

# Birkenhead Constituency: Profile of children aged 0-4

Produced by Wirral Council  
Performance & public Health  
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## Population

There are currently 18,500 children living in Wirral aged 0-4, with one-third of these living in Birkenhead Constituency. See Table 1 below.

**Table 1:** Number of 0-4's in Birkenhead constituency, 2012

Age	Number
<1	1286
1	1225
2	1159
3	1165
4	1214
<b>Total</b>	<b>6,049</b>

The 0-4's population is projected to decrease by 9.3% by 2033 (in Wirral overall), as is the population of children in general, see Table 2 below (projections not available at smaller area than Wirral overall currently).

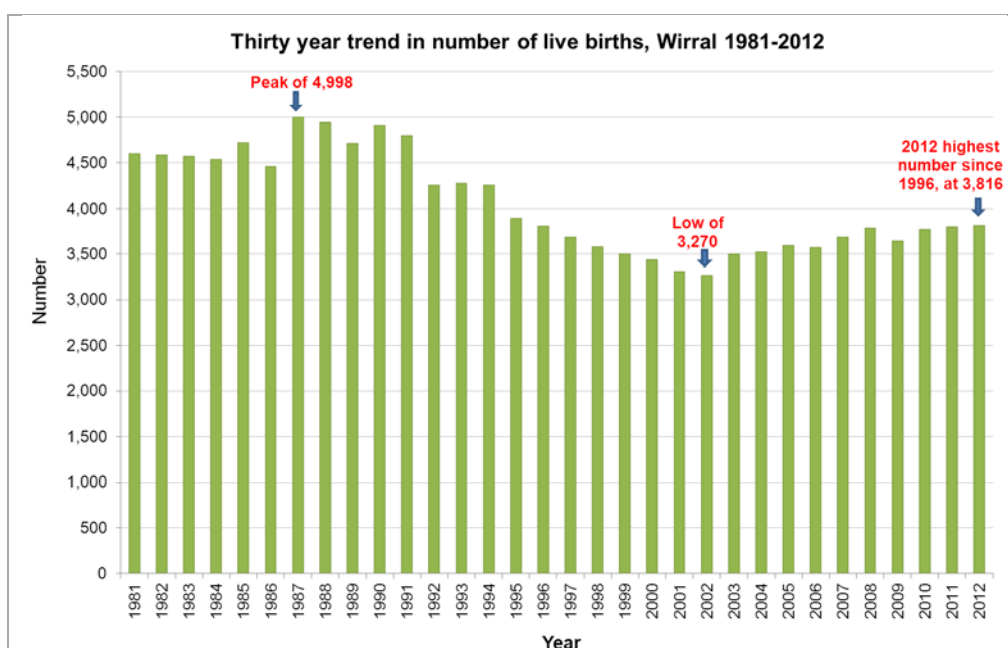
**Table 2:** Population projections for children and young people in Wirral (Mid 2011-Mid 2031, figures shown in thousands)

Age Group	2011	2015	2019	2024	2029	2033	% change 2008 to 2033
0-4	18.7	18.1	18.0	17.6	16.9	16.5	-9.3%
Total 0-19	73.4	71.7	71.6	72.3	71.0	69.6	-7.8%

Source: ONS

## Live births

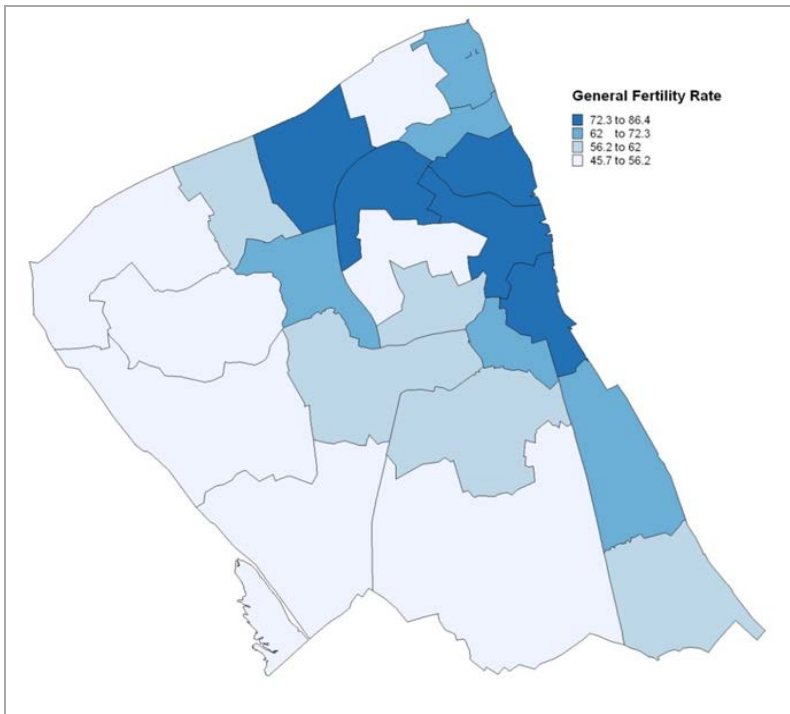
**Figure 1:** Trend in number of live births in Wirral (1999 to 2012)



The lowest number of live births in recent years was in 2002, when there were 3,270 live births in Wirral. Since then, the number of births has risen again and by 2012, there were 3,816 live births in Wirral, the highest figure for 14 years.

