

Injury attendances to Manchester Royal Infirmary Emergency Department

April 2008 to March 2009

This report summarises recorded injury attendances to Manchester Royal Infirmary Emergency Department (ED) between April 2008 and March 2009.

Between April 2008 and March 2009 there were 56,267 injury attendances to Manchester Royal Infirmary ED. Males accounted for over half of all attendances (n=32,196; 57%). The month with the highest attendances was May (n=5,522) with December having the lowest attendances (n=3,754) (Figure 1). The majority of attendances were recorded as other accident (89%). Of the specified injury groups assault accounted for the highest proportion (4%) followed by road traffic collision (RTC) (4%) and sports injury (2%) (Table 1).

For all injuries the highest proportion of attendances were for persons aged 20-34 (35%) and 5-19 (25%) (Figure 2). Half of assault attendees (50%) were aged 20-34. Nearly half (46%) of RTC attendees were aged 20-34. Over half (55%) of sports injury attendees were aged 20-34 (Figure 3).

Table 2 shows the location where injuries occurred. The majority (82%) of injuries were recorded as other location. Nearly one in ten (8%) injuries occurred in the home with a smaller proportion occurring in a public place (6%). One in seven (14%) assaults occurred in a public place. **Table 3** shows the ethnicity of attendees to Manchester Royal Infirmary ED. Nearly two thirds (65%) were white, 10% were recorded as other, 8% were Pakistani and 6% were black.

The disposal of a patient can give an indication of the severity of the injuries sustained. Nearly two thirds (64%) of attendees were discharged, over a fifth (21%) were referred and 7% were admitted (Table 4). Over three-quarters (79%) of RTC attendees were discharged while 4% were admitted. Nearly a quarter (24%) of deliberate self harm (DSH) attendees were admitted (Table 5).

Table 6 shows the arrival methods of attendances at Manchester Royal Infirmary ED. Over four in five (82%) arrived by means other than an ambulance, while nearly one in five (18%) arrived by ambulance.

Figure 4 (a-d) shows crude rates of attendance at Manchester Royal Infirmary ED by attendee's area of residence, in this case Middle Super Output Area (MSOA). The MSOAs with the highest crude rates are indicated beneath each figure. ¹

¹ Population figures are drawn from mid-2008 population estimates from the Office for National Statistics.



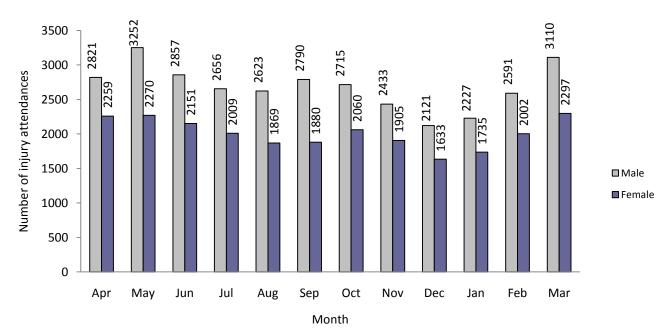
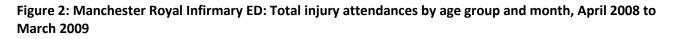


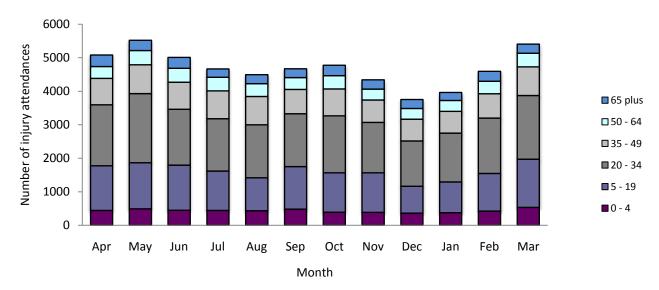
Figure 1: Manchester Royal Infirmary ED: Total injury attendances by gender and month, April 2008 to March 2009²

Table 1: Manchester Royal Infirmary ED: Total injury attendances by injury group and month, April 2008 toMarch 2009

Injury group	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%
Other accident*	4570	4999	4556	4163	3900	4103	4196	3755	3316	3477	4084	4785	49904	89
Assault	186	239	177	185	244	181	224	213	185	223	172	208	2437	4
RTC	150	135	148	169	186	169	203	185	163	131	159	192	1990	4
Sports injury	120	88	74	92	97	105	89	114	39	60	102	167	1147	2
DSH	54	61	53	56	65	112	63	72	51	71	76	55	789	1
Total	5080	5522	5008	4665	4492	4670	4775	4339	3754	3962	4593	5407	56267	100

*Firework injury has been included in other accident due to low numbers (n=14)





² There was one attendee whose gender was unreported in November.

