

TIIG Merseyside and Cheshire themed report

Intentional and unintentional childhood injuries within Merseyside and Cheshire (2011/12 to 2012/13)

March 2014

Document produced by Jennifer Brizell

Centre for Public Health, Research Directorate Faculty of Education, Health and Community Liverpool John Moores University
Henry Cotton Campus, 15-21 Webster Street Liverpool
L3 2ET
0151 231 4500
j.s.brizell@ljmu.ac.uk
www.cph.org.uk / www.tiig.info
www.twitter.com/tiig_cph





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KEY FINDINGS

- Between April 2011 and March 2013, there were 135,157 attendances made by children aged between 0 and 17 years of age to a Merseyside or Cheshire Emergency department (ED).
 - The majority of attendances were to Alder Hey Children's NHS Hospital (38,109) and Arrowe Park Hospital (21,105).
 - The largest number of attendances came from residents living in Liverpool (27,828), Chester East (25,375) and Wirral (19,831). When looking at the crude rate (per 100,000), the highest number of attendances came from Knowsley (40,840), Cheshire East (33,877) and Liverpool (31,335). More specifically the highest number of attendances came from wards Gillmoss (1,888), Warbreck (1,626), Dovecot (1,571), Pirrie (1,459) and Fazakerley (1,316). All five of these wards are in the Liverpool local authority.
 - There were more male (70,493) than female attendances (52,765) and the highest proportion of attendances were aged 0-4 years (37,652).
 - The majority of attendances were recorded as other injury (94,885), falls (12,233), sports injury (6,518) and road traffic collisions (3,965).
 - o Males made up 69% (1,562) of all assault attendances.
 - o Females represented 70% (671) of all deliberate self-harm attendances.
 - o Childhood injuries most often took place in the home (37,522) or in a public place (27,765).
 - The majority of patients either self-referred (59,476) or were referred by a friend or relative (33,911).
 - Most patients arrived at ED by private transport (83,432).
 - Only 8,427 patients were admitted into hospital and 79,640 were discharged. Almost a
 quarter 74% of RTC attendances were discharged with no follow up. Seventy one percent of
 bites and stings, 67% of falls and 63% of assaults attendances were also discharged.
- Between April 2011 and March 2013, there were 12,549 ambulance call outs for children aged between 0 and 17 years of age across Merseyside and Cheshire.
 - The most common call outs were for falls (4,855), traumatic injuries (2,913) and overdose/poisoning (1,323).
 - The majority of call outs were in the Liverpool local authority (2,990), followed by Wirral (1,725) and Sefton (1,501).
 - When looking at crude rates (per 100,000) the highest rates came from Liverpool local authority (3,367; CI 3,247-3,490), St Helens (2,821; CI 2,651-2,999) and Halton (2,792; CI 2,601-2,994).
 - There were more male (7,197) than female (5,273) callouts and 4,686 callouts were for children aged between 0-4 years.

MERSEYSIDE AND CHESHIRE AREA PROFILE

AREA DESCRIPTION

Merseyside, a metropolitan county and Cheshire, a ceremonial county, are both based within the north west of England. Merseyside is made up of five local authorities; Liverpool, Knowsley, St Helens, Sefton and Wirral and Cheshire is made up of four unitary authorities; Cheshire West and Chester, Cheshire East, Halton and Warrington. Using the mid-2011 population estimates, Merseyside has a population of approximately 1.38 million people and Cheshire a population of approximately 1.03 million people (ONS, 2012). Of these, approximately 280,000 residents (20%) in Merseyside are aged 17 years and under and in Cheshire, 213,000 residents (21%) are aged 17 years and under. Please see table one for a demographic breakdown by local/unitary authority.

TABLE 1. Demographic breakdown of Merseyside and Cheshire residents aged 17 years and under by gender and local/unitary authority (Mid-2011 Population Estimates)

Age group	0-	-4	5	-9	10	-13	14-	-17	Total		
Gender	М	F	М	F	М	F	М	F	Male total	Female total	
				Mersey	side local aut	horities					
Liverpool	13,538	12,782	11,345	10,984	9,449	9,341	10,923	10,445	45,255	43,552	
Knowsley	4,675	4,457	4,292	4,083	3,650	3,424	4,078	4,022	16,695	15,986	
St Helens	5,251	5,072	4,799	4,535	4,158	3,781	4,480	4,293	18,688	17,681	
Sefton	7,552	7,064	7,044	6,746	6,125	5,946	6,987	6,729	27,708	26,485	
Wirral	9,469	9,074	9,103	8,669	7,573	7,266	8,517	7,907	34,662	32,916	
				Cheshi	re unitary auti	horities					
Cheshire West and Chester	9,297	8,817	8,903	8,512	7,542	7,101	8,140	7,574	33,882	32,004	
Cheshire East	10,430	9,752	10,180	9,660	8,508	8,288	9,443	8,640	38,561	36,340	
Halton	4,128	4,142	3,805	3,670	3,043	2,997	3,277	3,124	14,253	13,933	
Warringto	6,263	6,123	5,995	5,620	4,957	4,681	5,383	4,968	22,598	21,392	
Total	70,603	67,283	65,466	62,479	55,005	52,825	61,228	57,702	252,302	240,289	

Source: Mid-2011 Population Estimates, Office for National Statistics, (2012). Accessed from; http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-262039

LEVELS OF DEPRIVATION

In terms of deprivation, local authorities within Merseyside fall on the whole at the more deprived end of the scale in England. Using the Indices of Multiple Deprivation (IMD 2010), four out of five local authorities within Merseyside are ranked in the most deprived quintile, these being; Liverpool, Knowsley, St Helens and Wirral. Sefton is ranked in the 2nd most deprived quintile. This is different to that of Cheshire, where only Halton

unitary authority is ranked in the most deprived quintile with Cheshire East being the 2nd least deprived quintile. Cheshire West and Chester and Warrington are positioned in the middle rank in quintile three.

EMPLOYMENT

Between October 2011 and September 2012, levels of unemployment in Merseyside range from 8.1% in Wirral to as high as 12.8% in Knowsley. All local authorities in Merseyside have higher than average rates of unemployment when compared to the national average of 7.9%. In addition, only Sefton and Wirral local authorities have levels of unemployment lower than the North West average of 8.8% (ONS, 2013). During the same time period for Cheshire figures shows that levels of unemployment ranged from 6.3% in Cheshire East to 10.9% in Halton and only Halton unitary authority has levels of unemployment higher than both the North West average and the average for England. Please see table 2 for a more detailed breakdown including 2009/10 and 2010/11 data.

TABLE 2. Unemployment rates (in those aged 16 and over) in Merseyside and Cheshire (October 2009 to September 2012)

Year	Oct 2009-Sept 2010 (%)	Oct 2010-Sept 2011 (%)	Oct 2011-Sept 2012 (%)									
	Merseyside local authorities											
Liverpool	12.7	11.7										
Knowsley	11.7	11.2	12.8									
St Helens	8.4	8.9	8.8									
Sefton	9.3	9.4	8.3									
Wirral	9.1	8.5	8.1									
	Cheshii	re unitary authorities										
Cheshire West and Chester	6.6	6.4	7.5									
Cheshire East	5.8	5.4	6.3									
Halton	9.9	9.5	10.9									
Warrington	6.6	6.3	6.7									
North West	8.2	8.2	8.8									
England	7.7	7.8	7.9									

Source: Figures for regions and England from Nomis, Office for National Statistics; and figures for local authorities are model based estimates, Office for National Statistics (2013). Accessed from;

 $\frac{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?m=0\&s=1380201273371\&enc=1\&page=analysisandgui}{\text{dance/analysisarticles/local-authority-profiles.htm\&nsjs=true\&nsck=false\&nssvg=false\&nswid=1024}$

INCOME

Table 3 shows residence based earnings (median weekly gross pay for full time workers) for those living in Merseyside local authorities and Cheshire unitary authorities. Data for 2012 shows that all local authorities in Merseyside have lower than average weekly pay compared to the England average of £513 per week. In addition, two local authorities; Liverpool (£464) and Knowsley (£451); have residents with lower weekly pay

than the North West average of £473 (ONS, 2013). Data in 2012 shows that only Halton (£452) has a lower than average weekly pay in Cheshire compared to the North West average whilst Cheshire West and Chester (£523) is the only unitary authority with an average weekly pay higher than the England average. Please see table 3 for a more detailed breakdown including 2010 and 2011 data.

TABLE 3. Income levels (in those aged 16 and over) in Merseyside and Cheshire (2010 to 2012)

Year	2010 (£)	2011 (£)	2012 (£)								
	Merseyside local authorities										
Liverpool	473	453	464								
Knowsley	430	435	451								
St Helens	483	482	479								
Sefton	453	469	480								
Wirral	508	477	498								
	Cheshii	re unitary authorities									
Cheshire West and Chester	530	498	523								
Cheshire East	505	499	500								
Halton	444	433	452								
Warrington	504	498	492								
North West	471	459	473								
England	506	505	513								

Source: Nomis, Office for National Statistics (2013). Accessed from;

 $\frac{\text{http://www.neighbourhood.statistics.gov.uk/dissemination/lnfo.do?m=0\&s=1380201273371\&enc=1\&page=analysisandgui}{\text{dance/analysisarticles/local-authority-profiles.htm} \& nsis=true \& nsck=false \& nssvg=false \& nswid=1024$

CLAIMANT COUNTS

As expected due to higher than average unemployment within Merseyside, there are also higher than average number of claimants for job seekers allowance within most local authorities. In 2012/2013 (March 2012 to March 2013), all local authorities in Merseyside had higher than average rates of job seeker allowance claimant count rates (against England of 3.8). In addition, only Wirral (4.2) has a lower than average rate when compared to the North West average of 4.4 (ONS, 2013). In Cheshire, only Halton (5.1) has a higher than average rate when compared to both North West and England averages. Please see table 4 for a more detailed breakdown including 2009/2010, 2010/2011 and 2011/2012 data.