Source: NHS IC, 2014

**Map 1: General fertility rate by Wirral ward (2007-09, 3 years pooled)**



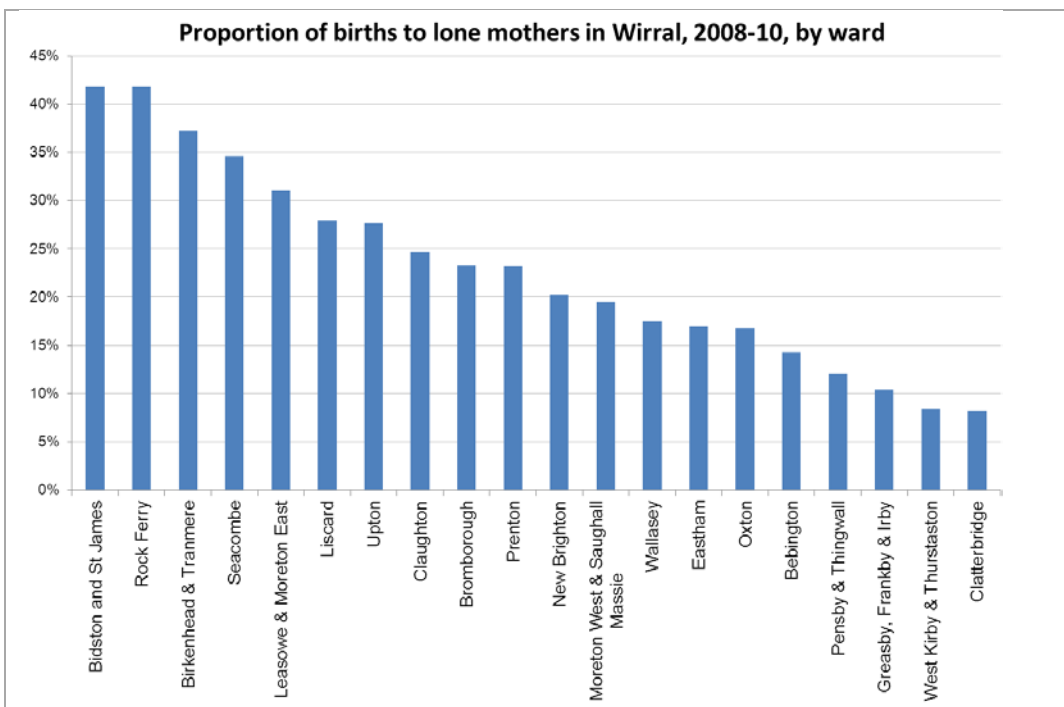
In previous years, the trend has been for the fertility rate to be higher in the east of Wirral, compared to wards on the west. Although Map 1 below shows data from 2007-09, this trend has been a longstanding one in Wirral and is unlikely to have changed in the last 3 years. As the map shows, fertility rates in Wirral are higher 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 rates, learning disability and higher than average smoking in pregnancy rates.

Source: NCHOD and ONS, 2010

**Births to Lone Mothers**

In Wirral in 2008-10, 24.9% of all births were to lone mothers (births registered solely by the mother or jointly by parents who are living at different addresses), but this varied considerably by ward however, with Birkenhead constituency wards having much higher rates than this (with the exception of Oxton), see Figure 2 below.

