Wirral JSNA: Demographic information for Children and Young People (including maternity and early years)

Produced by Wirral Council Business & Public Health Intelligence Team

February 2016

Summary

- The number of births in Wirral in 2014 was 3,536, the lowest number for a decade
- This is a small drop of 0.7% in the number of births between 2013 and 2014. There was also a drop between 2012 and 2013 of 7%. This appears to signal the end of a long period where the number of births increased year on year in Wirral (this may be partly due to the higher number of women revealed by 2011 Census).
- The general fertility *rate* continued to drop in England in 2014, but there was a very slight upturn in Wirral in 2014. This may be because although the *number* of births has *decreased*, the number of women aged between 15-44 has also dropped (the denominator on which the fertility rate is based) in Wirral
- Children and young people make up less than one in four (23%) of Wirral residents (74,720 in 2014)
- The number of young people in Wirral is projected to remain fairly stable for the next 25 years, increasing by just 1% by 2037
- The number of births are projected to decrease by around 5% by 2037
- The number of women of child bearing age (15-44 years) is projected to decrease in Wirral and this is likely to have an impact on the number of future maternities
- Wirral has a slightly higher proportion of births to younger mothers (aged under 24), and a lower proportion of births to older mothers (aged 35+), compared to our near statistical neighbour Sefton and England overall
- Wirral has a much lower percentage of births to mothers born outside the UK compared to England overall (7% in Wirral compared to 28% in England). The majority of foreign born mothers were from European countries (114 mothers in total from EU, new EU and non-EU countries), followed by the Middle East and Asia (90 mothers).
- The difference in birth rates between affluent and more deprived areas when considering the need for neonatal care (ward data not yet available)
- Wirral has a greater proportion of births registered solely or jointly by parents living at different addresses (which can indicate a greater need for social care) compared to England and the North-West overall
- Low birth weight is more common in the more deprived wards in Wirral. The overall Wirral rates of low birth weight babies in 2012/15 was 6.5%, but in Birkenhead & Tranmere ward, the rate was 9% - almost one in ten babies
- Overweight and obesity in Wirral children appears to be related to deprivation, with more deprived wards having higher rates of children of an unhealthy weight. In Birkenhead & Tranmere ward for example, almost one in three Reception aged children are an unhealthy weight
- The 2015 IDACI (Income Deprivation Index Affecting Children Index) showed that the proportion of children living in low income households ranged from 4% in Heswall, to 48% in Birkenhead & Tranmere ward

4.1 Population

As of 2014, there were 74,720 children and young people (aged 0-19 years) in Wirral, making up less than one in four (23.3%) of the total population(exactly the same proportion as in 2013). See table below.

Table 4.1a: Number of children and young people in Wirral, by single year (2014)

Age	Females	Males	All
0	1,746	1,899	3,645
1	1,827	1,892	3,719
2	1,942	2,185	4,127
3	1,872	1,943	3,815
4	1,884	1,912	3,796
5	1,882	1,881	3,763
6	1,913	1,928	3,841
7	1,800	2,019	3,819
8	1,815	1,951	3,766
9	1,773	1,825	3,598
10	1,754	1,871	3,625
11	1,687	1,829	3,516
12	1,757	1,762	3,519
13	1,753	1,802	3,555
14	1,870	1,873	3,743
15	1,841	1,949	3,790
16	1,899	1,996	3,895
17	1,966	2,101	4,067
18	1,791	2,105	3,896
19	1,574	1,651	3,225
Total 0-19	**36,346**	**38,374**	**74,720**

Source: Mid-2013 population estimates, ONS (2015)

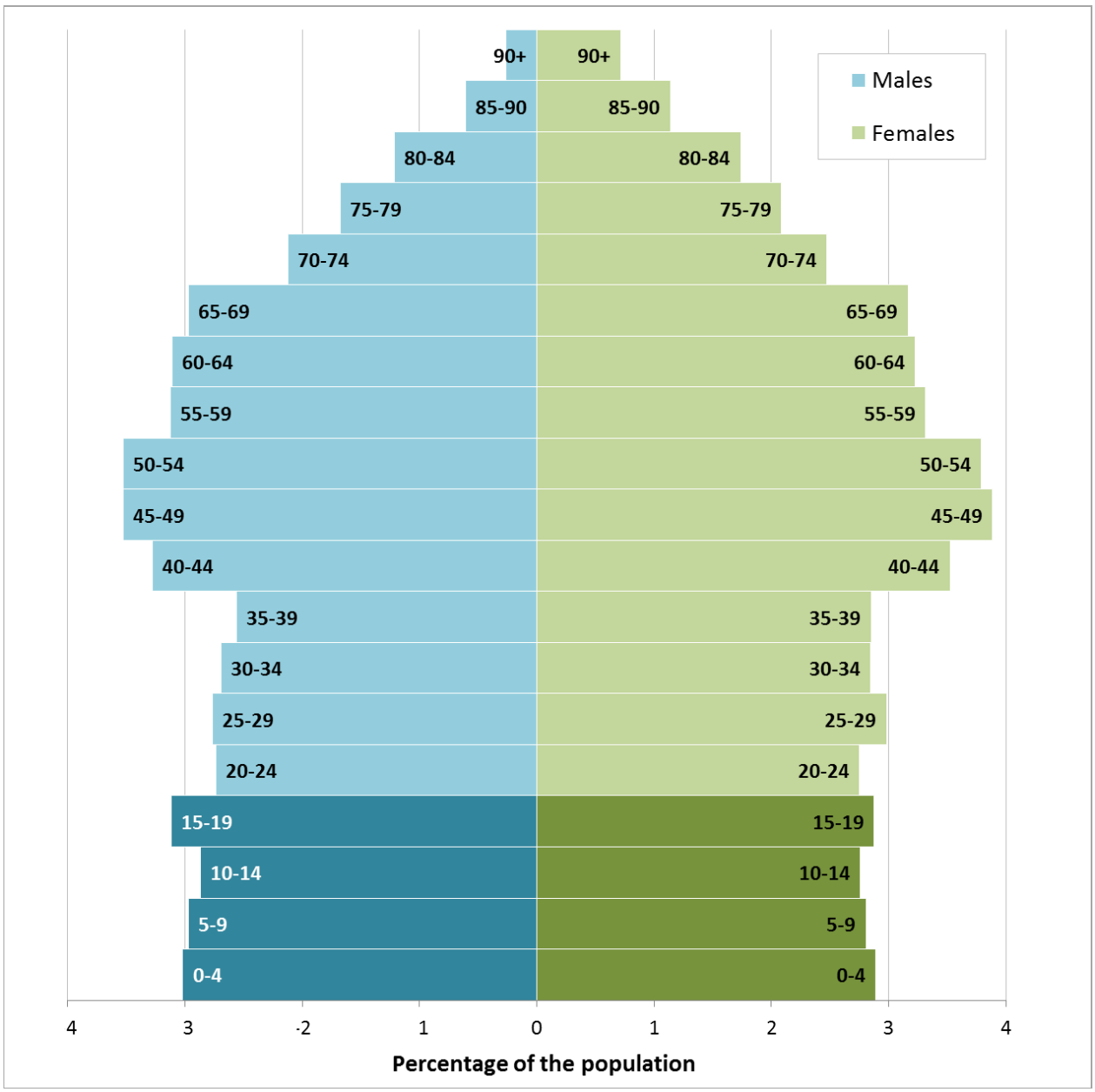
In the overall population (all ages) in Wirral, females slightly outnumber males (51.8% females versus 48.2% males), but the reverse is the case in the 0-19s.

In the 0-19 age groups, males make up 51.4% of the population, compared to 48.6% females. In real terms, this is around 2,000 more male than female children in Wirral.

As boys are more likely to suffer from a range of developmental conditions such as autism and ADHD and are more likely to be excluded from school or come into contact with the Youth Justice System, this is worth noting.

The population pyramid below for all ages, shows the proportion of children and young people in Wirral compared to older residents.

Figure 4.1b: Population pyramid for Wirral, 2014



Source: Mid-2014 population estimates, ONS (2014)

As the figure above shows, Wirral's population structure is weighted toward the older age groups, with large percentages of the population aged between 40 and 69. This gives our local pyramid shape typical of developed countries (i.e not very pyramid shaped). The number of children and young people by 5 year (quinary age band) is in the table below.

Table 4.1c: Number of children and young people in Wirral by 5-year (quinary) age band, Mid-2014

Age Group	Females	Males	All
0-4	9,271	9,831	19,102
5-9	9,183	9,604	18,787
10-14	8,821	9,137	17,958
15-19	9,071	9,802	18,873
Total 0-19	36,346	38,374	74,720

Source: Mid-2014 population estimates, ONS (2015)

Population projections

Table 4.1.d below shows the projections for future numbers of children and young people in Wirral and the likely percentage change in this population.

Newer population projections are planned for publication by ONS on 25 May 2016 and will provide population projections from mid-2014 to mid-2039. Until then, the most recent population projection figures are those produced in 2012 (see below).

Table 4.1d: Population projections for children and young people in Wirral (Mid 2013-Mid 2037, figures shown in thousands)

Age Group	2013	2018	2023	2028	2033	2037	% change 2013 to 2037
0-4	18,900	19,000	19,000	18,700	18,200	17,700	-6.35%
5-9	18,200	18,600	19,600	19,600	19,400	18,800	+1.10%
10-14	18,400	18,000	18,900	19,900	20,000	19,700	+4.35%
15-19	19,400	19,000	16,900	17,800	18,800	18,900	-3.61%
Total 0-19	**74,900**	**74,600**	**74,400**	**76,000**	**76,400**	**75,100**	**+1.20%**
All ages	**320,200**	**320,400**	**323,100**	**326,400**	**328,800**	**330,400**	**+0.19%**

Source: ONS 2012-based Subnational Population Projections, ONS (2014)

- The number of children aged 0-4 is projected to decrease by 6.35% by 2037
- The population aged 10-14 is projected to increase by 4.35% by 2037;
- The population aged 15-19 is projected to decrease by 3.61% between 2012 and 2037

Overall, the population aged 0-19 is projected to increase very slightly by 1.2%, compared to a negligible increase of just 0.19% in the overall population of Wirral

4.2 Births

Table 4.2 below shows the projected number of births in Wirral and England, to 2037.