TABLE 4. Job seeker allowance claimant count rates (in those aged 16 to 64 years) in Merseyside and Cheshire (2010 to 2013)

Year	09/10	10/11	11/12	12/13						
Merseyside local authorities										
Liverpool	6.8 6.4 6.9 6.3									
Knowsley	6.4	6.5	7.1	6.2						
St Helens	4.9	4.7	5.3	5.1						
Sefton	5.0	5.0	5.4	4.9						
Wirral	5.1	4.4	4.7	4.2						
		Cheshire unitary authorit	ties							
Cheshire West and Chester	3.4	3.2	3.5	3.2						
Cheshire East	2.9	2.4	2.6	2.5						
Halton	5.9	5.2	5.5	5.1						
Warrington	3.6	3.3	3.9	3.7						
North West	4.4	4.1	4.6	4.4						
England	3.9	3.6	4.0	3.8						

Source: Department for Work and Pensions, via Nomis, Office for National Statistics (2013). Accessed from; <a href="http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?m=0&s=1380201273371&enc=1&page=analysisandguidance/analysisarticles/local-authority-profiles.htm&nsjs=true&nsck=false&nssvg=false&nswid=1024

LEVELS OF EDUCATION

In general, the qualification levels for local authorities in Merseyside fall below the average for England. For example, all local authorities in Merseyside have a lower than average number of people attaining a level four or higher qualification (please see Box 1 for a full description of qualification types), when compared to the figures for the whole of England (33.5%) and the North West (31.0%) (ONS, 2013). In Cheshire, only Halton (23.0%) falls below the average for England and the

Box 1. Qualifications by level examples

Level 1 - GCSES grade D to G

Level 2 - GCSES grade A* to C

Level 3 - A Levels

Level 4 - Certificate of higher education.

For a full description please visit;

http://webarchive.nationalarchives.gov.uk/2012101 5000000/http://www.direct.gov.uk/en/EducationAndLearning/QualificationsExplained/DG 10039017

North West. Cheshire East saw 40.7% of its residents achieving a level four or higher. Please see table 5 for a more detailed breakdown including level two and three qualification data.

TABLE 5. Qualification levels (in males aged 16 to 64 and females aged 16 to 59) in Merseyside and Cheshire in 2010

Level of qualification	Level 2 or higher (%)	Level 3 or higher (%)	Level 4 or higher (%)								
Merseyside local authorities											
Liverpool	67.3	45.3	24.9								
Knowsley	62.9	38.4	16.6								
St Helens	70.4	46.8	26.0								
Sefton	73.2	53.5	30.0								
Wirral	73.5	51.0	29.6								
	Cheshire ur	nitary authorities									
Cheshire West and Chester	77.7	58.1	38.3								
Cheshire East	78.3	60.5	40.7								
Halton	66.5	41.7	23.0								
Warrington	75.7	55.1	34.2								
North West	72.0	51.3	31.0								
England	72.7	52.7	33.5								

Source: Department for Business, Innovation & Skills. Office for National Statistics (2013). Accessed from; <a href="http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?m=0&s=1380201273371&enc=1&page=analysisandguidance/analysisarticles/local-authority-profiles.htm&nsjs=true&nsck=false&nssvg=false&nswid=1024

CHILDHOOD POVERTY

Table 6 shows the proportion of dependent children within Merseyside and Cheshire local/unitary authorities who live in households where the equivalised income is below 60% of the contemporary national median. In 2010, all local authorities in Merseyside with the exception of Sefton (20.2%) had higher than average rates of children living in poverty compared to England (20.6%) and the North West (22.4%). In Cheshire in 2010, only Halton reported higher than average rates of children living in poverty (26.5%) when compared against both England and North West levels. Only 12.5% of children living in Cheshire East were living in poverty in 2010.

TABLE 6. Number of children living in poverty in Merseyside and Cheshire (2009 to 2010)

Year	2009 (%)	2010 (%)							
Merseyside local authorities									
Liverpool	34.4	33.1							
Knowsley	32.3	31.7							
St Helens	25.2	24.7							
Sefton	20.3	20.2							
Wirral	24.9	24.4							
	Cheshire unitary authorities								
Cheshire West and Chester	16.1	16.0							
Cheshire East	12.6	12.5							
Halton	27.2	26.5							
Warrington	14.5	14.3							
North West	23.1	22.4							
England	21.3	20.6							

Source: Department for Education, through Neighbourhood Statistics, Office for National Statistics (2013). Accessed from; <a href="http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?m=0&s=1380201273371&enc=1&page=analysisandguidance/analysisarticles/local-authority-profiles.htm&nsjs=true&nsck=false&nssvg=false&nswid=1024

ALCOHOL CONSUMPTION

Table 7 shows estimates of those aged 16 years and over engaging in low risk, increasing risk and high risk drinking in Merseyside and Cheshire using the Local Alcohol Profiles for England in 2009 (LAPE), 2013. Looking at the high risk category (see box 2 for definition of each level of drinking), only Liverpool local authority in Merseyside has higher than average rates (7.03%) of over 16s drinking at high risk levels (against the England average of 6.75%). (LAPE, 2013). All unitary authorities in

Box 2. Alcohol consumption levels

Lower risk drinking – Fewer than 22 units of alcohol per week for males and fewer than 15 for females.

Increasing risk drinking – Between 22 and 50 units of alcohol per week for males and between 15 and 35 units of alcohol per week for females.

Higher risk drinking – More than 50 units of alcohol per week for males and more than 35 units of alcohol per week for females.

Cheshire fall below the average for England for high risk drinking.

TABLE 7. Mid 2009 synthetic estimate of the percentage aged 16 years and over who report engaging in low risk, increasing risk and high risk drinking (data on abstainers also included) in Merseyside and Cheshire.

Level of alcohol consumption	Abstainers (%)	Low Risk (%)	Increasing Risk (%)	High Risk (%)							
Merseyside local authorities											
Liverpool	verpool 15.85 74.44 18.53										
Knowsley	14.32	74.69	18.73	6.59							
St Helens	13.33	73.76	19.82	6.42							
Sefton	13.77	73.61	19.77	6.62							
Wirral	13.75	73.88	6.31								
	C	Cheshire unitary authoritie	?\$								
Cheshire West and Chester	13.07	72.56	20.73	6.72							
Cheshire East	12.87	72.46	20.98	6.56							
Halton	13.38	74.06	19.50	6.44							
Warrington	12.92	73.11	20.65	6.24							
North West	15.38	73.53	19.86	6.61							
England	16.53	73.25	20.00	6.75							

Source: LAPE (2013), Public Health England. Accessed from; http://www.lape.org.uk/index.html

EMERGENCY DEPARTMENTS IN MERSEYSIDE AND CHESHIRE

Within Merseyside, there are six accident and emergency departments (ED). These are; University Hospital Aintree, Alder Hey Children's NHS Hospital, The Royal Liverpool University Hospital, Arrowe Park Hospital, Southport and Formby District General Hospital and Whiston Hospital. Within Cheshire, there are four EDs which are Macclesfield District General Hospital, Leighton Hospital, Countess of Chester Hospital and Warrington Hospital.

TABLE OF INJURY GROUPS COLLECTED

Table 8 details which injury groups are collected by each ED. There are varying levels of data collected across trusts with some collecting the College of Emergency recommended injury groups only and other trusts collecting additional information such as falls, bites and stings and burns and scalds. Due to different levels of data collection, we are unable to give a full comparison of all injury groups across all EDs in this report.

TABLE 8. Merseyside and Cheshire ED injury group data items

Injury group	Assault	Burn/scald	Bites/stings	Fall	Firework	Ingestion	Road Traffic Collision	Deliberate self-harm	Sports injury
Royal Liverpool	Y	Y	N	Y	Y	N	Υ	Y	Y
Whiston	Y	Y	N	Y	Y	Υ	Y	Y	Y
Aintree	Υ	N	N	Y	Υ	N	Y	Y	Υ
Alder Hey	Y	N	Y	N	N	Υ	Y	Y	N
Arrowe Park	Y	Y	Y	Y	Υ	Υ	Y	Y	Υ
Southport	Y	N	N	N	Y	N	Y	Y	Y
Macclesfield	Y	N	N	N	Υ	N	Y	Y	Υ
Leighton	Y	N	Y	N	N	N	Y	Y	Y
Countess of Chester	Y	N	N	N	Υ	N	Υ	Y	Υ
Warrington	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	9	3	3	4	7	3	9	9	8

CHILDHOOD INJURIES IN MERSEYSIDE AND CHESHIRE; AN ANALYSIS OF ED DATA

This section of the report examines the burden of childhood injuries in Merseyside and Cheshire using ED data between April 2011 and March 2013. In order to support local work following the Public Health Outcome Framework (PHOF), 'childhood' shall be classed as those aged 17 years and under to fit with the PHOF indicator 'hospital admissions caused by unintentional and deliberate injuries in under 18s¹'.

DEMOGRAPHICS

Between April 2011 to March 2013, a total of 135,157 ED injury attendances by individuals aged 0-17 years were recorded across Merseyside and Cheshire EDs (Table 9).

TABLE 9. Child injury attendances to Merseyside and Cheshire EDs (April 2011 – March 2013).

Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
2011/12	6538	6923	6439	6708	5401	6574	5928	5633	3902	4847	4709	6809	70411
2012/13	5233	6913	5894	5989	5184	6195	5885	5396	3900	4364	4664	5129	64746
Total	11771	13836	12333	12697	10585	12769	11813	11029	7802	9211	9373	11938	135157

¹ PHOF indicator now covers hospital admissions caused by unintentional and deliberate injuries in children and young people aged 0-14 and 15-24 years

Table 10 shows the breakdown of child injury attendances by ED attended between April 2011 and March 2013. Alder Hey Children's NHS Hospital saw the most child injury ED attendances over the two years (38,109) compared to Southport District General Hospital which only saw 866 attendances.

TABLE 10. Merseyside and Cheshire child injury attendances by ED (April 2011 – March 2013).

ED	Attendances
Alder Hey Children's NHS Hospital	38109
Arrowe Park Hospital	21105
Southport District General Hospital	866
The Royal Liverpool University Hospital	1789
University Hospital Aintree	5833
Whiston Hospital	20528
Countess of Chester Hospital	9241
Leighton Hospital	24067
Macclesfield District General Hospital	13619
Warrington Hospital	N/A
Total	135157

Across the child injury attendances made to Merseyside and Cheshire EDs between April 2011 and March 2013 (135,157), 123,259 (91%) were made by Merseyside and Cheshire residents. The highest out of region attendees came from Staffordshire (809; 1%), High Peak (533; <1%) and West Lancashire (446; <1%) local authorities. Table 11 shows the breakdown of attendances by local authority and which ED they attended. Many attendees went to an ED in the local authority they lived; for example 22,886 of Liverpool residents attended Alder Hey Children's NHS Hospital (82%) and 19,481 of Wirral residents attended Arrowe Park Hospital (98%). As Alder Hey is specifically a paediatric hospital, there were a high number of 'out of area' attendances to Alder Hey, for example 42% (5,668) of Knowsley residents and 71% (6,517) of Sefton residents were seen at Alder Hey. Low figures for childhood attendances at Southport and Formby District General Hospital (579) are most likely due to the nearby proximity of the paediatric ED, Ormskirk District General in Lancashire. Generally when children attend Southport and Formby District General Hospital they are triaged and advised to attend Ormskirk District General Hospital. The remainder of the ED section will look at Merseyside and Cheshire resident attendances only. Please note at the time of reporting TIIG does not hold information from Warrington Hospital and only data up to February 2013 for University Hospital Aintree. *** Please note throughout this report all numbers less than five have been suppressed in line with patient confidentiality and if there is only one number less than five in a category then a second number will be suppressed at the next level in order to prevent back calculations from totals.