**Figure 2: Proportion of births to lone mothers, by Wirral ward (2008-10)**

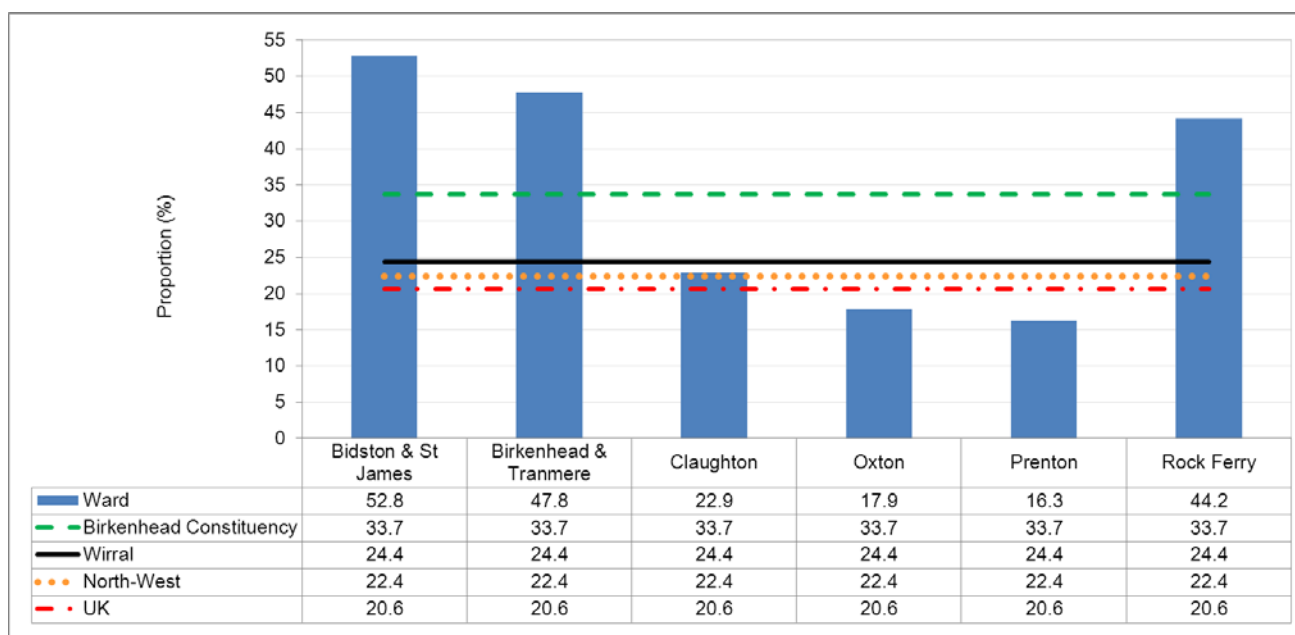


A larger percentage of lone births in Wirral in 2008-10 were to mothers in Birkenhead Constituency wards such as Bidston & St James, Rock Ferry and Birkenhead & Tranmere, compared to more affluent wards in Wirral.

Source: ONS, 2012

**Child Poverty**

**Figure 3: Child Poverty: Birkenhead Constituency, 2010**



As the chart and table show, three wards in Birkenhead constituency had levels of child poverty which are above the national, regional and local averages in 2010 (the last year rates at small area/ward level were calculated). These same three wards had the highest levels of child poverty in Wirral and in the case of Bidston & St. James, this means that more than half of children were living in poverty (53%). Only Oxton and Prenton were below national, regional and local averages.

**Table 3: Child Poverty: Birkenhead Constituency, 2010**

Ward of Residence (2004 boundaries)	% of all children living in poverty
Bidston and St James	52.8
Birkenhead and Tranmere	47.8
Claughton	22.9
Oxton	17.9
Prenton	16.3
Rock Ferry	44.2
<b>Birkenhead Constituency</b>	<b>33.7</b>
Wallasey Constituency	26.4
Wirral South Constituency	12.4
West Wirral Constituency	12.6
<b>Wirral</b>	<b>24.4</b>
North West	22.4
<b>UK</b>	<b>20.6</b>

**Notes and Definitions:** Child poverty is calculated on the basis of the number of children in families in receipt of either out of work benefits, or tax credits where their reported income is less than 60% median income as a proportion of the total number of children in the area.

## Infant Mortality

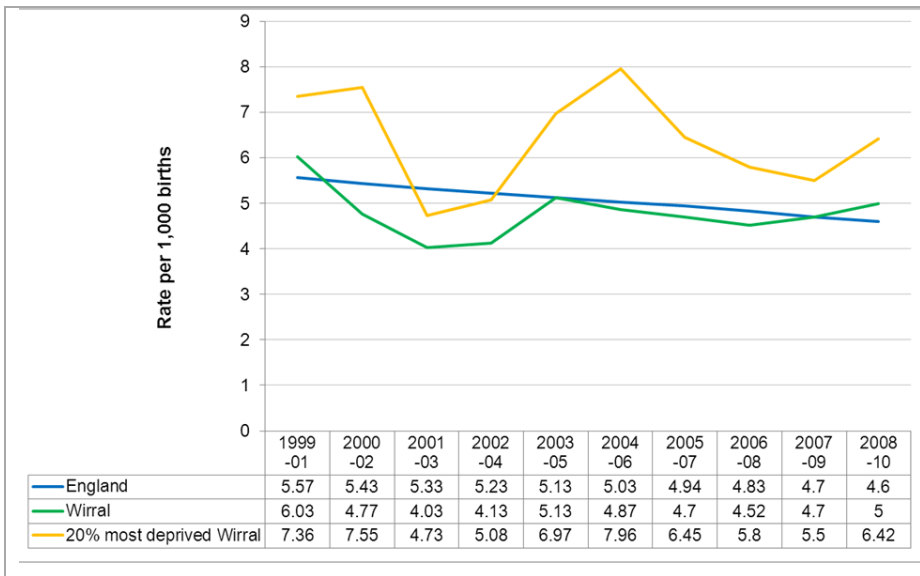
Infant mortality (or infant death rate) is the number of deaths in infants aged under one year per 1,000 live births and consists of two components:

- The neonatal mortality rate: The number of neonatal deaths occurring in the first 28 days of life, per 1,000 live births.
- The post-neonatal mortality rate: The number of infants who die between 28 days and less than one year, per 1,000 live births.

The infant mortality rate reflects the overall health of the population as it is influenced by wider determinants of health such as the pre-conception and antenatal health of mothers, plus social, economic and environmental factors. High infant mortality rates are associated with deprivation.

Although infant mortality is not monitored by Constituency, in order to monitor inequalities, Wirral does monitor the rate in the 20% most deprived Lower Super Output Areas (according to the Index of Multiple Deprivation). A large proportion of these 20% most deprived areas fall into Birkenhead Constituency area. See Figure 4 below.

**Figure 4:** Infant mortality rate, 1999-2010 (3 year rolling rates), England, Wirral and 20% most deprived areas of Wirral



Infant mortality rates have shown a downward trend both nationally and locally, despite a peak during 2004-06. Rates appear to be increasing slightly in the most recent time periods for both Wirral and the 20% most deprived areas of Wirral. As infant deaths involve such small numbers, some fluctuation is to be expected none of the differences on this chart are statistically significant (due to small numbers).

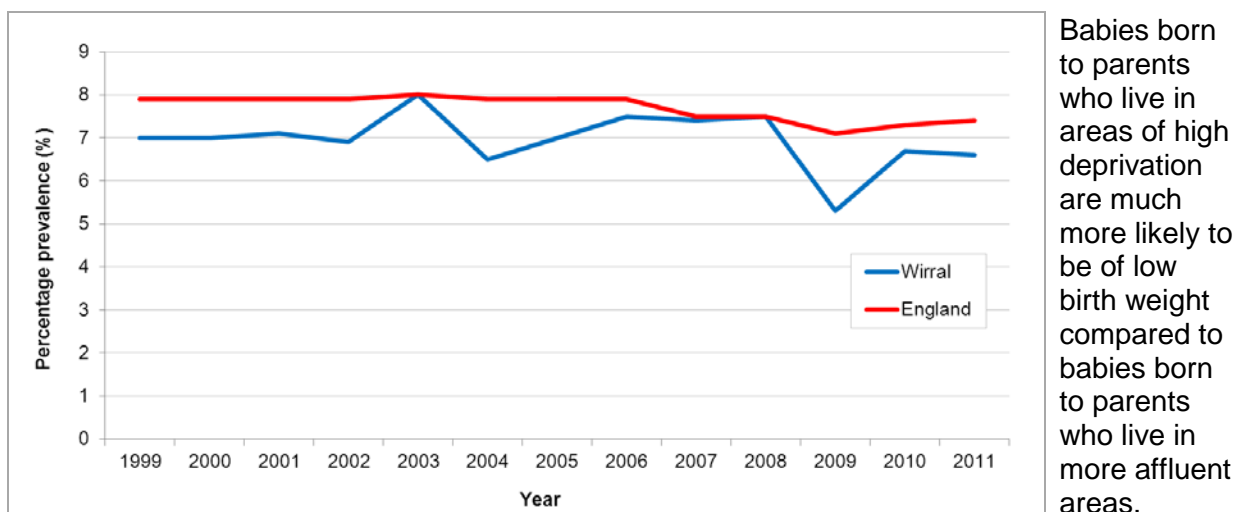
Source: NCHOD and ONS Annual Birth Death Extracts, 2010

There is published [evidence-based guidance on effective interventions for reducing infant mortality](#) published by the Department of Health. These include reducing obesity in routine and manual occupation groups, improving pre-conception care, targeting smoking in pregnancy, teenage conceptions, encouraging early booking-in of pregnancy and education and action to prevent sudden unexpected death in infancy. Other effective interventions that those which address the wider determinants of health.

## Low Birth Weight

Low birth weight is defined as below 2,500g and is closely correlated with poor health in the first weeks of life. Longer term impacts can last into adulthood and include cognitive impairments, diabetes, heart disease as well as physical disabilities (World Health Organisation). Low birth weight is linked to many factors, including maternal smoking, multiple births and poor maternal nutrition. Figure 4 below shows how Wirral compares to England overall. Table 4 shows the variation within Wirral wards.