Table 4.2a: Projected births and percentage change, Wirral and England (2013 to 2037)

	2013	2018	2023	2028	2033	2037	% change 2013 to 2037
Wirral	3,700	3,700	3,600	3,500	3,400	3,500	**-5.41%**
North-West	88,100	88,300	86,300	84,000	83,300	84,400	**-4.20%**
England	682,800	696,500	691,600	683,200	683,100	696,100	**+1.95%**

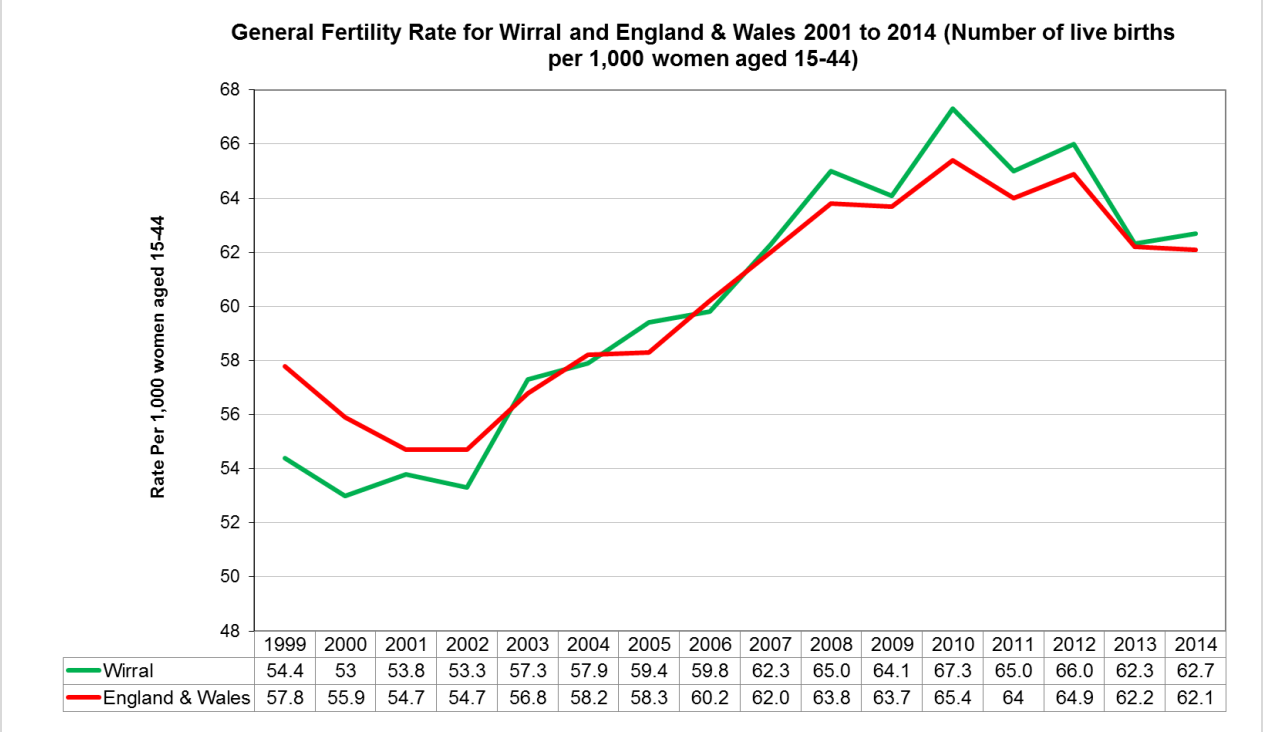
Source: ONS 2012-based Subnational Population Projections, ONS (2014)

As the table shows, births are projected to decrease by over 5.4% in Wirral over the next 25 years, compared to a decrease of 4.2% in the North-West and a slight increase in England overall of 1.9%.

Fertility rates

Fertility rates refer to the number of live births relative to the number of women in the population (the general fertility rate is per 1,000 females aged 15-44 years).

Figure 4.2b: General fertility rate for Wirral and England & Wales (1999 to 2014)



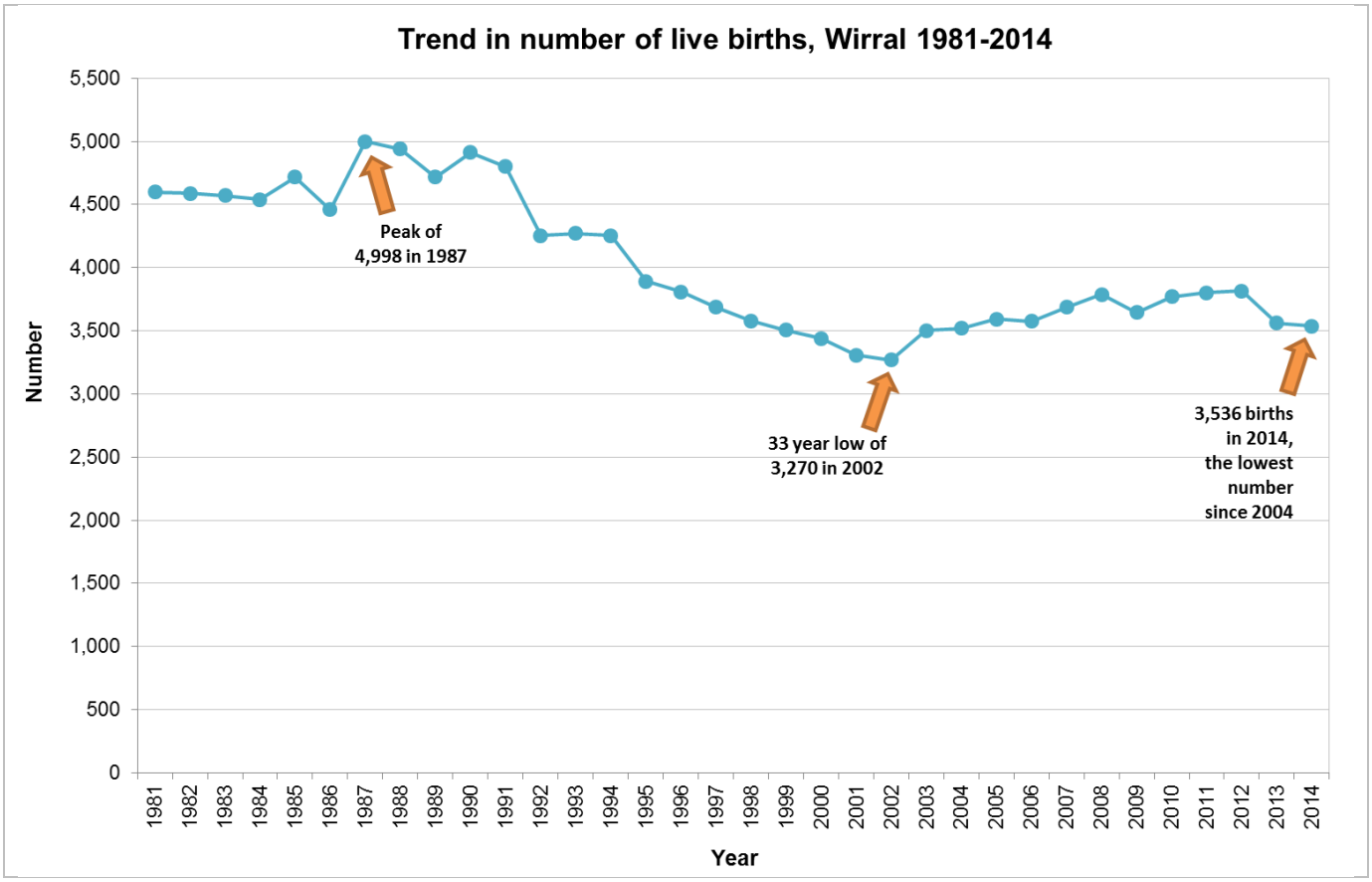
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Wirral	54.4	53	53.8	53.3	57.3	57.9	59.4	59.8	62.3	65.0	64.1	67.3	65.0	66.0	62.3	62.7
England & Wales	57.8	55.9	54.7	54.7	56.8	58.2	58.3	60.2	62.0	63.8	63.7	65.4	64	64.9	62.2	62.1

Source: NHS Information Centre and ONS, 2015

As Figure 4.2b shows, the rise in fertility rates which was observed in both Wirral and England & Wales since 2002, halted and showed a large drop in 2013. Despite a very small upturn again in Wirral, remains levels last seen in 2007. This may be partly due to the higher number of women (as revealed by 2011 Census).

The population of women of child bearing age (15-44 years) is projected to decrease in Wirral over the coming years, which likely to have an impact on future fertility rates. The trend in the actual number of live births in Wirral over the same period is shown in Figure 4.2c below.