TABLE 11. Merseyside and Cheshire child injury attendances by ED and Local Authority (April 2011 – March 2013).

	Cheshire East	Cheshire West and Chester	Halton	Knowsley	Liverpool	Sefton	St Helens	Warrington	Wirral	Merseyside total	Cheshire total	Total
Alder Hey Children's NHS Hospital	58	76	362	5668	22886	6517	339	164	182	35592	660	36252
Arrowe Park Hospital	15	1016	8	12	52	35	8	9	19481	19588	1048	20636
Southport and Formby District General Hospital	***	***	0	***	***	562	***	***	***	574	5	579
The Royal Liverpool University Hospital	***	<10	<25	85	1403	58	9	<10	32	1587	41	1628
University Hospital Aintree	10	9	23	1048	2344	1965	48	19	38	5443	61	5504
Whiston Hospital	5	18	3711	6516	1118	63	8077	127	16	15790	3861	19651
Countess of Chester Hospital	59	6603	32	***	18	7	<10	15	61	95	6709	6804
Leighton Hospital	13609	6727	25	11	***	***	9	79	12	37	20440	20477
Macclesfield District General Hospital	11617	85	***	0	***	***	***	11	<10	11	11717	11728
Warrington Hospital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	25375	14545	4189	13347	27828	9210	8501	433	19831	78717	44542	123259

In the financial year 2011/12 there were 62,966 child injury attendances made by Merseyside and Cheshire residents to Merseyside and Cheshire EDs. In 2012/13 this number had slightly decreased to 60,293 (4% decrease). Female attendees stayed relatively consistent over the two year period (26,557 in 2011/12; 26,208 in 2012/13) however male attendees dropped from 36,408 in 2011/12 to 34,085 in 2012/13. The biggest drop in age groups was in the 10-13 year (16,293 to 13,177) and 14-17 year (16,915 to 14,506) age groups. Attendances in both 0-4 and 5-9 year olds increased slightly from 2011/12 to 2012/13. Most injury groups dropped slightly in 2012/13 from 2011/12, e.g. assaults dropped from 1,231 to 1,035 and falls dropped from 6,228 to 6,005. There were more male (70,493; 57%) child injury attendances than female (52,765; 43%) and this was consistent across each month over the two year period (Figure 1). *Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals*.

FIGURE 1. Merseyside and Cheshire child injury attendances by gender (April 2011 – March 2013).

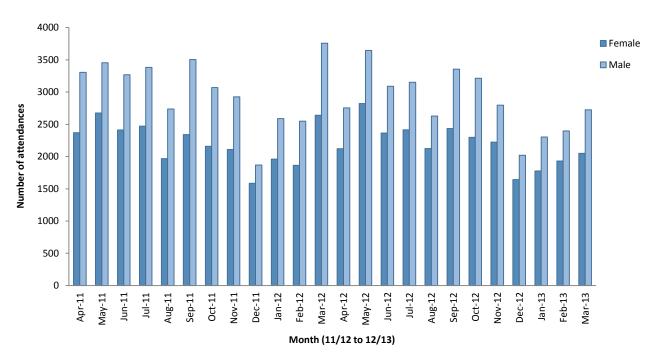


Figure 2 shows the percentage of child injury attendances from each age group. The highest proportion of injury attendances was from the 0-4 age group with 37,652 (31%), the lowest was the 5 to 9 year olds (24,716; 20%). The remaining two age groups saw 29,470 (24%) aged 10 to 13 years and 31,421 (25%) aged 14 to 17 years.

FIGURE 2. Merseyside and Cheshire child injury attendances by age group (April 2011 – March 2013).

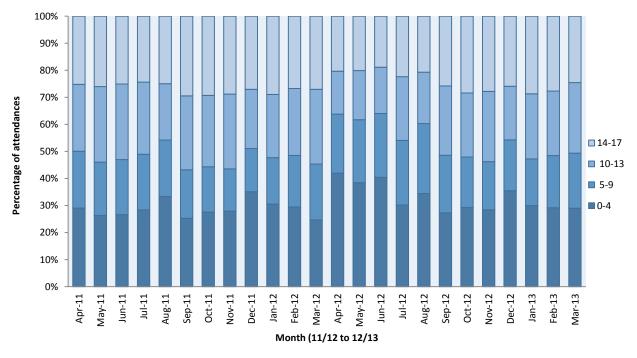


Figure 3 shows the ethnicity of child injury attendances by ED. For those EDs who collect ethnicity, almost nine in ten (87,334; 90%) of attendees were White. *Please note, three A&Es do not collect ethnicity, these are*;

University Hospital Aintree, Arrowe Park Hospital and Southport and Formby District General Hospital. In those EDs that did collect ethnicity, 5,080 did not have an ethnicity recorded.

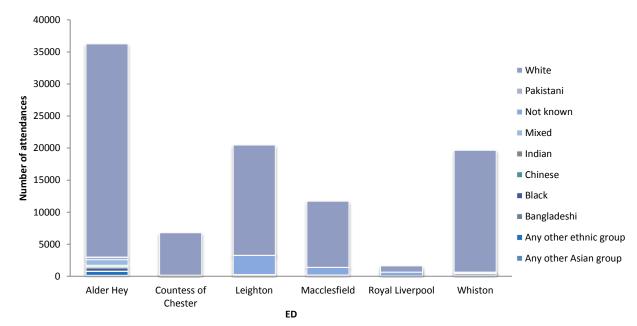


FIGURE 3. Merseyside and Cheshire child injury attendances by ethnicity and ED (April 2011 – March 2013).

Table 12 shows the gender and age group of child injury attendances split by ED. The distribution of age groups varied across all the EDs. Alder Hey Children's NHS Hospital attendances included a high proportion of 0-4 year olds (14,181; 39%) but Royal Liverpool University Hospital, Southport and Formby District General Hospital and University Hospital Aintree saw a small proportion of 0-4 year olds (4% 6% and 7% respectively). This is most likely due to the close proximity of paediatric EDs, Ormskirk District General and Alder Hey Children's NHS. Conversely Alder Hey saw a much lower proportion of 14 to 17 year olds (4,691; 13%) where for other EDs this age group represented their biggest proportion of attendances, e.g. 91% of child attendances to The Royal Liverpool University Hospital were aged between 14 and 17 years. *Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals*.

TABLE 12. Merseyside and Cheshire child injury attendances by ED, gender and age group (April 2011 – March 2013).

Age group	0	-4	5	5-9	10)-13	14	-17	To	otal
Gender	М	F	М	F	М	F	М	F	М	F
Alder Hey Children's NHS Hospital	7946	6235	4761	3868	5008	3743	2987	1704	20702	15550
Arrowe Park Hospital	3050	2433	2599	2128	3100	2411	3219	1696	11968	8668
Southport and Formby District General Hospital	23	12	12	13	15	6	302	196	352	227
The Royal Liverpool University Hospital	32	39	21	19	17	22	799	679	869	759
University Hospital Aintree	200	181	139	111	214	169	2258	2232	2811	2693
Whiston Hospital	4296	3426	1854	1559	2157	1517	2790	2052	11097	8554
Countess of Chester Hospital	1029	850	797	616	1038	664	1137	673	4001	2803
Leighton Hospital	2835	2118	1892	1689	3538	2631	3612	2162	11877	8600
Macclesfield District General Hospital	1720	1227	1490	1147	1846	1374	1760	1163	6816	4911
Warrington Hospital	N/C									
Total	21131	16521	13565	11150	16933	12537	18864	12557	70493	52765

Table 13 shows the gender and age group of child injury attendances split by local authority. The highest proportion of attendances came from Liverpool (27,828; 23%) and the lowest from Warrington (433, <1%) and Halton (4,189, 3%). However this is most likely due to this report not including data from Warrington ED. *Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals.*

TABLE 13. Merseyside and Cheshire child injury attendances by local authority, gender and age group (April 2011 – March 2013).

Age group	C)-4	5	5-9	10)-13	14	-17	To	otal
Gender	М	F	М	F	M	F	М	F	M	F
Liverpool	5395	4229	3114	2526	3356	2523	3922	2763	15787	12041
Knowsley	2514	2082	1450	1222	1568	1199	1817	1495	7349	5998
St Helens	2037	1571	837	674	897	606	1095	784	4866	3635
Sefton	1502	1190	878	752	992	772	1711	1413	5083	4127
Wirral	2981	2349	2499	2010	2955	2286	3081	1670	11516	8315
Cheshire West and Chester	2096	1600	1485	1223	2506	1658	2504	1473	8591	5954
Cheshire East	3612	2717	2819	2375	4045	3117	4143	2546	14619	10755
Halton	927	732	426	334	541	349	522	358	2416	1773
Warrington	67	51	57	34	73	27	69	55	266	167
Total	21131	16521	13565	11150	16933	12537	18864	12557	70493	52765

INJURY GROUP

Table 14 details the injury group of child injury attendances in Merseyside and Cheshire. The majority (77%) of ED childhood injury attendances were recorded as other injury² (94,995), 5% as sports injuries (6,518), 10% as falls (12,233), and 3% as road traffic collisions (RTCs) (3,965). The prevalence of falls attendances should be treated with caution as only four EDs collect data on whether an attendance was a fall; the true figure is likely to be much higher. Assaults (2,226) made up only 2% and deliberate self-harm (DSH) accounted for 1% of all injury attendances (953).

Males made more than double the attendances to EDs for assaults (69%) than females (31%) whilst females represented 70% of all DSH attendances compared to just 30% of males. The distribution of injury groups were varied across the EDs. The Royal Liverpool University Hospital saw the highest proportion of assaults within their attendances (10%) followed by Southport and Formby District General Hospital (8%) and University Hospital Aintree (5%). Arrowe Park Hospital saw a much smaller proportion of RTCs than any other ED (3%). Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals. NC=Not collected by the ED.