Figure 3: Manchester Royal Infirmary ED: Total injury attendances by age group and injury group, April 2008 to March 2009

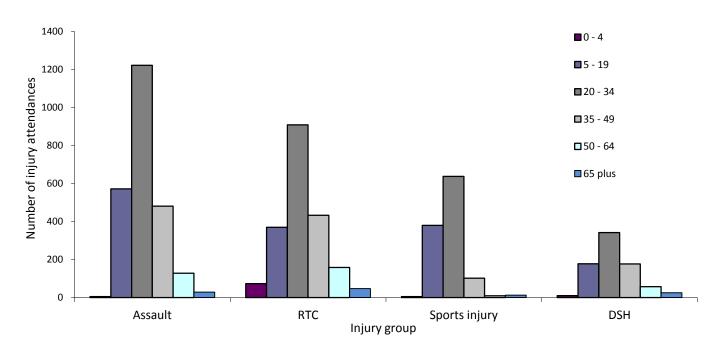


Table 2: Manchester Royal Infirmary ED: Total injury attendances by location of incident and injury group, April2008 to March 2009

Location	RTC		Assault		DSH		Sports injury		Other accide	ent	Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Other	1970	99	1997	82	714	91	1086	95	40441	81	46208	82
Home	***	***	31	1	13	2	***	***	4319	9	4382	8
Public Place	14	1	352	14	60	8	22	2	2939	6	3387	6
School	***	***	24	1	***	***	23	2	1602	3	1649	3
Work	***	***	33	1	***	***	***	***	603	1	641	1
Total	1990	100	2437	100	789	100	1147	100	49904	100	56267	100

Table 3: Manchester Royal Infirmary ED: Total injury attendances by ethnicity and month, April 2008 to March2009³

Ethnicity	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%
White	3299	3460	3340	2999	2887	3187	3201	2904	2416	2630	2967	3504	36794	65
Other	486	583	385	457	442	413	405	431	425	378	461	570	5436	10
Pakistani	353	441	467	432	424	364	398	333	308	293	390	407	4610	8
Black	309	364	320	330	303	300	303	283	226	273	279	350	3640	6
Not known	353	379	205	204	201	160	218	177	165	164	270	276	2772	5
Mixed	98	111	126	111	91	114	91	88	98	95	100	141	1264	2
Indian	78	65	83	59	63	73	65	55	54	54	50	63	762	1
Chinese	70	79	48	53	40	41	64	45	41	48	50	54	633	1
Bangladeshi	34	40	34	20	41	18	30	23	21	27	26	42	356	1
Total	5080	5522	5008	4665	4492	4670	4775	4339	3754	3962	4593	5407	56267	100

³ White = Irish, British, other white background; Mixed = white and black, white and Asian, mixed any other; Other = any other ethnic group, any other Asian background; Black = African, Caribbean, other black.

Table 4: Manchester Royal Infirmary ED: Total injury attendances by method of disposal and month, April 2008 to March 2009⁴

Disposal	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%
Discharged	3223	3587	3157	3000	2813	2902	3030	2687	2383	2574	2968	3406	35730	64
Referred	1140	1121	1162	975	981	1075	943	922	734	831	891	1205	11980	21
Other	363	515	352	408	345	383	452	402	372	288	427	451	4758	8
Admitted	354	299	337	282	353	310	350	328	265	269	307	345	3799	7
Total	5080	5522	5008	4665	4492	4670	4775	4339	3754	3962	4593	5407	56267	100

Table 5: Manchester Royal Infirmary ED: Total injury attendances by method of disposal and injury group, April2008 to March 2009

Disposal	RTC		Assault		DSH		Sports inj	ury	Other accide	ent	Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Discharged	1581	79	1481	61	356	45	777	68	31535	63	35730	64
Referred	247	12	532	22	110	14	330	29	10761	22	11980	21
Admitted	74	4	199	8	192	24	28	2	3306	7	3799	7
Other	88	4	225	9	131	17	12	1	4302	9	4758	8
Total	1990	100	2437	100	789	100	1147	100	49904	100	56267	100