Figure 4.2c: Trend in number of live births in Wirral (1981 to 2014)



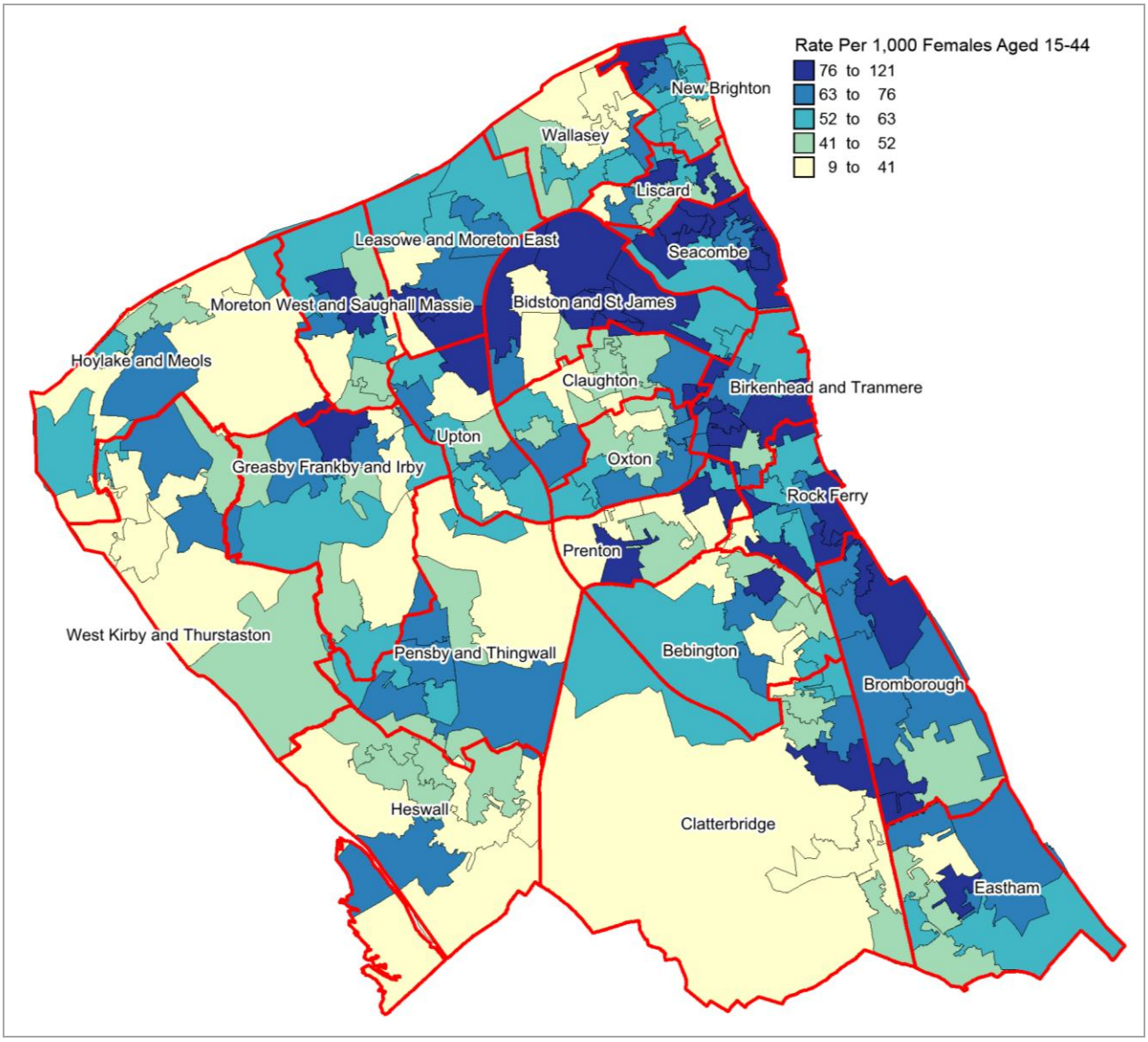
Source: NHS IC, 2015

The lowest number of live births in recent years occurred in 2002, when there were 3,270 live births in Wirral. Since then, the trend in births has generally been a shallow upward one, except for the last two years. In 2013 and 2014, which appears to have halted in 2013, most recent year for which figures are available), there has been a 7% drop on the number of births in the previous year (2012).

The following charts, maps and tables show fertility rates by geography and show that fertility rates in Wirral vary across the Borough, with higher rates in the more disadvantaged wards, compared to the more affluent west of Wirral.

This is likely to impact on the provision of health and social care services as deprivation is linked to a number of infant health issues such as low birth weight, higher rates of hospital admissions, reduced breastfeeding, learning disability and high smoking in pregnancy rates. See the map below for geographical representation of births in Wirral in 2014/15.

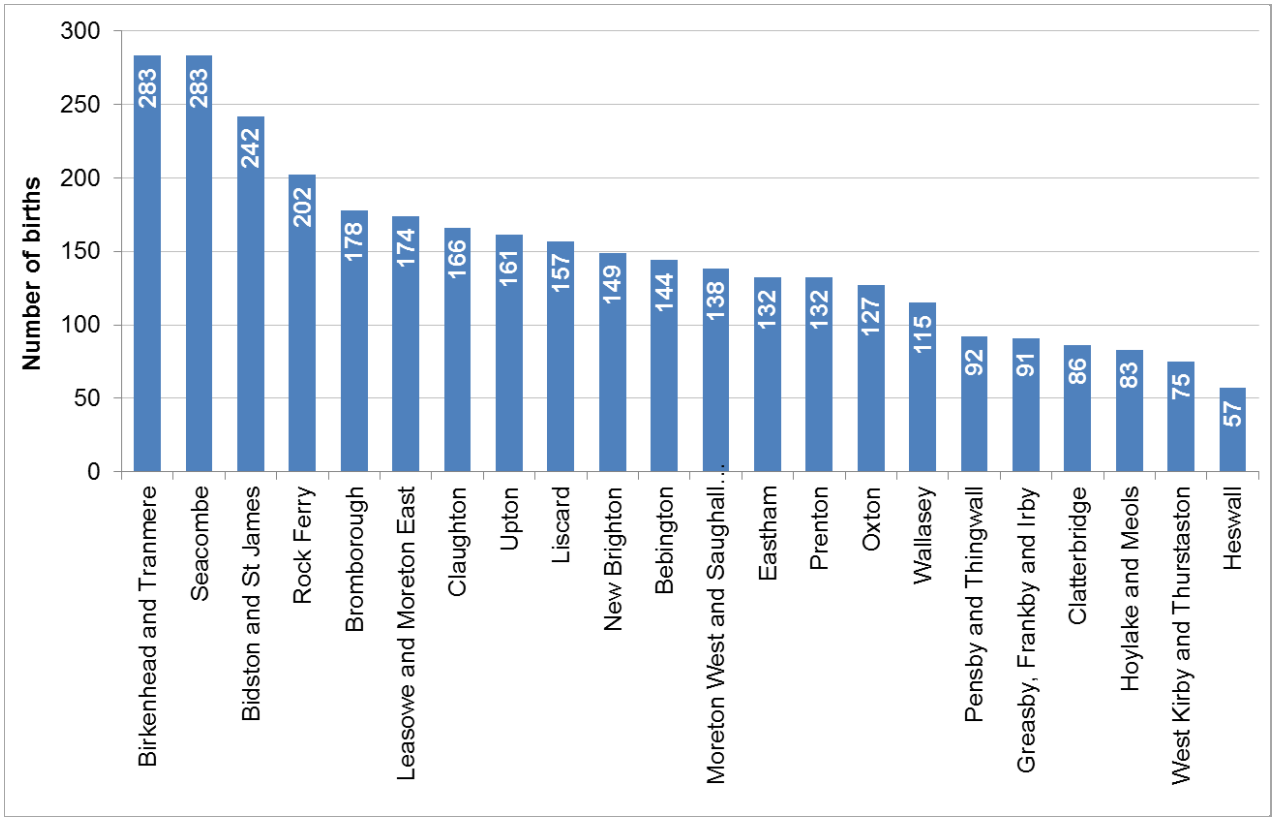
Map 4.2d: General fertility rate by Wirral ward (2014/15)



Source: Hospital Episode Statistics, 2016

As the map shows, the rate of births (rate per 1,000 women aged 15-44) shows a mixed picture. There are generally lower rates in the west of Wirral and more areas where rates are high in the east of Wirral, but there are also several exceptions this. The chart below shows the actual number of births, by Wirral ward in 2013.

Figure 4.2e: Births in Wirral in 2014/15 by Wirral Ward



Source: HES, 2016

As the chart above shows, the four most deprived wards in Wirral had the highest number of births in 2014/15. This trend is not a new one, so health and social care services will probably already be aware that they have a large proportion of new mothers and children from areas of deprivation with significant health and social care needs. The total number of births in Wirral was 3,493 in 2014/15.

Age of mothers is also a factor (children born to both younger mothers and older mothers tend of have more health issues) and Table 4.2f below shows births by age of the mother.