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² The high number of A&E attendances recorded as 'other injury' is due mostly to recording practices at A&E. However, some attendances which were recorded as a specific injury group were grouped under other injury due to small numbers. For example, domestic injury (less than 5), inhalation (25).

TABLE 14. Merseyside and Cheshire child injury attendances by local authority, ED, gender and injury group (April 2011 – March 2013)

Injury group	Ass	ault	Bites stii	and ngs		s and alds	D!	SH	Fa	all	_	work jury	Inge	stion	Other	injury	RT	гс	Sports	injury	To	otal
Gender	M	F	М	F	М	F	М	F	М	F	M	F	М	F	М	F	М	F	М	F	М	F
Local authority																						
Liverpool	425	158	93	92	22	19	41	90	250	226	0	0	172	190	14142	10888	361	315	281	63	15787	12041
Knowsley	143	92	24	<20	70	60	32	51	439	415	***	0	69	76	6135	4954	324	269	112	64	7349	5998
St Helens	107	57	***	***	96	84	34	32	593	457	0	0	37	29	3584	2678	332	237	80	60	4866	3635
Sefton	149	84	20	20	***	***	21	76	118	122	***	0	58	81	4257	3562	148	119	309	60	5083	4127
Wirral	209	98	79	84	149	123	33	87	4769	3913	***	***	132	109	4029	3153	364	287	1750	459	11516	8315
Cheshire West and Chester	186	50	24	31	11	***	40	108	243	200	***	***	***	***	6851	5086	275	211	956	259	8591	5954
Cheshire East	300	138	60	40	0	***	71	201	7	***	***	6	0	0	12513	9587	255	202	1409	578	14619	10755
Halton	<40	<25	***	***	40	32	10	18	240	224	0	***	21	<15	1870	1337	<155	106	44	18	2416	1773
Warrington	***	***	***	***	***	***	0	8	9	<10	0	0	***	0	234	135	***	6	11	5	266	167
Total	1562	704	305	288	393	328	282	671	6668	5565	10	10	493	501	53615	41380	2213	1752	4952	1566	70493	52765
ED																						
Alder Hey Children's NHS Hospital	311	166	143	134	NC	NC	25	61	NC	NC	NC	NC	273	320	19604	14600	346	269	NC	NC	20702	15550
Arrowe Park Hospital	213	98	80	85	155	122	<35	87	5043	4141	***	***	130	112	4077	3225	364	299	1873	498	11968	8668
Southport & Formby District General	28	17	NC	NC	NC	NC	6	27	NC	NC	0	0	NC	NC	144	122	34	28	140	33	352	227
The Royal Liverpool University Hospital	116	40	NC	NC	7	17	6	10	41	34	0	0	NC	NC	586	593	28	36	85	29	869	759
Univ Hosp Aintree	210	59	NC	NC	NC	NC	40	88	298	307	***	***	NC	NC	1719	2078	118	89	424	71	2811	2693
Whiston Hospital	208	136	NC	NC	231	189	<65	79	1286	1083	0	***	90	69	8262	6233	792	628	168	136	11097	8554
Countess of Chester	108	29	NC	NC	NC	NC	34	101	NC	NC	***	***	NC	NC	2929	2367	184	126	744	179	4001	2803
Leighton Hospital	268	110	82	69	NC	NC	43	91	NC	NC	NC	NC	NC	NC	10724	7960	269	224	491	146	11877	8600
Macclesfield District General Hospital	100	49	NC	NC	NC	NC	37	127	NC	NC	***	<10	NC	NC	5570	4202	78	53	1027	474	6816	4911
Warrington Hospital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	1562	704	305	288	393	328	282	671	6668	5565	10	10	493	501	53615	41380	2213	1752	4952	1566	70493	52765

Table 15 shows the age and gender of children presenting with different injuries in Merseyside and Cheshire. Males aged between 14 and 17 years of age made up 48% of all assault cases (1,080). Children aged 0-4 years made up 53% of all burn and scalds injuries and 35% of all fall attendances. The vast majority of DSH attendances were aged 14-17 years (773; 81%). Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals.

TABLE 15. Merseyside and Cheshire child injury attendances by gender and age group (April 2011 – March 2013).

Age group	O)-4	į	5-9	10)-13	14	-17	т	otal
Gender	М	F	M	F	M	F	M	F	М	F
Assault	121	81	59	34	302	129	1080	460	1562	704
Bites and stings	99	94	90	75	68	60	48	59	305	288
Burns and scalds	216	163	55	54	41	<30	81	<90	393	328
DSH	30	<30	<15	***	<45	65	200	573	282	671
Fall	2362	1902	1517	1350	1443	1288	1346	1025	6668	5565
Firework injury	0	***	***	***	***	***	5	***	10	10
Ingestion	319	278	66	49	34	48	74	126	493	501
Other injury	17235	13372	10885	9057	12993	9853	12502	9098	53615	41380
RTC	630	528	436	335	419	350	728	539	2213	1752
Sports injury	119	71	444	191	1589	714	2800	590	4952	1566
Total	21131	16521	13565	11150	16933	12537	18864	12557	70493	52765

LOCATION

Table 16 details the injury group of child injury attendances in Merseyside and Cheshire by location of incident. Over a third (37,522; 36%) of injuries took place in the home, 27% of injuries (27,765) took place in a public place and 16% (16,396) took place in an educational establishment. Over half of DSH took place in the home (425; 52%). Four in ten assaults took place in a public place (765; 40%). There were also relatively high number of assaults which occurred in an education establishment (267; 14%) and the home (210; 11%). *Please note, one attendee did not have a gender recorded; this attendee has not been included in the totals. Please note, Whiston ED does not collect location of incident and therefore attendances from Whiston have not been included in the totals.*

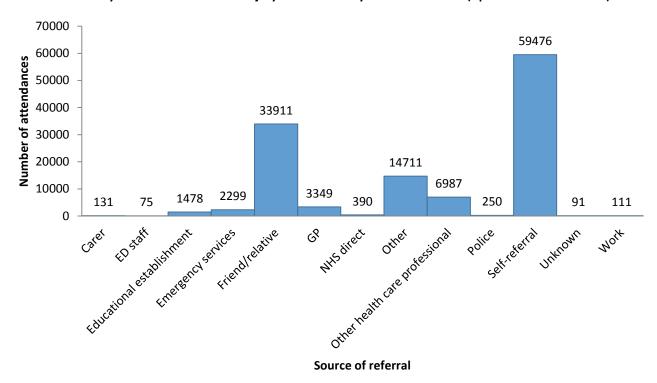
TABLE 16. Merseyside and Cheshire child injury attendances by gender and injury location (April 2011 – March 2013).

Location	Educational	establishment	Но	me	Public	place	W	/ork	Otl	ner	То	tal
Gender	М	F	М	F	М	F	М	F	M	F	М	F
Assault	212	55	126	84	546	219	***	0	468	<215	1354	568
Bites and stings	8	***	142	115	98	96	***	***	56	75	305	288
Burns and scalds	***	***	117	114	<30	<20	***	0	<15	<10	162	139
DSH	<15	23	111	314	26	56	0	***	74	198	222	592
Fall	856	643	1752	1684	2464	1927	***	<10	306	223	5382	4482
Firework injury	***	***	***	***	***	***	0	0	***	***	10	9
Ingestion	9	8	315	304	26	47	0	0	53	73	403	432
Other injury	7707	5449	16716	15290	11022	7147	159	120	9749	7141	45353	35147
RTC	***	***	<30	<25	808	641	0	0	583	457	1421	1124
Sports injury	973	424	199	82	2115	481	***	***	1493	442	4784	1430
Total	9785	6611	19509	18013	17133	10632	174	128	12795	8827	59396	44211

SOURCE OF REFERRAL

Figure 4 shows the source of referral for child injury attendances in Merseyside and Cheshire. The majority of attendees (59,476; 48%) self-referred. Almost three in ten (28%) were brought in by a friend or a relative.

FIGURE 4. Merseyside and Cheshire child injury attendances by source of referral (April 2011 – March 2013).



ARRIVAL MODE

Figure 5 shows the arrival mode for child injury attendances in Merseyside and Cheshire. The majority of attendees (83,432; 68%) arrived by private transport. Just under one in ten (9%) arrived by ambulance.

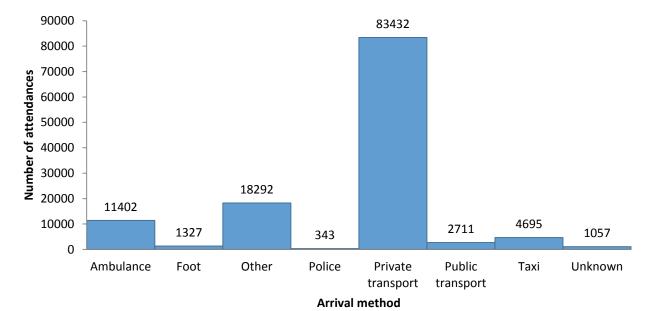


FIGURE 5. Merseyside and Cheshire child injury attendances by arrival mode (April 2011 - March 2013).

DISCHARGE METHOD

The disposal of a patient from an ED gives an indication of the severity of the injuries (Table 17). Fewer than one in ten injuries amongst children from Merseyside and Cheshire were admitted (8,427; 7%) and 64% (79,460) were discharged with no follow up. Almost four in ten (39%) of deliberate self-harm attendees were admitted whilst 74% of RTC, 71% of bites and stings, 67% of falls and 63% of assaults were discharged with no follow up. Both The Royal Liverpool University Hospital (238) and Whiston Hospital (2,896) saw a high proportion of children admitted into hospital (both 15%). Further investigation would be needed to ascertain whether a higher proportion of children are admitted into these hospitals or whether this is due to differences in recording practices.

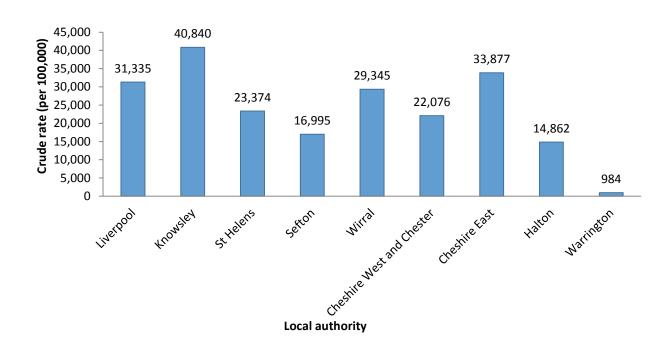
TABLE 17. Merseyside and Cheshire child injury attendances by discharge method, local authority and ED (April 2011 – March 2013).