Table 6: Manchester Royal Infirmary ED: Total injury attendances by mode of arrival and month, April 2008 toMarch 2009

Mode	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%
Other	4254	4612	4203	3849	3585	3863	3866	3495	3032	3202	3750	4477	46188	82
Ambulance	826	910	805	816	907	807	909	844	722	760	843	930	10079	18
Total	5080	5522	5008	4665	4492	4670	4775	4339	3754	3962	4593	5407	56267	100

For further information please contact: Centre for Public Health, Research Directorate, Liverpool John Moores University, 5th Floor, Kingsway House, Hatton Garden, Liverpool, L3 2AJ, Tel: 0151 231 8724 or Email: <u>i.j.warren@ljmu.ac.uk</u> Website: <u>www.tiig.info</u> (data requests should be made through the website)

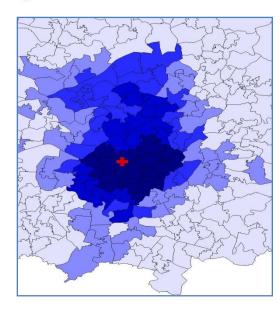
⁴ Admitted=admitted to ED bed/became a lodged patient of the same health care provider; Discharged=discharged - did not require any follow up treatment; Referral/follow-up =discharged - follow up treatment to be provided by GP, referred to ED clinic, referred to fracture clinic, referred to other out-patient clinic, transferred to other health care provider, referred to other health care professional; Other=died in department, left department before being treated, left department having refused treatment, other.



Figure 4a,b,c,d: Middle Super Output Area of residence for injury attendances to Manchester Royal Infirmary ED. Quintiles of crude rates per 1,000 population, April 2008 to March 2009

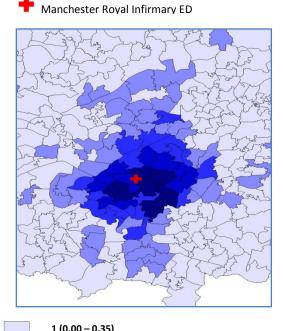
a) All injury attendances: quintiles of crude rates per 1,000 population b) Assault: quintiles of crude rates per 1,000 population

Manchester Royal Infirmary ED



1 (0.00 – 5.47)	
2 (5.48 – 17.41)	MSOA E02001062 (192.84)
3 (17.42 – 42.12)) MSOA E02001066 (187.26)
4 (42.13 - 85.72	MSOA E02001069 (190 16)
5 (85.73 – 192.8	΄ ΜΩΩΔ ΕΩ2001067 (159 89)

c) RTC: quintiles of crude rates per 1,000 population



1 (0.00 - 0.35)	MSOA E02001071
2 (0.36 – 1.20)	
3 (1.21 – 2.77)	MSOA E02001072
· · ·	MSOA E02001062
4 (2.78 – 5.16)	MSOA E02001068
5 (5.17 – 8.64)	

(8.64)

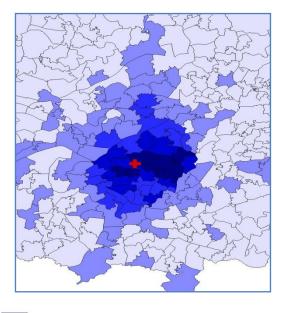
(7.91)

(7.52)

(7.51)

5

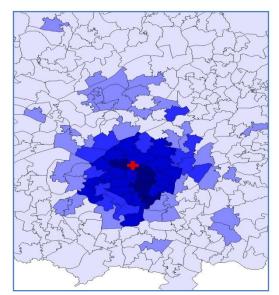
Manchester Royal Infirmary ED



1 (0.00 – 0.41)	MSOA E02001062 (9.88)
2 (0.42 – 1.55)	MSOA E02001067 (9.71)
3 (1.56 – 3.70)	MSOA E02001064 (9.04)
4 (3.71 – 6.23)	MSOA E02001066 (8.58)
5 (6.24 – 9.88)	

d) Sports injury: quintiles of crude rates per 1,000 population

Manchester Royal Infirmary ED



1 (0.00 – 0.23)
2 (0.24 – 0.78)
3 (0.79 – 1.79)
4 (1.80 – 3.26)
5 (3.27 – 5.28)

MSOA E02001080 (5.28) MSOA E02001076 (4.53) MSOA E02001066 (3.95) MSOA E02001070 (3.91)