Table 4.2f: Number of live births by age of mother, England, North-West & Wirral, 2014

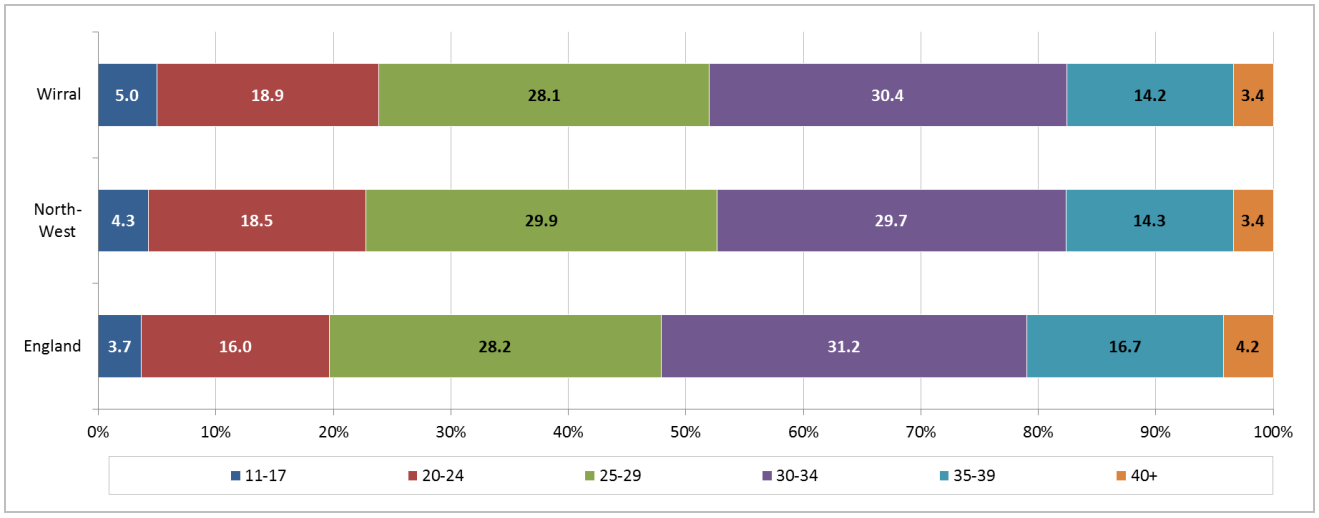
		11-17	20-24	25-29	30-34	35-39	40+	All Ages
England	**No.**	24,246	105,794	186,659	206,117	110,748	27,932	661,496
	%	3.7%	16.0%	28.2%	31.2%	16.7%	4.2%	100%
North-West	**No.**	3,654	15,815	25,598	25,421	12,220	2,898	85,606
	%	4.3%	18.5%	29.9%	29.7%	14.3%	3.4%	100%
Wirral	**No.**	176	668	995	1,075	502	120	3,536
	%	5.0%	18.9%	28.1%	30.4%	14.2%	3.4%	100%

Source: ONS, 2015

As the table shows, the largest number of Wirral births occur in women aged 30-34. This was also the case in England, but not in the North-West overall, where the most common age was 25-29. Wirral differs from England in two main respects – Wirral has a higher proportion of births to younger mothers (aged 24 and under), and a smaller proportion of births to older mothers (aged 35 and over). For example, in England overall, less than 20% of mothers are aged under 24, compared to almost 24% in Wirral. National data shows

higher proportions of births to younger mothers tend to occur in more deprived areas, whilst a higher proportion of births in older mothers tend occur in more affluent areas.

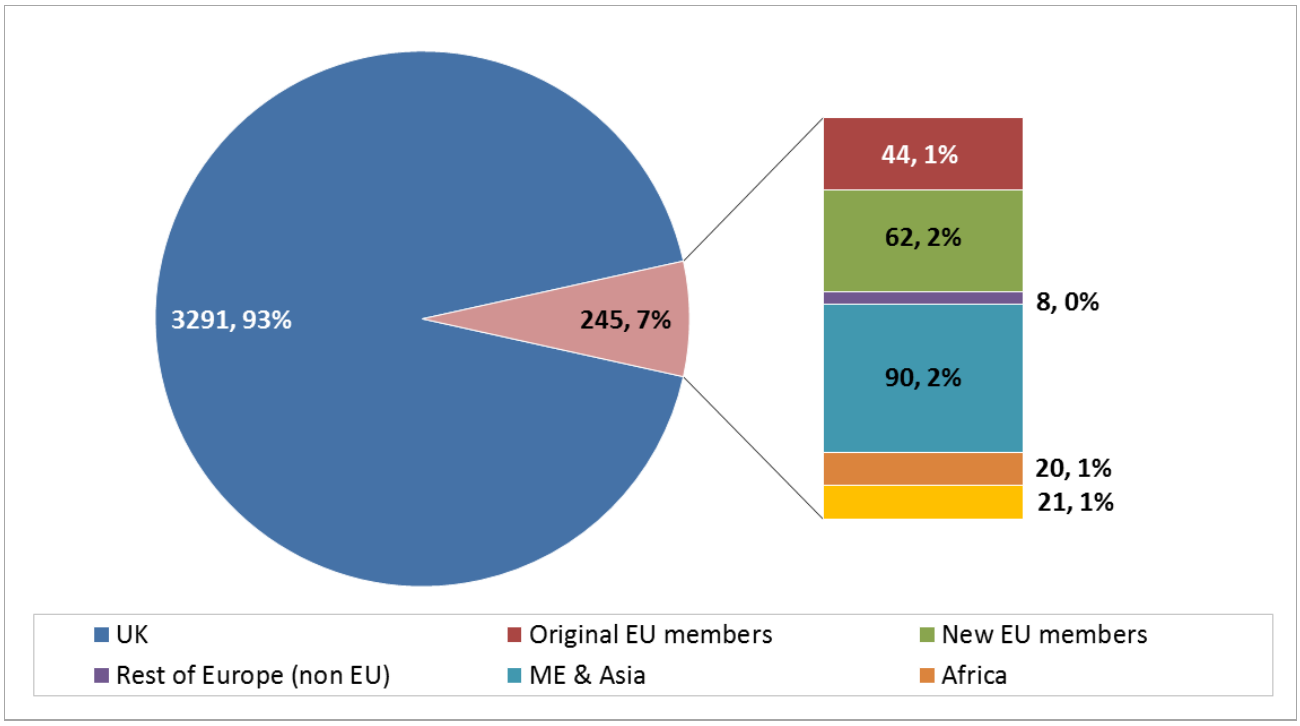
Figure 4.2g: Percentage of births by age of mother, England, North-West & Wirral, 2014



Source: ONS, 2015

4.3 Births by country of origin of mother

Figure 4.3a: Wirral births by the country of birth of the mother (2014)



Source: ONS, 2015
New EU countries refers to those who joined post-2004 such as Poland, Czech Republic, Lithuania etc..
Original EU members refers to the original core group of members such as France, Germany, the Netherlands etc…

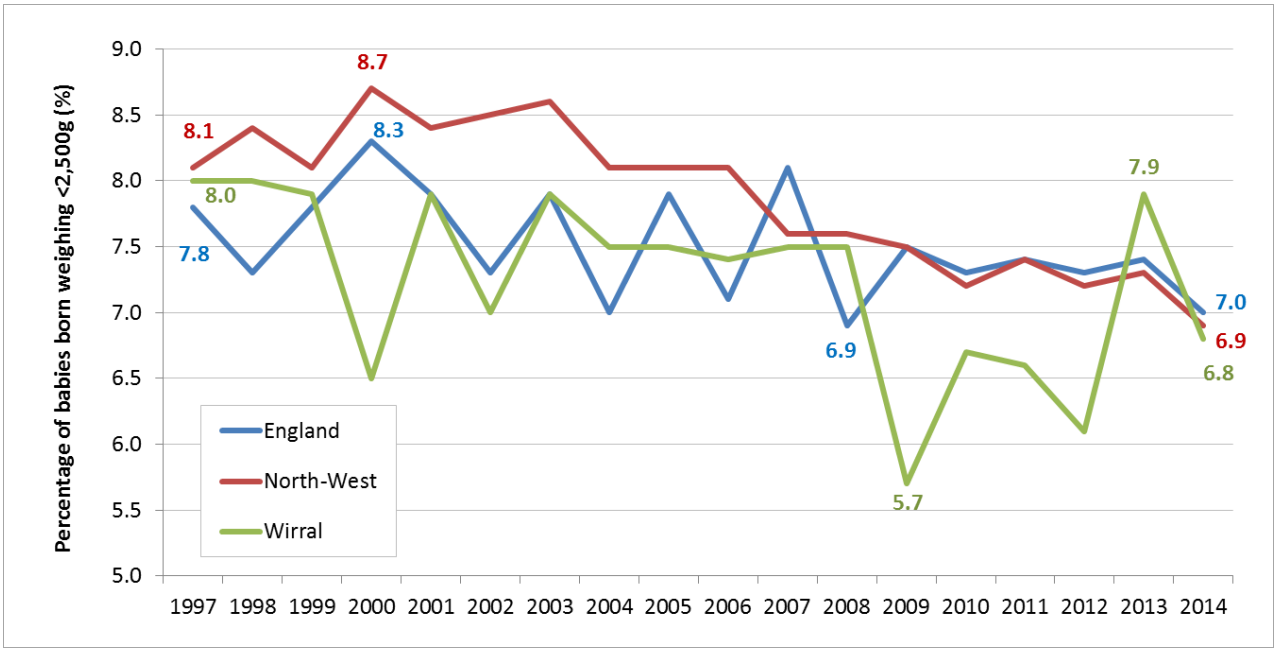
As the chart shows, Wirral differs significantly to the UK overall on the proportion of non-UK born mothers who gave birth in 2013. In Wirral, the percentage who were non-UK born was 7%, compared to 28% in England overall. These figures were very similar in 2013 (7% in Wirral and 27% in England).

As the chart also shows, the majority of foreign born mothers were from European countries (114 mothers in total from EU, new EU and non-EU countries), followed by the Middle East and Asia (90 mothers).

4.4 Low birthweight

Low birthweight is an important cause of childhood morbidity, a major factor in infant mortality and has serious consequences for health in later life, e.g children who are of a low birthweight are more likely to have learning disabilities. Low birthweight shows a pattern consistent with many health issues, in that it is a source of health inequality, because it is more common in deprived areas. It is an bell-weather for maternal health. Low birthweight is classed as births in which the baby weighed less than 2,500grams (which is roughly 5lb 4oz).