Discharge method	Admitte	ed	Discha	rged	Follow up / R	eferral	Oth	er	Total
Gender	N	%	N	%	N	%	N	%	N
Local authority									
Liverpool	1942	7	18326	66	7118	26	442	2	27828
Knowsley	1177	9	9084	68	2871	22	215	2	13347
St Helens	1473	17	5420	64	1435	17	173	2	8501
Sefton	735	8	5860	64	2456	27	159	2	9210
Wirral	867	4	13626	69	4961	25	377	2	19831
Cheshire West and Chester	532	4	9468	65	4190	29	355	2	14545
Cheshire East	953	4	14841	58	8888	35	693	3	25375
Halton	652	16	2618	62	858	20	61	1	4189
Warrington	96	22	217	50	116	27	4	1	433
Total	8427	7	79460	64	32893	27	2479	2	123259
ED									
Alder Hey Children's NHS Hospital	2384	7	24136	67	9481	26	251	1	36252
Arrowe Park Hospital	840	4	14209	69	5209	25	378	2	20636
Southport and Formby District General Hospital	28	5	286	49	227	39	38	7	579
The Royal Liverpool University Hospital	238	15	884	54	385	24	121	7	1628
University Hospital Aintree	657	12	3199	58	1383	25	265	5	5504
Whiston Hospital	2896	15	12998	66	3380	17	377	2	19651
Countess of Chester Hospital	353	5	4034	59	2132	31	285	4	6804
Leighton Hospital	518	3	14400	70	5243	26	316	2	20477
Macclesfield District General Hospital	513	4	5314	45	5453	46	448	4	11728
Warrington Hospital	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	8427	7	79460	64	32893	27	2479	2	123259

SUMMARY OF CHILD INJURY ATTENDANCES AT LOCAL AUTHORITY LEVEL³

The following section details child attendances between April 2011 and March 2013 split by local authority of residence. The largest number of attendances came from residents living in Liverpool (27,828), Chester East (25,375) and Wirral (19,831). However when looking at the rate level (per 100,000), the highest number of attendances came from Knowsley (40,840), Cheshire East (33,877) and Liverpool (31,335). Figure 6 shows the crude rate of childhood injury attendances (per 100,000) between April 2011 and March 2013 by local authority.

FIGURE 6. Merseyside and Cheshire child injury attendances by local authority crude rate (per 100,000) (April 2011 – March 2013).



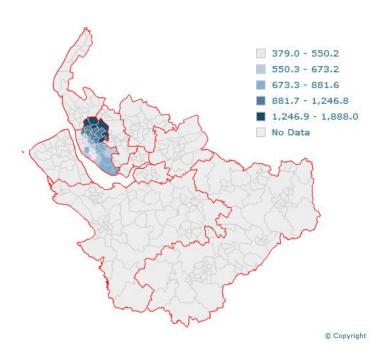
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³ Please note, whilst crude rates by local authority have been given in this section there are caveats to this. The exclusion of data from Warrington A&E means that Warrington and surrounding area residents will be vastly under reported. Secondly as the A&E data includes repeat attendances the rates provided are not an accurate figure of the proportion of the population attending a Merseyside and Cheshire A&E.

LIVERPOOL

The number of attendances made by Liverpool residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 27,828. This figure represented 23% of the total number of attendances made by Merseyside and Cheshire residents. The crude rate for Liverpool residents attending a Merseyside and Cheshire ED was 31,335 per 100,000 population (CI; 30,938 – 31,706). Males made up 57% of Liverpool resident attendances (15,787) and those aged between 0-4 years accounted for 35% of attendances (9,624). These figures are similar to those found across the whole of Merseyside and Cheshire where 57% of attendances were male and 31% were aged 0-4 years. Ninety percent of Liverpool resident injury attendances were classed as other injury (25,030). Where a specific injury group was provided, the highest attendances were seen in RTCs (676; 2%), assaults (583; 2%) and falls (476; 2%). There were a similar proportion of assaults (2%) and RTCs (3%) seen across the whole of Merseyside and Cheshire; however there was a much higher proportion of falls (10%). This is most likely due to Alder Hey Children's NHS Hospital not collecting data on whether an injury was a fall. Within Liverpool, the highest number of attendances came from the wards, Gillmoss (1,888), Warbreck (1,626), Dovecot (1,571), Pirrie (1,459) and Fazakerley (1,316). The map below shows Liverpool resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

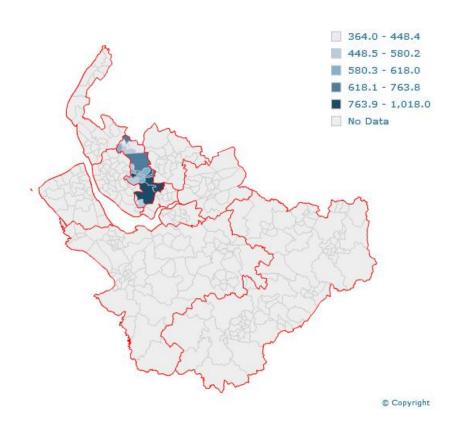
LIVERPOOL RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



KNOWSLEY

The number of attendances made by Knowsley residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 13,347. This represented 11% of the total number of attendances made by Merseyside and Cheshire residents. The crude rate for Knowsley residents attending a Merseyside and Cheshire ED was 40,840 per 100,000 population (CI; 40,150 – 41,539). Males made up 55% of Knowsley resident attendances (7,349) and 34% of attendances were aged 0-4 years (4,596). These figures are similar to those found across the whole of Merseyside and Cheshire where 57% of attendances were male and 31% were aged 0-4 years. Eighty three percent of Knowsley resident injury attendances were classed as other injury (11,089). Where a specific injury group was provided, the highest attendances were seen in falls (854; 6%), RTCs (593; 4%) and assaults (235; 2%) which is a similar picture to that of the whole of Merseyside and Cheshire where 10% of injuries were classed as falls, 3% as RTCs and 2% as assaults. Within Knowsley, the highest number of attendances came from the wards, Whiston South (1,018), Prescot East (966), Halewood East (781), Page Moss (765) and Longview (763). The map below shows Knowsley resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

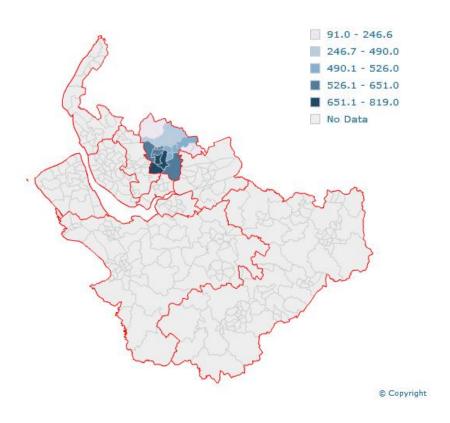
KNOWSLEY RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



ST HELENS

The number of attendances made by St Helens residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 8,501 which represented 7% of the total attendances made by Merseyside and Cheshire residents. The crude rate for St Helens residents attending a Merseyside and Cheshire ED was 23,374 per 100,000 population (CI; 22,880 - 23,877). Males made up 57% of St Helens resident attendances (4,866) and over two in five (42%) were aged between 0-4 years (3,608). Whilst across the whole of Merseyside and Cheshire the highest proportion of attendances came from the 0-4 year old group, within St Helens there was a much larger proportion of attendances aged 0-4 years. This figure also reflects a much larger proportion when compared to the St Helens population where approximately 28% of children aged between 0-4 years. Seventy four percent of St Helens resident injury attendances were classed as other injury (6,262). Where a specific injury group was provided, the highest attendances were seen in falls (1,050; 12%) and RTCS (569; 7%); burns and scalds (180), assaults (164) and sports injuries (140) each made up around 2% of injury attendances. This is a similar picture to that of the whole of Merseyside and Cheshire where 10% of injuries were classed as falls, 3% as RTCs and 2% as assaults. Within St Helens, the highest number of attendances came from the wards, Thatto Heath (819), Rainhill (792), West Sutton (703), Grange Park (638) and Eccleston (580). The map below shows St Helens resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

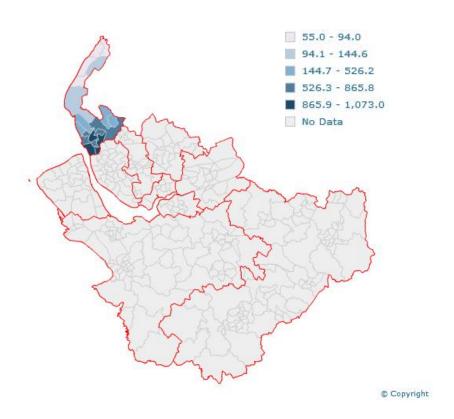
ST HELENS RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



SEFTON

The number of attendances made by Sefton residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 9,210 which represented 7% of the total attendances made by Merseyside and Cheshire residents. The crude rate for Sefton residents attending a Merseyside and Cheshire ED was 16,995 per 100,000 population (CI; 16,650 – 17,346). Over half (55%) of Sefton resident attendances were male (5,083) and over a third (34%) we aged between 14 and 17 years of age (3,124). Across the whole of Merseyside and Cheshire, 57% of attendances were male, however the highest proportion of attendances came from the 0-4 year age group (31%). Eighty five percent of Sefton resident injury attendances were classed as other injury (7,819). Where a specific injury group was provided, the highest attendances were seen in sports injury (369; 4%), RTCs (267; 3%), falls (240; 3%) and assaults (233; 3%). The reason for a lower proportion of fall attendances when compared to Merseyside and Cheshire (10%) is likely due to Southport and Formby District General Hospital not collecting information on when an attendance is a fall. Within Sefton, the highest number of attendances came from the wards, Derby (1,073), Netherton and Orrell (1,033), Ford (908), Linacre (903) and St Oswald (841). The map below shows Sefton resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