**Figure 5:** Percentage of births classed as low birth weight, England & Wirral 1999-2011



**Table 4:** Low birth weight babies by Wirral ward (2008-10)

Ward of Residence	Total Number of Live and Still Births	Total number of Births <2500	% of all Births
Birkenhead & Tranmere	967	86	8.9
Seacombe	847	70	8.3
Prenton	456	36	7.9
Upton	556	43	7.7
Bidston & St James	801	61	7.6
Moreton West & Saughall Massie	488	37	7.6
Leasowe & Moreton East	646	46	7.1
Claughton	489	34	7.0
Hoylake and Meols	334	23	6.9
Rock Ferry	714	47	6.6
New Brighton	538	34	6.3
Liscard	579	36	6.2
West Kirby & Thurstaston	283	17	6.0
Bromborough	612	35	5.7
Greasby, Frankby & Irby	308	17	5.5
Wallasey	361	19	5.3
Eastham	437	22	5.0
Pensby & Thingwall	341	17	5.0
Oxton	438	21	4.8
Clatterbridge	344	16	4.7
Heswall	276	13	4.7
Bebington	437	18	4.1
<b>Wirral</b>	<b>11252</b>	<b>748</b>	<b>6.6</b>

Source: ONS, 2012

As Table 4 shows, the ward with the highest percentage of low birth weight babies was Birkenhead & Tranmere ward in Birkenhead Constituency.

### **Breastfeeding**

The UK has one of the lowest rates of breastfeeding in the developed world, especially among families from disadvantaged groups. Breastfed babies experience fewer stomach upsets, infections and dental problems and are at a reduced risk of obesity. Evidence shows that the longer the baby is breastfed, the greater the benefit (World Health Organisation).

Current UK policy is to promote exclusive breastfeeding (feeding only breast milk) for the first 6 months. Thereafter, it recommends that breastfeeding should continue for as long as the mother and baby wish, while gradually introducing a more varied diet (DH 2003).

The latest figures from the Department of Health’s five-yearly Infant Feeding Survey (Renfrew and IFF Research 2011) showed breastfeeding initiation rates rose during the period of 2005-2010 from 76% to 81% across the UK. In Wirral breastfeeding initiation rose from 52% to 57% over the same period and has not risen since then, with rates at 56.5% in 2012/13. See Table 5.

**Table 5: Trend in breastfeeding initiation in Wirral 2004-13**

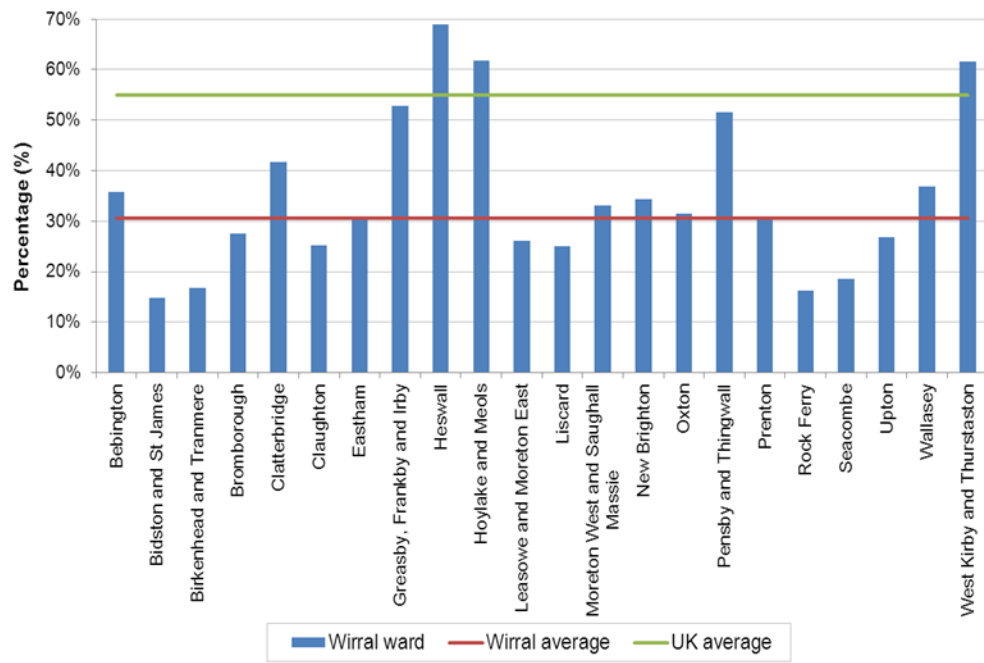
Year	% Maternities where breastfeeding was initiated Wirral
2004-05	52.4%
2005-06	54.2%
2006-07	54.7%
2007-08	54.0%
2008-09	53.3%
2009-10	56.9%
2010-11	55.5%
2011-12	55.6%
2012-13	56.5%

Source: Department of Health, Vital Signs Monitoring Return

**Breastfeeding at 6-8 weeks**

Breastfeeding rates in Wirral remain below the average for the North West and England. In 2012/13 only 30.5% new mums were continuing to breastfeed at 6-8 weeks, compared to 55% in the UK overall. Figure 6 below shows that the most deprived wards in Wirral have the lowest rates of breastfeeding, with 19 out of the 22 Wirral wards with rates below the UK average.