Figure 4.4a: Low birthweight (<2,500g) in England, North-West & Wirral, 1997-2014

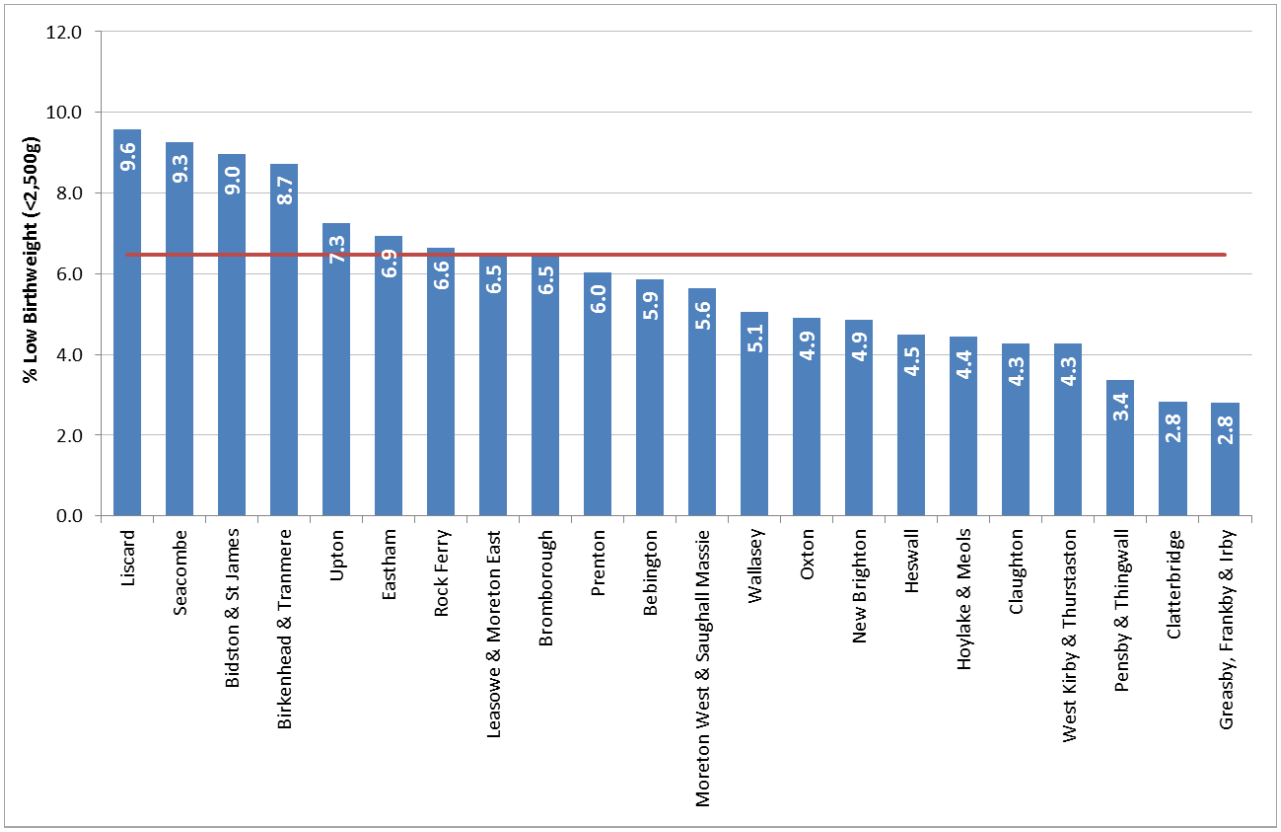


Source: ONS, 2015

As Figure 4.4a shows, the prevalence of low birthweight has been falling in England since a peak in around 2000. The Wirral value had never been above that of England until 2013, when it rose well above both England and the North-West and was at its highest level since 1997. Reasons for this are unclear, but it may be related to rates being subject to more fluctuation when numbers are smaller (there were less than 250 births classed as low birthweight in Wirral in 2014). The Wirral rate has since fallen again in 2014 and is now marginally below both England and the North-West.

The overall figure for Wirral hides considerable inequalities however. Figure 4.4b below shows that low birthweight varies considerably across Wirral, by showing figures by Wirral ward for the 3 pooled (financial) years of 2012/13, 2013/14 and 2014/15. Pooling 3 years data together is necessary to ensure the figures are robust at a lower level (because numbers are small).

Figure 4.4b: Low birthweight by Wirral ward (2012-15, 3 pooled years)



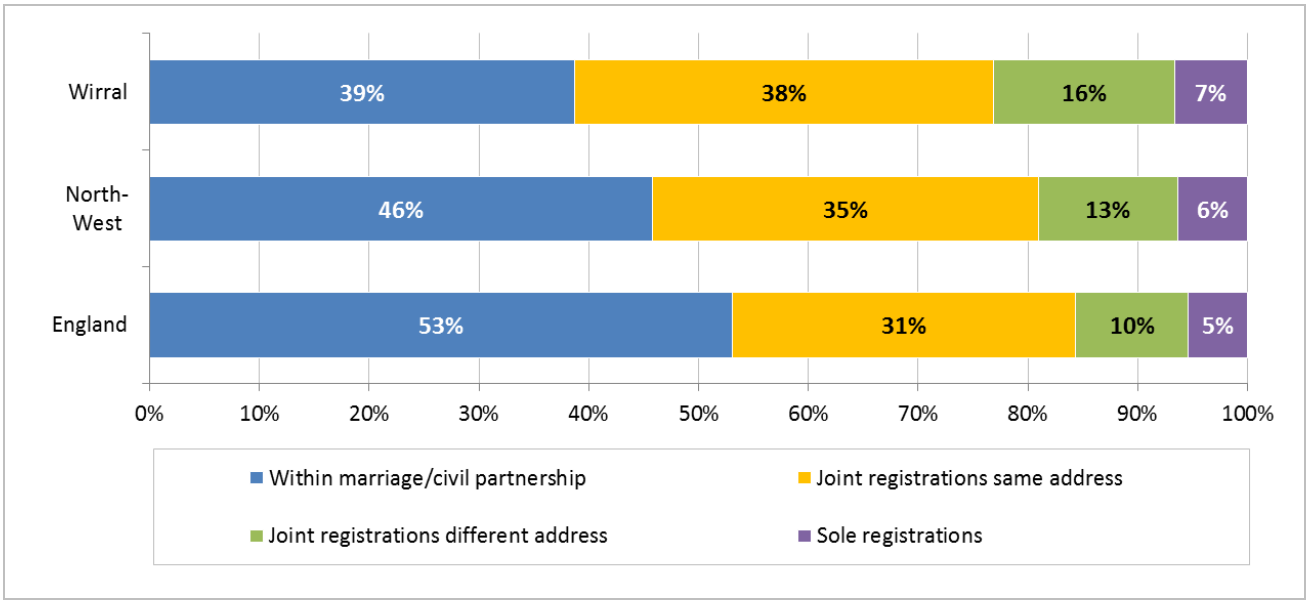
Source: HES, 2016
Note: Wirral average shown by red line

4.5 Births by type of registration

As Figure 4.5a shows, in Wirral in 2014, around one in four (23%) of all births were registered either solely or jointly by parents not living together at the time of the birth. This compares to a figure for England overall of one in seven (or 15%) of all births and in the North-West overall, the figure was one in five (or 19%). Figures are not currently available at small area level (e.g. ward), but there is likely to be considerable variation between wards in Wirral on this measure.

A joint registration records details of both parents, and requires them both to be present. Births occurring outside marriage/civil partnership may be registered either jointly or solely. A sole registration records only the mother's details. Information from the birth registration is used to determine whether the parents jointly registering a birth outside marriage/civil partnership live at the same address at the time of registration. Births which are sole registrations or joint registrations living at different addresses can be an indicator for households with a higher need for social care.

Figure 4.5a: Births by type of registration in England, North-West and Wirral (2014)