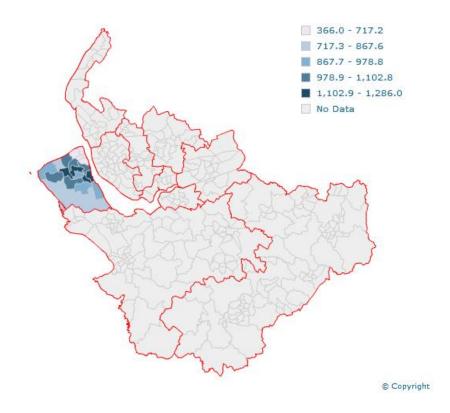
SEFTON RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



WIRRAL

The number of attendances made by Wirral residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 19,831 which represented 16% of the total attendances made by Merseyside and Cheshire residents. The crude rate for Wirral residents attending a Merseyside and Cheshire ED was 29,345 per 100,000 population (CI; 28,938 - 29,757). Males made up 58% of Wirral resident attendances (11,516) which is similar to the proportion seen in the Merseyside and Cheshire figures (57%). Wirral saw a very even split between the age groups of those attending an ED with 27% of attendances aged 0-4 years, 26% aged 10-13 years, 24% aged 14-17 years and 23% aged between 5 and 9 years. Across Merseyside and Cheshire the majority of attendances were aged 0-4 years (31%). Only 36% of Wirral resident injury attendances were classed as other injury (7,182). This figure is much lower than other EDs and is likely due to the way Arrowe Park Hospital code their injury data. Where a specific injury group was provided, the highest attendances were seen in falls (8,682; 44%) sports injuries (2,209; 11%), RTCs (651; 3%) and assaults (307; 2%). The much higher proportion of fall attendances made by Wirral residents when compared to the whole of Merseyside and Cheshire (10%) is most likely due to different recording practices between EDs; the majority of Wirral residents (98%) attended Arrowe Park Hospital where fall injuries are collected as an injury group however many EDs do not collect this information. Within Wirral the highest number of attendances came from the wards, Tranmere (1,286), Upton (1,251), Claughton (1,119), Egerton (1,113) and Prenton (1,096). The map below shows Wirral resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

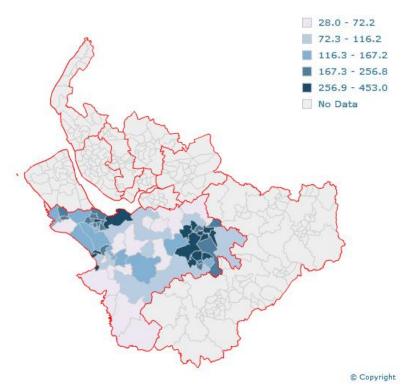
WIRRAL RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



CHESHIRE WEST AND CHESTER

The number of attendances made by Cheshire West and Chester residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 14,545 which represented 12% of the total attendances made by Merseyside and Cheshire residents. The crude rate for Cheshire West and Chester residents attending a Merseyside and Cheshire ED was 22,076 per 100,000 population (CI; 21,719 - 22,438). Males made up 59% of Cheshire West and Chester resident attendances (8,591). Cheshire West and Chester saw a fairly even split between the age groups of those attending an ED with 29% of attendances aged 10-13 years, 27% aged 14-17 years, 25% aged 0-4 years and 19% aged between 5 and 9 years. Across Merseyside and Cheshire whilst the remaining age groups were fairly evenly split, the majority of attendances were aged 0-4 years (31%). Eighty two percent of Cheshire West and Chester resident injury attendances were classed as other injury (11,937). Where a specific injury group was provided, the highest attendances were seen in sports injuries (1,215; 8%), RTC (486; 3%), falls (443; 3%) and assaults (236; 2%). There were a similar proportion of assaults (2%) and RTC (3%) seen across the whole of Merseyside and Cheshire; however there was a much higher proportion of falls (10%) in Merseyside and Cheshire. This is most likely due to Leighton Hospital and Countess of Chester hospital not collecting data on whether an injury was a fall. Within Chester West and Chester, the highest number of attendances came from the wards, Leftwich and Kinsmead (453), Blacon Hall (403), Northwich Castle (351), Northwich Witton (341) and Winsford Over (300). The map below shows Cheshire West and Chester resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

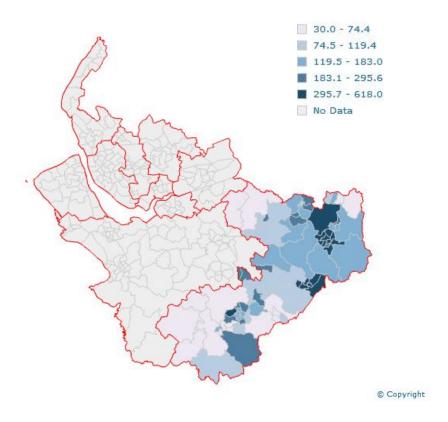
CHESHIRE WEST AND CHESTER RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



CHESHIRE EAST

The number of attendances made by Cheshire East residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 25,374 which represented 21% of the total attendances made by Merseyside and Cheshire residents. The crude rate for Cheshire East residents attending a Merseyside and Cheshire ED was 33,877 per 100,000 population (CI; 33,461 - 34,296). Males made up 58% of Cheshire East resident attendances (14,619). Cheshire East saw a fairly even split between the age groups of those attending an ED with 28% of attendances aged 10-13 years, 26% aged 14-17 years, 25% aged 0-4 years and 20% aged between 5 and 9 years. Across Merseyside and Cheshire whilst the remaining age groups were fairly evenly split, the majority of attendances were aged 0-4 years (31%). Eighty seven percent of Cheshire East resident injury attendances were classed as other injury (22,100). Where a specific injury group was provided, the highest attendances were seen in sports injuries (1,987; 8%), RTCs (457; 2%), assaults (438; 2%) and DSH (272; 1%). There were only nine instances where an attendance was recorded as a fall which is most likely due to Leighton Hospital and Macclesfield District General Hospital not collecting data on whether an injury was a fall. Within Chester East, the highest number of attendances came from the wards, Congleton North (618), Macclesfield Broken Cross (581), Macclesfield West (564), Macclesfield South (557) and Congleton South (528). The map below shows Cheshire East resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

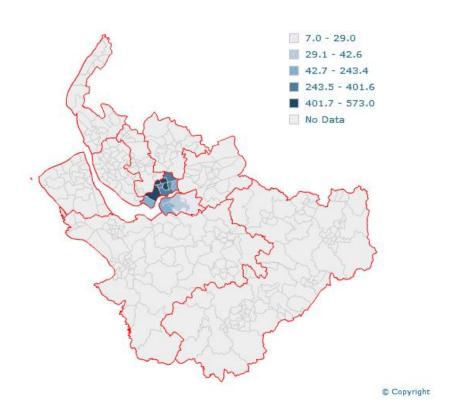
CHESHIRE EAST RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



HALTON

The number of attendances made by Halton residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 4,189 which represented 3% of the total attendances made by Merseyside and Cheshire residents; the reason for the low number of attendances made by Halton residents is most likely due to the exclusion of data from Warrington A&E. The crude rate for Halton residents attending a Merseyside and Cheshire ED was 14,862 per 100,000 population (CI; 14,415 – 15,319). Males made up 58% of Halton resident attendances (2,416) and two fifths (40%) were aged between 0-4 years (1,659). These figures are similar to those found across the whole of Merseyside and Cheshire where 57% of attendances were male and 31% were aged 0-4 years. Seventy seven percent of Halton resident injury attendances were classed as other injury (3,207). Where a specific injury group was provided, the highest attendances were seen in falls (464; 11%), RTCs (257; 6%), burn and scalds (72; 2%) and assaults (63; 2%). Within Halton, the highest number of attendances came from the wards, Hough Green (573), Ditton (539), Birchfield (478), Kingsway (422) and Farnworth (371). The map below shows Halton resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

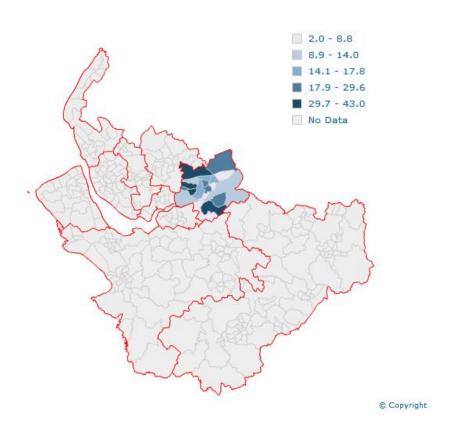
HALTON RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



WARRINGTON

The number of attendances made by Warrington residents to Merseyside and Cheshire EDs between April 2011 and March 2013 was 433 which represented less than 1% of the total attendances made by Merseyside and Cheshire residents. The crude rate for Warrington residents attending a Merseyside and Cheshire ED was 984 per 100,000 population (CI; 894 – 1,082). The reason for the low number of attendances made by Warrington residents is due to the exclusion of data from Warrington A&E. Males made up 61% of Warrington resident attendances (266) and less than three in ten (29%) were aged between 14 to 17 years (124). Eighty five percent of Warrington resident injury attendances were classed as other injury (369). Within Warrington, the highest number of attendances came from the wards, Burtonwood and Winwick (43), Whittle Hall (38), Great Sankey South (35), Appleton (29) and Great Sankey North (28). However, please note this information only provides detail of Warrington residents who attended a Merseyside and Cheshire ED other than Warrington ED. The map below shows Warrington resident attendances (aged 0 to 17 years) who attended an ED in Merseyside and Cheshire between April 2011 and March 2013.

WARRINGTON RESIDENT CHILD INJURY ATTENDANCES BY WARD AND LA BOUNDARIES



CHILD INJURY ATTENDANCES AT WARD LEVEL

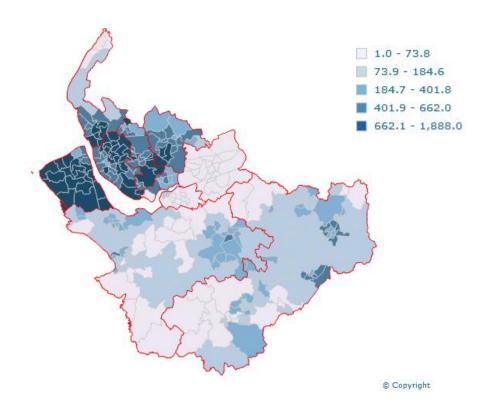
Across the child injury attendances made by Merseyside and Cheshire residents to Merseyside and Cheshire EDs, the highest number of attendances came from patients residing in wards Gilmoss (1,888) followed by Warbreck (1,626), Dovecot (1,571) and Pirrie (1,459). Please see table 18 for a breakdown of the top twenty wards. Please note it was not possible to ascertain a ward for all A&E attendances, only 114,314 attendances (85%) were assigned to a ward. Particular consideration needs to be given to data from Leighton Hospital as only 9,565(40%) attendances place of residence could be assigned to ward level. Also at time of reporting TIIG does also not hold information from Warrington Hospital, this accounts for the lower proportion of attendances residing in Cheshire.