**Figure 6: Breastfeeding at 6-8 weeks by ward, 2012-13**



The success of breastfeeding depends on continuity rates. Consequently, the prevalence at 6-8 weeks is key. As Figure 5 shows, only Oxton ward in Birkenhead Constituency had rates that were above the Wirral average. There were no wards in the Constituency with rates even approaching the England average.

## **Smoking in Pregnancy**

The impact of smoking during pregnancy is significant. Evidence has demonstrated that babies born to women who smoke during pregnancy are around 40% more likely to die within the first four weeks of life than babies born to non-smokers. Smoking during pregnancy can result in the increased risk of miscarriage, premature birth, low birth weight and stillbirth. It is also associated with sudden infant death syndrome (SIDS), childhood respiratory illnesses and attention deficit hyperactivity disorder (ADHD) and behavioural problems.

Overall, 13% of mothers were smoking at delivery in Wirral in 2011/12 and of the 1001 women who reported that they smoked in the 12 months prior to their booking in, 463 (54%) continued to smoke throughout their pregnancy. Smoking in pregnancy is strongly associated with deprivation and contributes to health inequalities. Table 6 shows smoking in pregnancy rates by ward (Birkenhead Constituency wards shown in blue).

**Table 6:** Smoking in pregnancy (at delivery) by Wirral Ward 2011-12

<b>Ward</b>	<b>Percentage (%)</b>
Clatterbridge	0%
Heswall	1%
Hoylake & Meols	4%
Greasby, Frankby and Irby	5%
Wallasey	7%
West Kirby and Thurstaston	7%
New Brighton	7%
Moreton West and Saughall Massie	8%
Eastham	9%
Bebington	9%
Upton	9%
Oxton	9%
Pensby and Thingwall	9%
Liscard	11%
Bromborough	12%
Prenton	13%
Leasowe and Moreton East	15%
Claughton	18%
Rock Ferry	18%
Seacombe	23%
Birkenhead & Tranmere	23%
Bidston & St James	26%
<b>Wirral</b>	<b>13%</b>

Source: Wirral University Teaching Hospital Foundation Trust, 2013

There are higher rates of smoking in pregnancy in 2011/12 were in Birkenhead & Tranmere and Bidston & St James, both in Birkenhead Constituency.