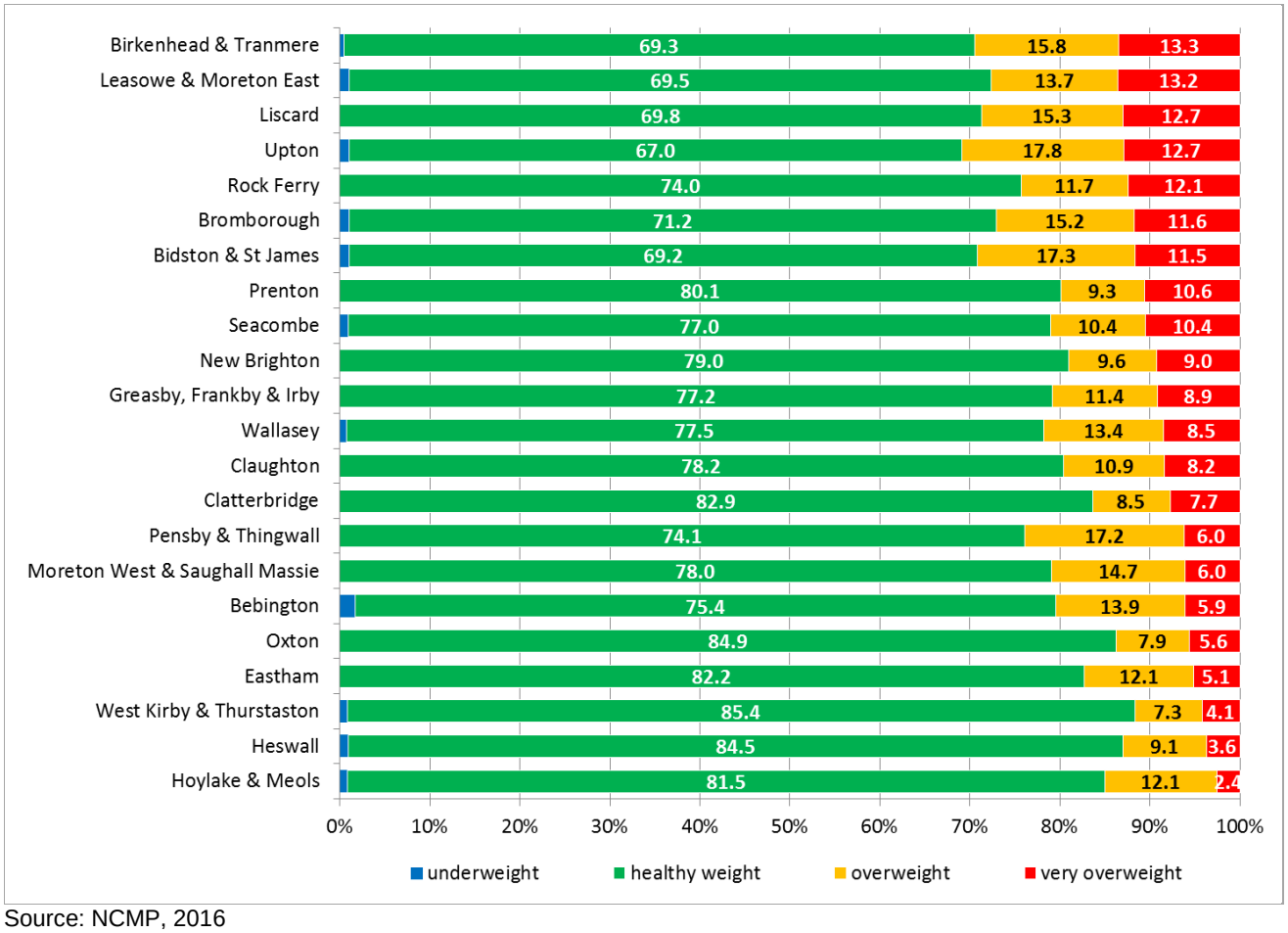


Source: ONS, 2015

4.6 Obesity in 4/5 year olds

Obesity data is available via the National Child Measurement Programme and coverage is excellent in Wirral, with in excess of 98% of all children measured. The data below is for Reception year children only (aged 4/5), by Wirral ward for 2014/15.

Figure 4.6a: NCMP data by Wirral ward for 2014/15



Source: NCMP, 2016

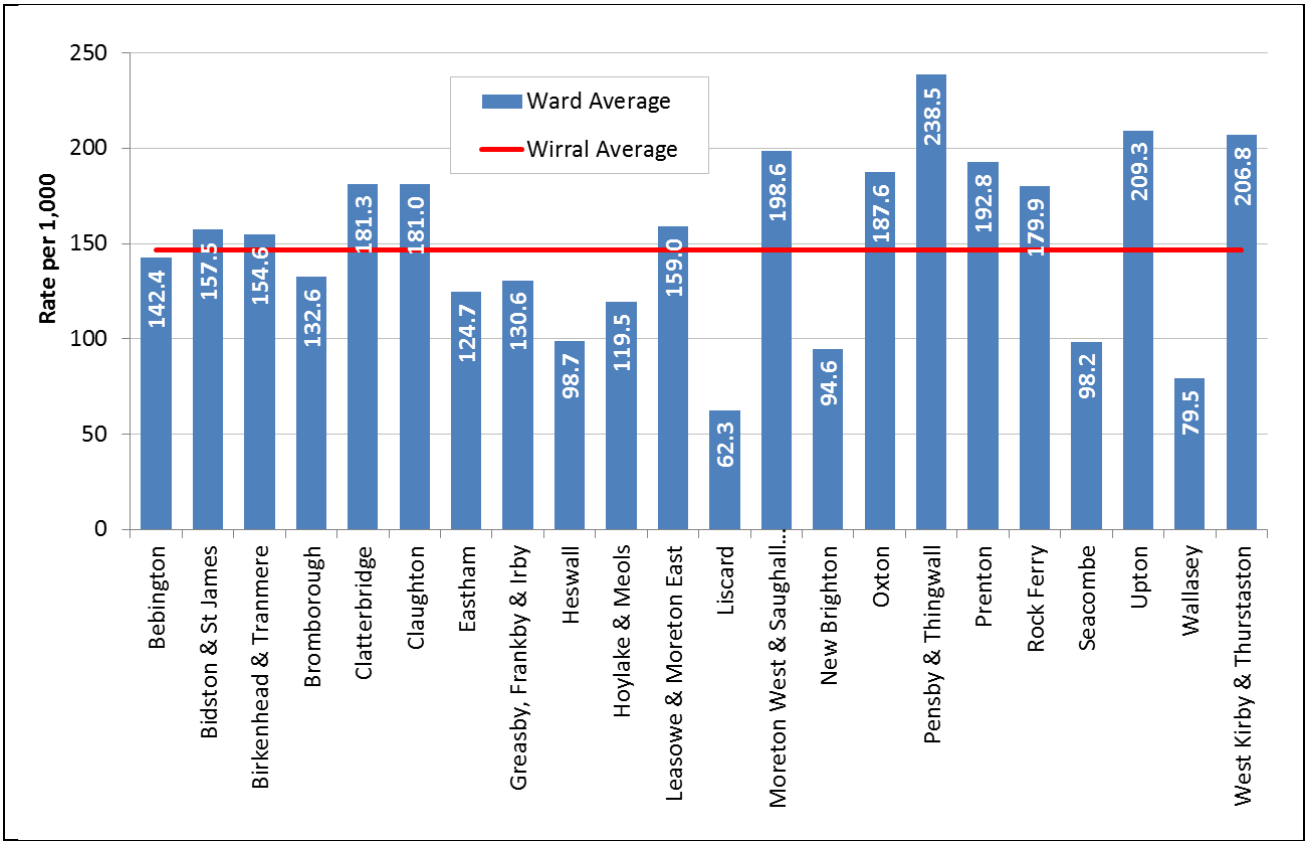
As the chart above shows, the majority of children are of a healthy weight, which is positive. There does appear to be a relationship between deprivation and being of an unhealthy weight however, with those wards with the highest rates generally those which are most deprived. In Birkenhead & Tranmere ward for example, almost one in three Reception aged children are an unhealthy weight.

The number of children who were underweight was negligible. The ward with the highest percentage of underweight children was Bebington, and even this was only 1.6%. The total number of underweight children in Wirral in 2014/15 was 18. The total number of overweight children was 473, whilst a further 336 children were very overweight (this category was formerly called obese).

4.7 Unintentional Injuries in the 0-4s

Injuries are a significant and often preventable cause of mortality and morbidity in childhood. The chart below shows the rate of attendance at Arrowe Park A&E in 2014-15, for children aged 0-4 where the cause was an unintentional injury.

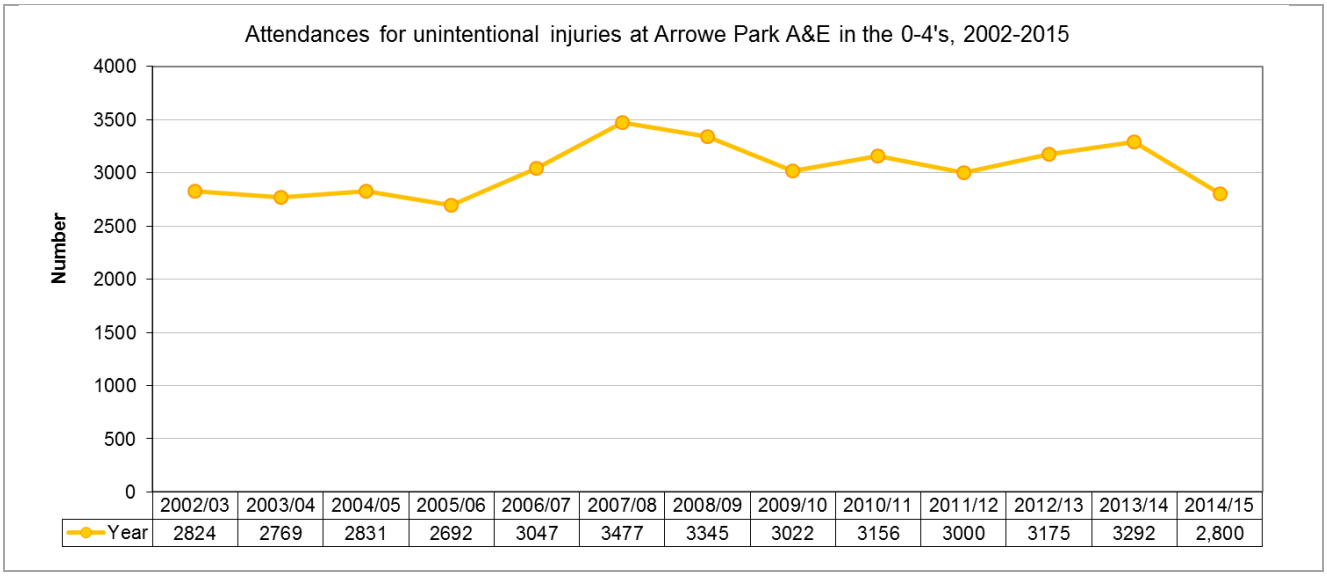
Figure 4.7a: Rate (per 1,000) of attendance at Arrowe Park A&E for unintentional injury in Wirral residents, by ward, 2014-15



Source: TIIG, 2016

As the chart shows, rates of hospital attendance varied greatly between wards, with rates seemingly more related to proximity (to Arrowe Park) than deprivation, as is more usually the case with many health issues. Notably, those wards which surround Victoria Central Hospital (Liscard, New Brighton & Seacombe), have very low rates, which is highly likely to be because there is a long established Minor Injuries Unit which has a high level of local usage on the hospital site (these figures do not include attendances at any of the Minor Injuries Units or Walk-In Centres in Wirral).