TABLE 18. Merseyside and Cheshire child injury attendances by top twenty wards (April 2011 – March 2013).

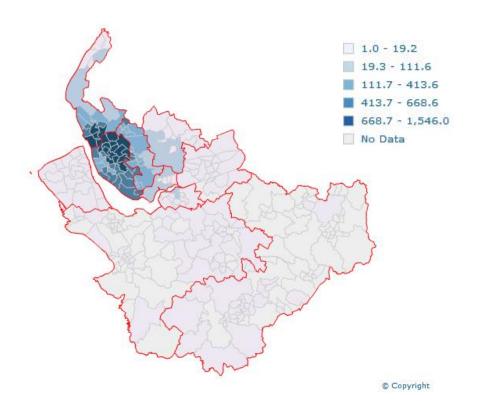
Ward Name	Ward Code	Local Authority	Number of attendances
Gillmoss	00BYFS	Liverpool	1888
Warbreck	00BYGJ	Liverpool	1626
Dovecot	00BYFP	Liverpool	1571
Pirrie	00BYGB	Liverpool	1459
Fazakerley	00BYFR	Liverpool	1316
Tranmere	00CBFW	Wirral	1286
Broadgreen	00BYFG	Liverpool	1274
Upton	00CBFX	Wirral	1251
Tuebrook	00BYGF	Liverpool	1240
County	00BYFL	Liverpool	1189
Croxteth	00BYFM	Liverpool	1175
Claughton	00CBFF	Wirral	1119
Egerton	00CBFH	Wirral	1113
Prenton	00CBFR	Wirral	1096
Clubmoor	00BYFK	Liverpool	1089
Derby	00CAGF	Sefton	1073
Leasowe	00CBFL	Wirral	1055
Birkenhead	00CBFC	Wirral	1054
Netherton and Orrell	00CAGR	Sefton	1033
Bidston	00CBFB	Wirral	1022

The following section of this report includes maps of Merseyside and Cheshire at ward level, the first map shows all Merseyside and Cheshire resident childhood injury A&E attendances between April 2011 and March 2013 to Merseyside and Cheshire EDs. The subsequent maps show the same information split by attendances by each ED.

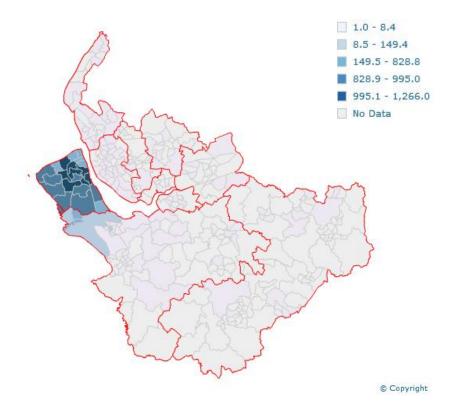
ALL CHILD INJURY ATTENDANCES BY WARD



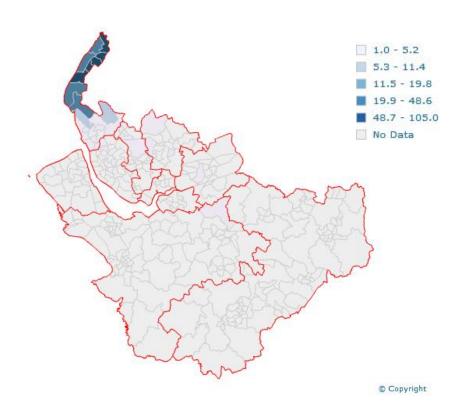
CHILD INJURY ATTENDANCES TO ALDER HEY CHILDREN'S NHS HOSPITAL BY WARD



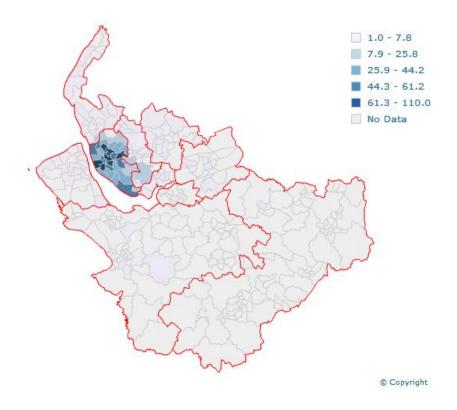
CHILD INJURY ATTENDANCES TO ARROWE PARK HOSPITAL BY WARD



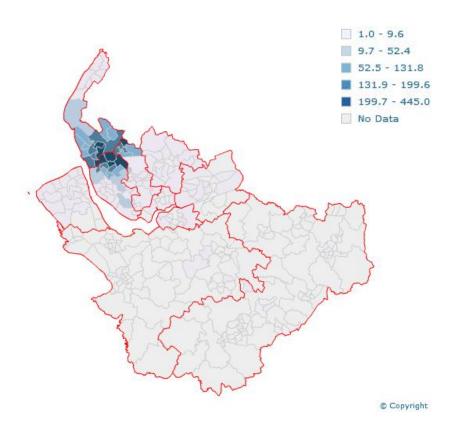
CHILD INJURY ATTENDANCES TO SOUTHPORT DISTRICT GENERAL HOSPITAL BY WARD



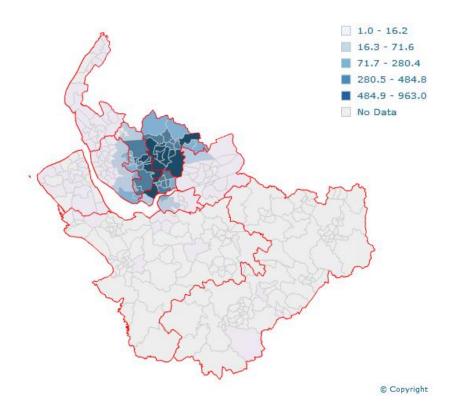
CHILD INJURY ATTENDANCES TO THE ROYAL LIVERPOOL UNIVERSITY HOSPITAL BY WARD



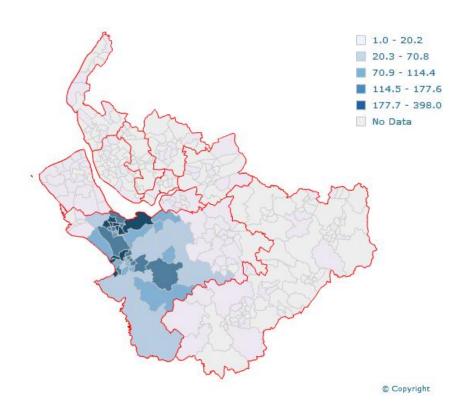
CHILD INJURY ATTENDANCES TO UNIVERSITY HOSPITAL AINTREE BY WARD



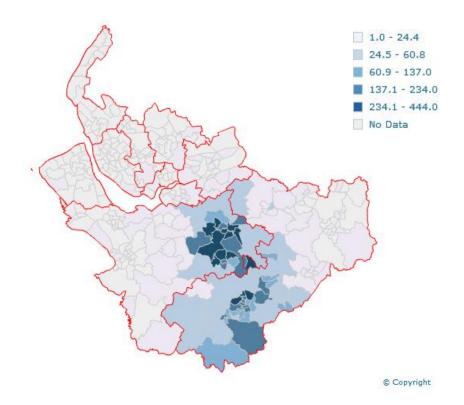
CHILD INJURY ATTENDANCES TO WHISTON HOSPITAL BY WARD



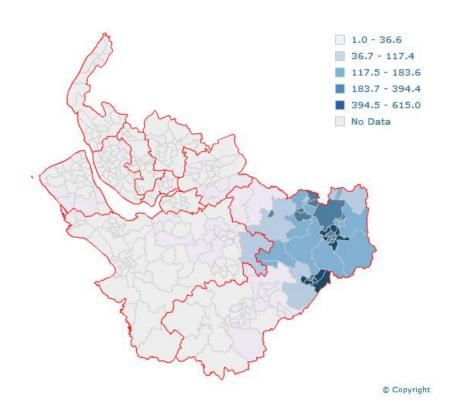
CHILD INJURY ATTENDANCES TO COUNTESS OF CHESTER HOSPITAL BY WARD



CHILD INJURY ATTENDANCES TO LEIGHTON HOSPITAL BY WARD



CHILD INJURY ATTENDANCES TO MACCLESFIELD DISTRICT GENERAL HOSPITAL BY WARD



CHILDHOOD INJURIES IN MERSEYSIDE AND CHESHIRE; AN ANALYSIS OF AMBULANCE CALL OUT DATA

Between April 2011 and March 2013 there were 12,549 ambulance call outs for injuries in 0-17 year olds (Table 19) across Merseyside and Cheshire. In the financial year 2011/12 there was 6,169 ambulance call outs and in 2012/13 this number had slightly increased by around 3% to 6,380. The most common call outs were for falls (4,855; 39%), traumatic injuries (2,913; 23%), overdose/poisoning (1,323; 11%) and traffic/transportation accidents (1,018; 8%), (Table 19).

TABLE 19. Merseyside and Cheshire ambulance callouts by reason for call outs (April 2011 – March 2013)

Reason for call out	Number of call outs
Animal Bites/Attacks	93
Assault/Sexual Assault	541
Burns(Scolds)/Explosion	396
Choking	594
Drowning (Near)/Diving Accident	18
Electrocution/Lightning	13
Eye Problems/Injuries	48
Falls	4855
Overdose/Poisoning (Ingestion)	1323
Psychiatric/Suicide Attempt	619
Stab/Gunshot/Penetrating Trauma	118
Traffic/Transportation Accidents	1018
Traumatic Injuries (Specific)	2913
Total	12549

The majority of ambulance call outs in the 0-17 year age group were in Liverpool local authority (2,990; 24%). The remaining calls outs came from Wirral (1,725; 14%), Sefton (1,501; 12%), Cheshire East (1,373; 11%), Cheshire West and Chester (1,317; 10%), St Helens (1,026; 8%), Warrington (984; 8%), Knowsley (846; 7%) and Halton (787; 6%). When looking at crude rates (per 100,000) the highest rates came from Liverpool local authority (3,367; Cl 3,247-3,490), St Helens (2,821; Cl 2,651-2,999) and Halton (2,792; Cl 2,601-2,994). Figure 7 shows the crude rate of ambulance call out by local authority.

