	8	6	-	7.5	21.6	10.0

1 A baby may be admitted to and discharged from neonatal care more than once. Figures relate to the total number of discharges, not to the number of individual babies.

2 Includes births where health board of residence is unknown or outside Scotland.

3 Area of residence "not known" or outwith Scotland.

4 Formally Western Isles.

5 Drug misuse is defined using the following International Classification of Disease (10th Revision) codes : P04.4, P96.1.

r Revised.

p Provisional.

Source : ISD Scotland (SMR11).