Figure 4.7b: Trend in number of attendances for unintentional injury in children aged 0-4 in Wirral (2002 to 2015)



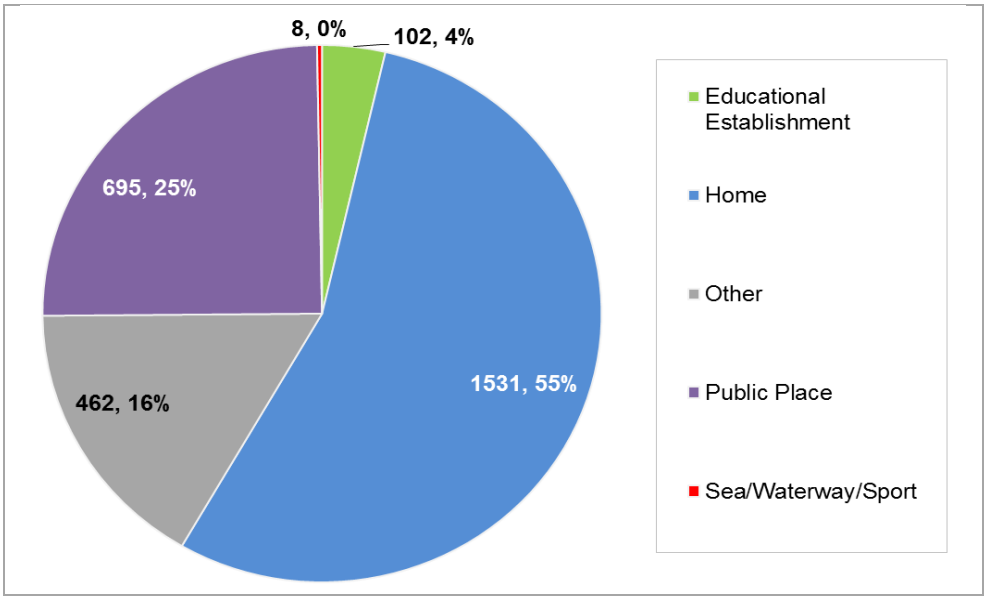
	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Year	2824	2769	2831	2692	3047	3477	3345	3022	3156	3000	3175	3292	2,800

Source: TIIG, 2016

As the chart above shows, the rate of attendances at Arrowe Park A&E for unintentional injuries in children aged 0-4 was lower in 2014/15 than it has been at any time since the Trauma, Injury & Intelligence Group (TIIG) started producing data in 2002. This is against a backdrop of increasing A&E attendances across the country, so reasons for this are not clear, but probably include the recent introduction of several Walk-In Centres and Minor Injuries Units in Wirral. Figures have long demonstrated that the Minor Injuries Unit at Victoria Central Hospital (VCH) results in significantly fewer children attending Arrowe Park from the areas immediately surrounding VCH, so it is highly likely that other newly opened facilities in Wirral (e.g Eastham, Laird Street) are also lessening the pressure on Arrowe Park.

Figure 3 below shows the where injuries in the 0-4s in 2014-15 occurred and over the page (Figure 4), shows the type of injury sustained.

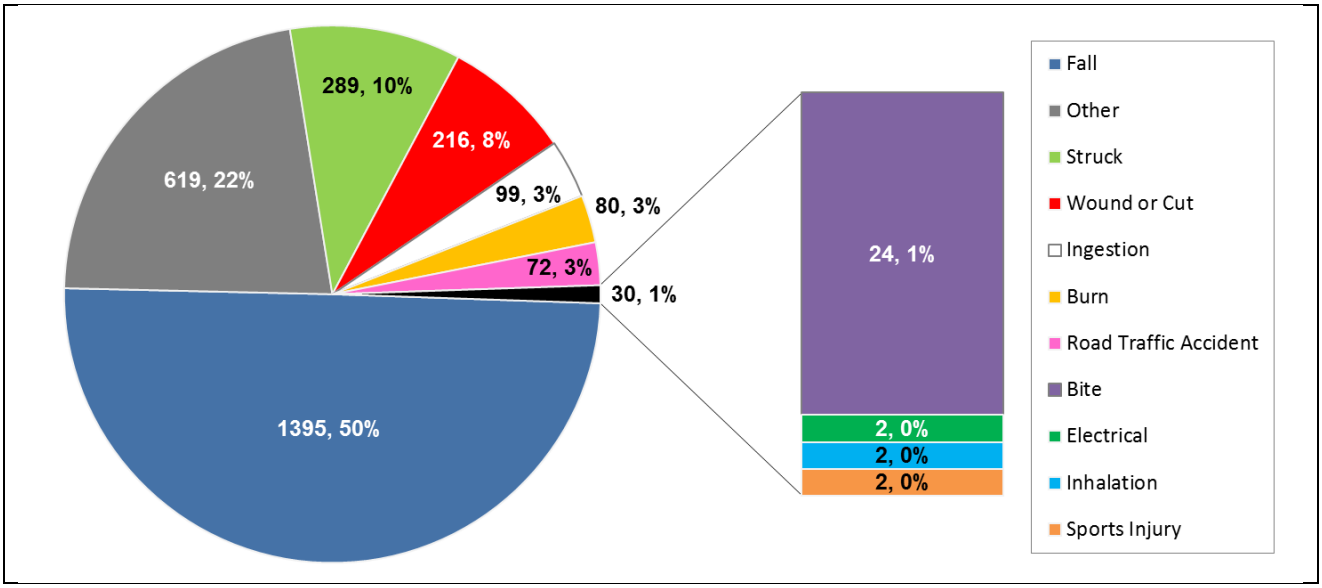
Figure 4.7c: Unintentional Injury attendances to Arrowe Park Hospital by location, Wirral residents (2014/15)



As the chart clearly shows, the most likely place for a child aged 0-4 to sustain an unintentional injury was in their own home. This is to be expected, as this is where young children spend the majority of their time. The next most likely place for an unintentional injury was in a public place.

Source: TIIG, 2016

Figure 4.7d: Unintentional Injury attendances to Arrowe Park Hospital by injury type, Wirral residents (2014/15)

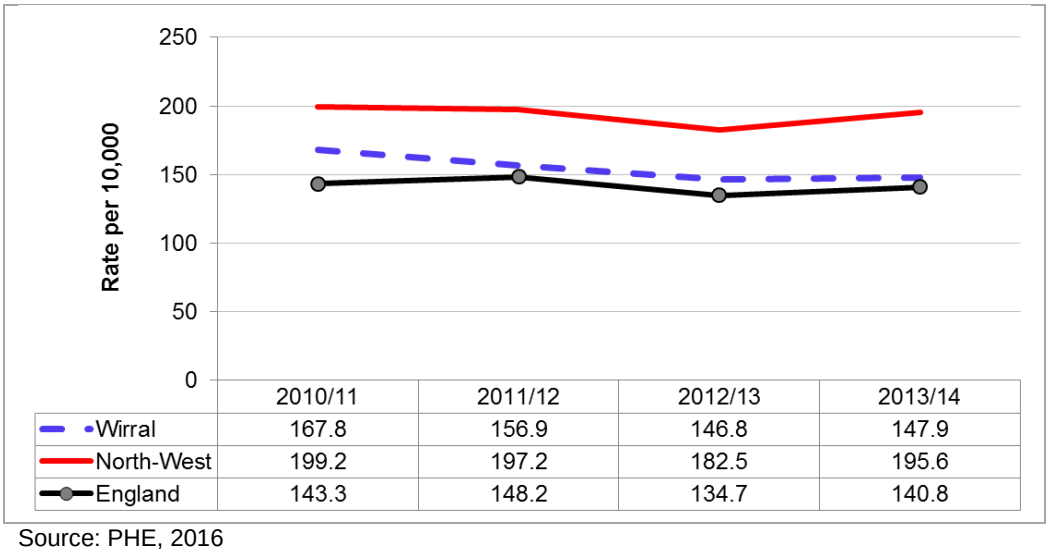


Source: TIIG, 2016

As the chart above shows, by far the most common injury type for a child aged 0-4 to sustain in 2014-15 was a fall. Half of all attendances at A&E at Arrowe Park were for a fall and this trend has been apparent for as long as figures have been collected on injury type. The next most common injury type was 'Struck', which does not necessarily mean struck by a person, it more usually refers to being struck by an object. Whilst ingestions and burns only represented 3% each of all injuries, their consequences are often serious and long lasting, especially in the case of burns, which can require years of skin grafts, with all the pain and distress this entails.

As well as attendances, it is also helpful to look at admissions, as these give an indication of the prevalence of more serious injuries. See Figure 4.7e below for the trend in admissions for unintentional injuries in children aged 0-4 for the last four financial years.