FIGURE 7. Merseyside and Cheshire child ambulance call outs by local authority crude rate (per 100,000) (April 2011 – March 2013).

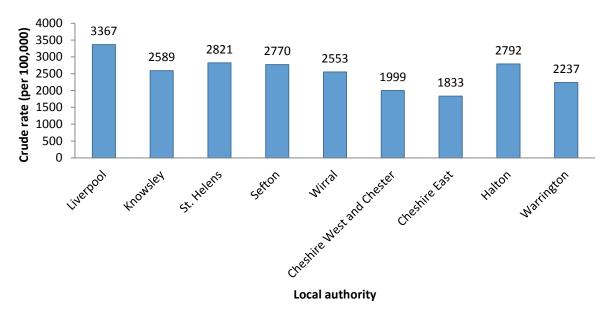


Table 20 shows the top ten LSOAs in Merseyside and Cheshire for ambulance call outs.

TABLE 20. Top 10 LSOAs in Merseyside and Cheshire ambulance call outs (April 2011 – March 2013)

LSOA code	LSOA name	Number of call outs
E01033762	Liverpool 060E	85
E01033761	Liverpool 060D	69
E01033300	Warrington 018F	60
E01007126	Wirral 016A	42
E01006872	St. Helens 014C	41
E01032903	Wirral 010F	40
E01007128	Wirral 016C	39
E01006679	Liverpool 039D	38
E01006968	Sefton 004C	37
E01012441	Halton 007D	36

Almost four in ten call outs were for children aged 0 to 4 years of age (4,686; 37%) and 32% were for those aged 14 to 17 years (4,053). The majority of choking call outs were for the 0 to 4 year age group (500, 84%) and most psychiatric/suicide attempt (518; 84%) and overdose/poisoning (956; 72%) call outs were for 14 to 17 year olds. Seventy-four per cent of assault/sexual assault call outs were for those in the 14 to 17 year age group (403), (Table 21).

Across the two year period 57% (7,197) ambulance call outs involved males (Table 22); 42% (5,273) were for females whilst 79 (1%) had their gender recorded as unknown. Males accounted for over six in ten (334; 62%) of assault/sexual assault call outs and 66% (668) of traffic/transportation accidents. *U=Unknown*.

TABLE 21. Merseyside and Cheshire ambulance call outs by reason for call out, local authority and age group (April 2011 – March 2013)

Local authority		Liv	erpool			Kn	owsley			St	Helens			S	efton			١	Virral	
Age group	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17
Animal Bites/Attacks	***	7	8	6	5	***	***	***	5	5	***	***	***	***	***	5	***	***	***	***
Assault/Sexual Assault	8	6	25	105	***	0	***	26	***	***	7	35	5	***	13	59	6	***	12	55
Burns(Scolds)/Explosion	87	10	7	7	15	***	0	***	24	***	***	***	25	***	***	8	39	***	***	***
Choking	121	10	9	***	33	6	***	0	43	***	***	***	42	5	0	5	70	7	***	***
Drowning (Near)/Diving Accident	***	0	0	0	0	0	0	***	***	0	0	0	***	0	0	0	***	0	***	***
Electrocution/Lightning	0	***	0	0	0	0	***	0	0	0	0	***	0	***	0	0	0	***	***	***
Eye Problems/Injuries	11	***	***	***	***	***	0	***	***	0	0	0	***	***	***	0	***	0	0	***
Falls	594	190	146	197	162	61	60	45	193	55	54	51	298	105	114	81	332	141	109	119
Overdose/Poisoning (Ingestion)	51	***	21	242	21	***	***	64	24	***	9	70	32	***	14	117	40	6	12	143
Psychiatric/Suicide Attempt	0	***	18	125	0	0	6	52	***	0	8	59	0	***	13	54	0	***	10	60
Stab/Gunshot/Penetrating Trauma	***	***	***	32	0	***	***	12	0	***	***	6	***	0	***	16	0	***	***	8
Traffic/Transportation Accidents	43	59	75	88	7	18	24	13	15	15	29	40	15	19	35	34	15	35	42	38
Traumatic Injuries (Specific)	232	115	127	176	67	34	36	50	82	42	53	72	108	51	81	118	119	61	79	124
Total	1155	410	441	984	314	127	139	266	391	130	167	338	532	193	279	497	629	261	276	559

TABLE 21 CONTINUED. Merseyside and Cheshire ambulance call outs by reason for call out, local authority and age group (April 2011 – March 2013)

Local authority	Che	Cheshire West and Chester				Ches	hire East			F	lalton			Wa	rrington			To	otal	
Age group	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17	0-4	5-9	10-13	14-17
Animal bites/attacks	***	***	***	***	***	***	0	0	***	***	***	***	***	***	***	0	30	23	20	20
Assault/sexual assault	***	***	***	33	5	0	8	28	***	***	5	32	***	***	10	30	34	17	87	403
Burns(scolds)/explosion	42	***	***	***	32	5	***	5	18	***	***	0	30	0	***	***	312	28	24	32
Choking	70	8	***	5	44	8	***	***	35	***	0	0	42	5	***	***	500	54	18	22
Drowning (near)/diving accident	***	***	***	***	0	***	0	***	0	0	0	0	0	0	***	***	7	***	***	5
Electrocution/lightning	***	***	0	***	***	0	0	***	0	0	0	0	0	0	0	0	***	***	***	***
Eye problems/injuries	***	0	0	***	***	***	***	0	***	0	0	***	***	0	0	0	29	9	***	6
Falls	253	96	93	84	260	89	93	87	164	49	60	46	170	68	76	60	2426	854	805	770
Overdose/poisoning (ingestion)	21	0	***	81	25	***	14	99	17	0	10	73	22	***	6	67	253	20	94	956
Psychiatric/suicide attempt	0	***	8	49	***	***	6	52	0	***	***	27	0	0	15	40	***	13	86	518
Stab/gunshot/penetrating trauma	***	0	***	***	0	0	***	6	***	0	***	***	0	0	0	***	6	9	13	90
Traffic/transportation accidents	18	20	20	48	20	19	23	51	8	7	17	22	17	15	28	26	158	207	293	360
Traumatic injuries (specific)	107	58	64	93	88	60	94	123	66	32	43	32	57	42	48	79	926	495	625	867
Total	524	190	200	403	481	195	242	455	315	94	140	238	345	135	191	313	4686	1735	2075	4053

TABLE 22. Merseyside and Cheshire ambulance callouts by injury group, local authority and gender (April 2011 – March 2013)

Local authority		Liverpo	ol		Knowsle	ey .		St Heler	าร		Sefton	1		Wirral	
Age group	F	М	U	F	М	U	F	М	U	F	М	U	F	М	U
Animal bites/attacks	7	18	0	***	6	0	***	8	0	6	5	0	7	5	0
Assault/sexual assault	55	88	***	9	22	0	13	34	0	30	47	***	28	48	0
Burns(scolds)/explosion	40	71	0	***	13	0	14	18	0	18	20	***	14	33	***
Choking	76	68	0	24	17	0	24	25	0	30	22	0	42	39	0
Drowning (near)/diving accident	***	0	0	0	***	0	0	***	0	0	***	0	***	***	0
Electrocution/lightning	***	0	0	***	0	0	***	0	0	***	0	0	***	0	0
Eye problems/injuries	11	7	0	***	***	0	0	***	0	***	***	0	0	***	0
Falls	496	629	***	148	180	0	134	218	***	218	379	***	272	428	***
Overdose/poisoning (ingestion)	214	103	***	59	31	0	63	40	***	118	45	***	140	59	***
Psychiatric/suicide attempt	77	68	0	31	27	0	33	35	0	46	25	0	40	31	0
Stab/gunshot/penetrating trauma	7	33	0	***	14	0	***	9	0	***	18	0	***	8	0
Traffic/transportation accidents	92	166	7	22	40	0	26	69	***	27	74	***	36	91	***
Traumatic injuries (specific)	220	429	***	69	117	***	71	177	***	114	243	***	122	258	***
Total	1298	1680	12	375	470	***	384	635	<10	612	881	8	708	1007	10

TABLE 22 CONTINUED. Merseyside and Cheshire ambulance call outs by injury group, local authority and gender (April 2011 – March 2013)

Local authority	Cheshire West and Chester			Cheshire East			Halton			Warrington			Total		
Age group	F	М	U	F	M	U	F	М	U	F	М	U	F	М	U
Animal bites/attacks	***	***	0	5	0	0	***	5	0	0	6	0	37	56	0
Assault/sexual assault	14	25	***	18	23	0	14	24	***	19	23	***	200	334	7
Burns(scolds)/explosion	27	22	0	16	27	0	12	8	0	19	18	0	164	230	***
Choking	44	39	***	29	26	0	16	20	0	24	28	0	309	284	***
Drowning (near)/diving accident	***	***	0	0	***	0	0	0	0	***	***	0	7	11	0
Electrocution/lightning	***	***	0	***	***	0	0	0	0	0	0	0	10	***	0
Eye problems/injuries	***	***	0	***	***	0	***	***	0	***	***	0	27	21	0
Falls	211	313	***	218	310	***	134	184	***	145	228	***	1976	2869	10
Overdose/poisoning (ingestion)	76	30	0	100	42	0	54	46	0	67	31	0	891	427	5
Psychiatric/suicide attempt	32	27	0	44	18	0	20	10	0	33	22	0	356	263	0
Stab/gunshot/penetrating trauma	0	7	0	***	***	***	***	***	0	0	***	0	17	100	***
Traffic/transportation accidents	37	62	7	34	76	***	16	34	***	22	56	8	312	668	38
Traumatic injuries (specific)	130	191	***	123	240	***	61	110	***	57	166	***	967	1931	15
Total	581	723	13	594	772	7	333	446	8	388	583	13	5273	7197	79

Document produced by Jennifer Brizell

Centre for Public Health, Research Directorate
Faculty of Education, Health and Community
Liverpool John Moores University
Henry Cotton Campus, 15-21 Webster Street
Liverpool
L3 2ET
0151 231 4500
j.s.brizell@ljmu.ac.uk
www.cph.org.uk / www.tiig.info
www.twitter.com/tiig_cph