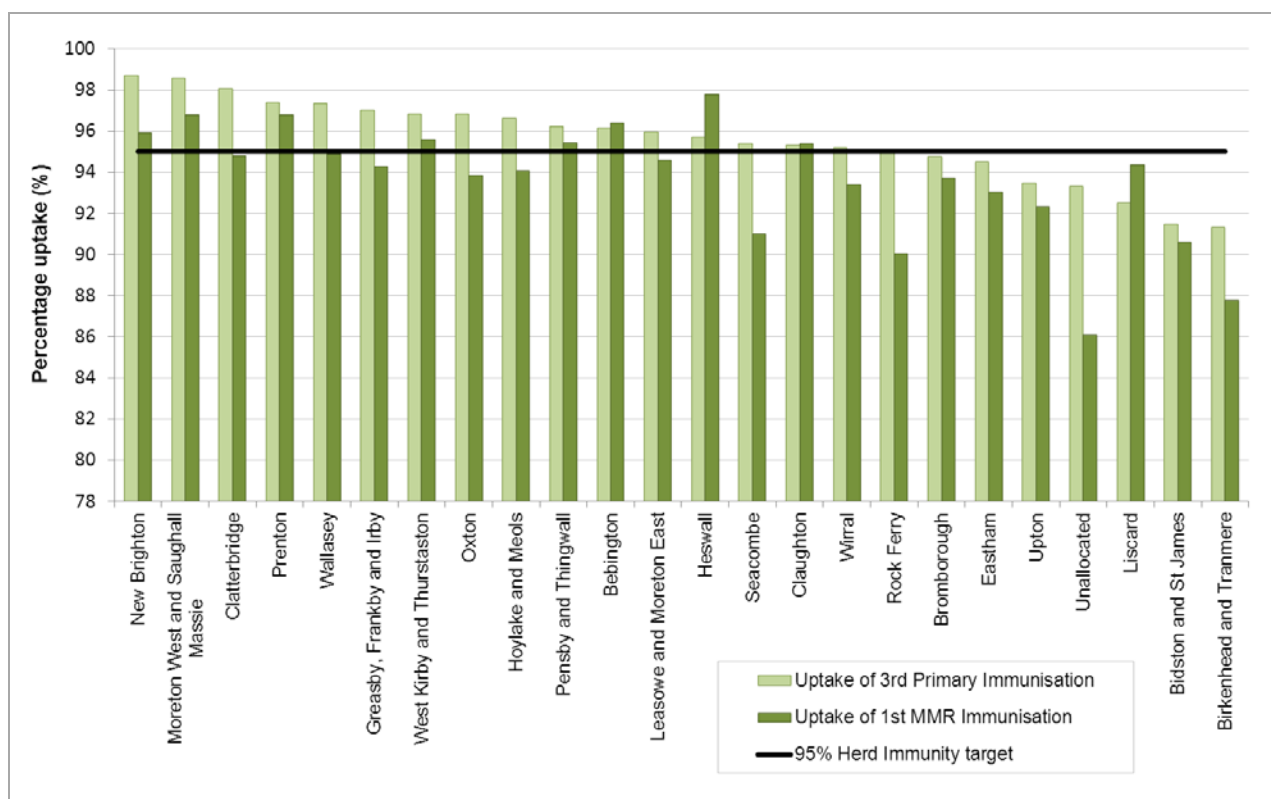
## **Childhood Immunisations**

The World Health Organisation (WHO) recommends that to maintain herd immunity (enough people vaccinated to avoid an outbreak/ epidemic) at least 95% of children should receive:

- (i) 3 primary doses of diphtheria, tetanus, polio, pertussis (whooping cough) by age 1
- (ii) One dose of Measles, Mumps and Rubella (MMR) vaccine by two years of age

Herd immunity acts to protect children who have not been vaccinated either because they are not yet old enough or for other reasons, such as medical conditions. If herd immunity levels are not achieved, the risk of outbreaks and epidemics is increased. There was a significant outbreak of measles in Merseyside in 2012 due to historically low MMR immunisation.

**Figure 7:** Immunisation uptake in 1 and 2 year old children, by Wirral ward, 2011/12



As Figure 6 shows, immunisation uptake was lowest in the more deprived wards. The two wards with the lowest overall uptake were both in Birkenhead Constituency. This information is also shown in the table below.

**Table 7:** Immunisation uptake in 1 and 2 year old children, by Wirral ward, 2011/12

Ward of Residence	Uptake of 3rd Primary Immunisation	Uptake of 1st MMR Immunisation
New Brighton	98.72	95.91
Moreton West & Saughall Massie	98.60	96.77
Clatterbridge	98.06	94.78
Prenton	97.39	96.77
Wallasey	97.35	94.87
Greasby, Frankby & Irby	97.03	94.26
West Kirby & Thurstaston	96.83	95.58
Oxton	96.82	93.85
Hoylake & Meols	96.64	94.07
Pensby & Thingwall	96.23	95.41
Bebington	96.15	96.39
Leasowe & Moreton East	95.96	94.58
Heswall	95.69	97.80
Seacombe	95.38	91.02
Claughton	95.29	95.39
Wirral	95.18	93.38



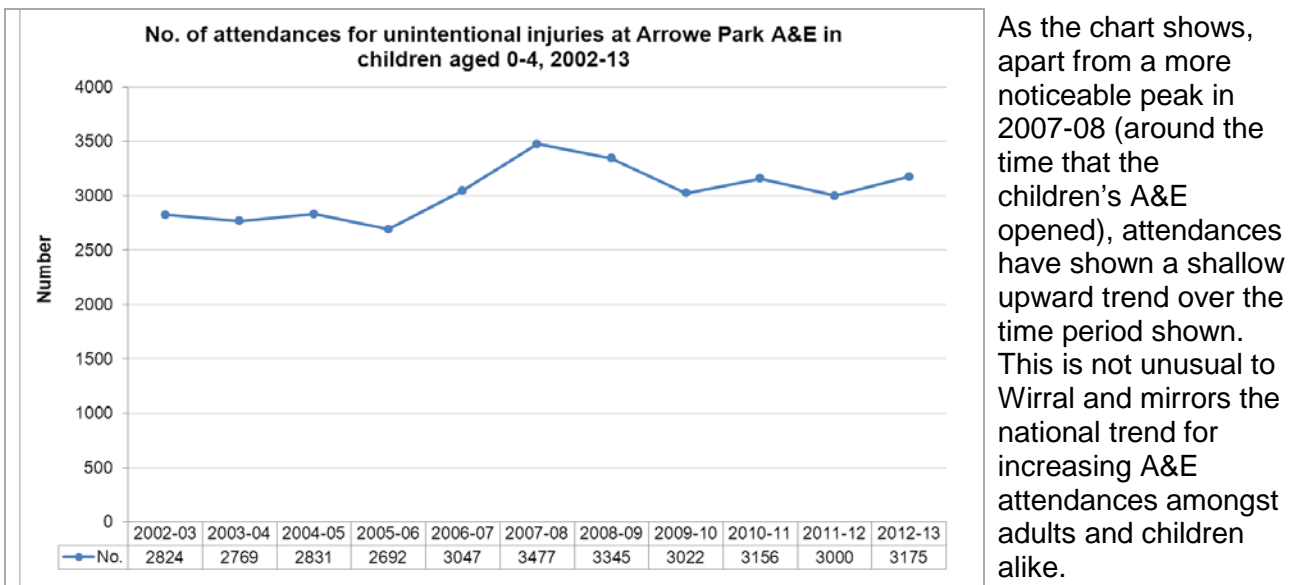
Rock Ferry	94.96	90.04
Bromborough	94.76	93.72
Eastham	94.51	93.06
Upton	93.47	92.31
Unallocated	93.33	86.11
Liscard	92.52	94.37
Bidston & St James	91.49	90.60
Birkenhead & Tranmere	91.33	87.79