Figure 4.7e: Trend in admissions for unintentional injuries in the 0-4s in Wirral, 2010-14



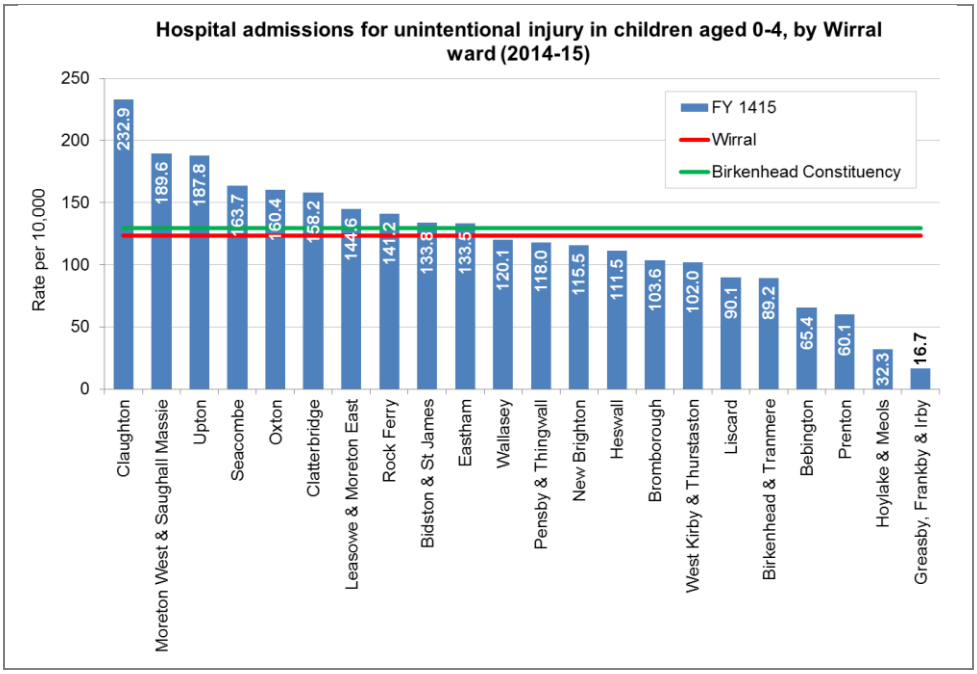
	2010/11	2011/12	2012/13	2013/14
Wirral	167.8	156.9	146.8	147.9
North-West	199.2	197.2	182.5	195.6
England	143.3	148.2	134.7	140.8

Although the reduction is more slight, the chart shows that as with attendances, Wirral has shown a slight downward trend in admissions for injuries. The North-West and England rates remain stable.

Source: PHE, 2016

Figure 4.7f below shows the same information as above (admissions for unintentional injuries), but at ward level.

Figure 4.7f: Admissions for unintentional injuries in the 0-4s in Wirral, by ward



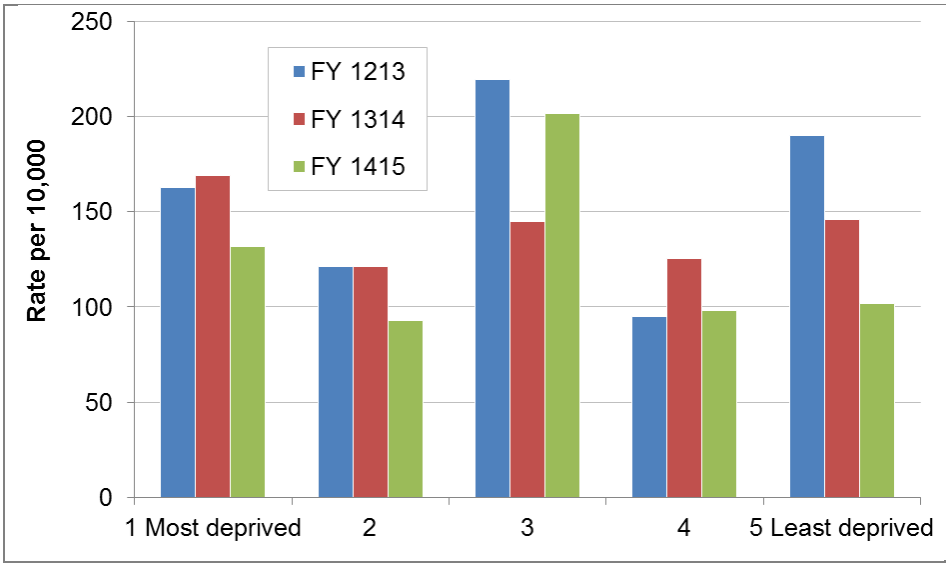
As the chart shows, there seems to be slightly less 'proximity effect' in admissions, compared to attendances at Arrowe Park in the figures (e.g tendency for those living close to Arrowe Park to use it because it is convenient, rather than because the situation warrants it), although Upton is still high (ranks third out of 22 wards, rather than second of 22 wards as it was for attendances).

Source: HES, 2016

Pensby and Thingwall ward was mid-ranking for admissions, despite being the ward with the highest rate of attendances. There also appears to be some effect of affluence/deprivation (in line with national evidence suggesting children from less affluent backgrounds are more likely to have more serious injuries), as the two wards with the lowest rates are 2 of the most affluent wards in Wirral. The picture is still a mixed one however, with Birkenhead & Tranmere ward (deprived), ranking 17th out of 22 wards for admissions for injuries, whilst Clatterbridge ranks 6th highest, despite being one of Wirrals most affluent wards.

This slightly mixed picture is summed up by Figure 4.7g below, which shows the trend in hospital admission rates for injuries in the 0-4s by deprivation quintile (based on the Index of Multiple Deprivation, 2015).

Figure 4.7g: Trend in hospital admission rate for injuries in the 0-4s in Wirral, by IMD quintile for 3 financial years (2012-13, 2013-14 and 2014-15)



Admission rates in this age group appear to have fallen over the 3 years shown in all the quintiles except Quintile 3. There does not appear to be any clear trend for children from more deprived quintiles being admitted more than children from more affluent groups, in fact, it is Quintile 3 which had the highest rates in 2014-15 and 2012-13.

4.8 Annual Child Health Profile for Wirral (ChiMat)

An annual report on many different aspects of child health is produced on behalf of each Local Authority in England by ChiMat (Child & Maternal Health Observatory). Authorities are benchmarked against other authorities and England overall, to provide a useful summary of areas of poor performance. Although profiles are produced annually, some indicators have changed over time, so backward comparison is not possibly for all indicators.

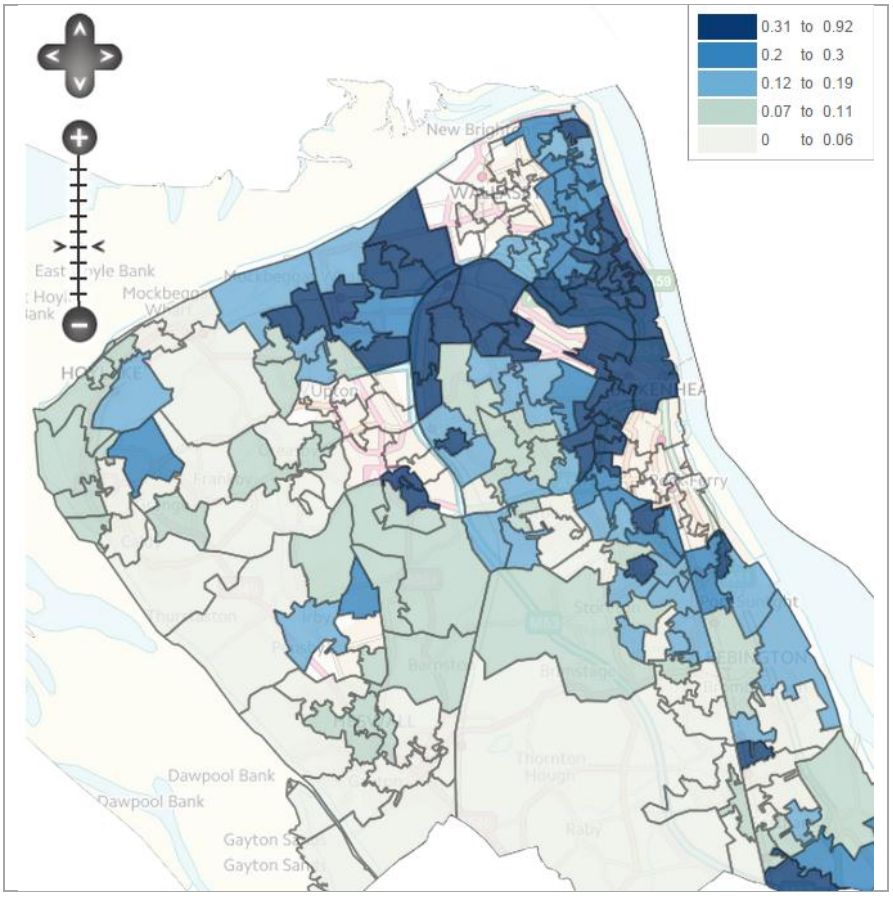
4.9 Deprivation

The 2015 Income Deprivation Affecting Children Index (IDACI) is produced by the Department for Communities and Local Government. It measures the proportion or percentage of children under the age of 16 in an area living in income deprived households. The definition of low income used includes both those people that are out-of-work, and those that are in work but who have low earnings (and who satisfy the respective means tests).

The IDACI is a supplementary index to the main Indices of Deprivation (IMD) and is provided at lower super output area level (LSOA).Table 4.8a (over page) shows results by Wirral ward (LSOA results have been amalgamated up to ward).

The map (Map 4.9a) shows the geographical distribution by LSOA. The 2015 Index is currently the most recently available Indices of Deprivation.

Map 4.9a & Table 4.9a: Income Deprivation Affecting Children Index Score (IDACI) 2015 by Wirral LSOA and Ward



As the map shows, the highest proportions of children living in income deprived families live in the east of Wirral, mainly in Birkenhead and Wallasey constituency areas.

Source: DCLG, 2015

Table 4.9a: Percentage of children living in income deprived families, by Ward (2015)

Ward	% living in income deprived families	Ward Rank
Birkenhead and Tranmere	48%	1
Bidston and St James	46%	2
Seacombe	43%	3
Rock Ferry	42%	4
Leasowe and Moreton East	33%	5
Liscard	29%	6
Upton	26%	7
Claughton	23%	8
Bromborough	21%	9
New Brighton	21%	10
Moreton West & Saughall Massie	17%	11
Oxton	16%	12
Prenton	15%	13
Bebington	13%	14
Eastham	13%	15
Pensby and Thingwall	12%	16
Wallasey	11%	17
West Kirby and Thurstaston	8%	18
Greasby, Frankby and Irby	7%	19
Hoylake and Meols	7%	20
Clatterbridge	6%	21
Heswall	4%	22