### Unintentional injuries

Unintentional injury is the largest cause of mortality in children in the UK and shows a clear relationship with inequalities. Children from deprived backgrounds are 13 times more likely to die as a result of an injury (any kind) and 37 times more likely to die as a result of fire, flame or smoke injuries than children with parents in the higher managerial or professional occupations.

When children are very young (up to the age of four) evidence shows they are most likely to be injured in the home, reflecting where they spend most of their time; the accident they are most likely to sustain being a fall. Figure 8 below shows the number of unintentional injuries sustained by Wirral children aged 0-4 from 2002 to 2013.

**Figure 8:** Number of attendances for unintentional injuries at Arrowe Park A&E in children



Source: Trauma Injury Intelligence Group, 2014

### Emergency hospital admissions

There are considerably more emergency admissions to hospital in Wirral for children and young people than planned admissions. Table 8 summarises the key causes of admissions for children aged 0-4 during 2010-11 (figures not able to be split by ward).

**Table 8:** Hospital admissions by cause in Wirral, 2010-11

Emergency admission	Elective (planned) admission
Total admissions: 3691	Total admissions: 809
<u>Top 3</u>	<u>Top 3</u>
<ul style="list-style-type: none"> <li>• Viral infection (527)</li> <li>• Acute Bronchitis (424)</li> <li>• Upper respiratory infection (418)</li> </ul>	<ul style="list-style-type: none"> <li>• Other congenital anomalies (102)</li> <li>• Otitis media (middle ear) &amp; related conditions (71)</li> <li>• Genitourinary congenital anomalies (61)</li> </ul>

Source: Dr Foster Intelligence 2012

It is interesting to note that all of the top 3 causes of emergency admissions and one of the three planned admissions are for conditions known to associated with deprivation and factors such as exposure to second-hand tobacco smoke (acute bronchitis, upper respiratory infections and otitis media or middle ear infection).

### **Overweight and obesity**

As well as causing problems in childhood (respiratory problems, school absenteeism, bullying, poor quality of life and poor mental health), overweight and obese children are more likely to be overweight and obese adults. Four out of five adults who are obese were obese as children, and obesity in adulthood has a negative impact on health, high blood pressure, heart problems, diabetes, joint problems and cancer.

The National Child Measurement Programme provides us with excellent information; in Wirral in 2010-11, 98.1% of Reception year (age 4 /5) pupils had their heights and weights recorded. Table 9 shows how Birkenhead Constituency compared to comparators in 2012/13.

**Table 9:** Weight status of Reception pupils, Birkenhead Constituency & comparators (2012/13)

<b>Ward of Residence</b>	<b>Healthy weight</b>	<b>Obese</b>	<b>Overweight</b>	<b>Underweight</b>
Bidston & St James	72.2%	11.9%	15.0%	0.9%
Birkenhead & Tranmere	71.5%	13.9%	13.9%	0.7%
Cloughton	73.8%	11.0%	14.5%	0.7%
Oxton	76.8%	8.8%	12.8%	1.6%
Prenton	75.5%	9.8%	14.7%	0.0%
Rock Ferry	74.8%	7.6%	16.7%	1.0%
<b>Birkenhead Constituency</b>	<b>73.6%</b>	<b>10.9%</b>	<b>14.7%</b>	<b>0.8%</b>
Wallasey Constituency	78.5%	6.5%	13.8%	1.1%
Wirral South Constituency	77.3%	7.3%	15.1%	0.3%
West Wirral Constituency	79.9%	8.7%	10.9%	0.5%
<b>Wirral</b>	<b>77%</b>	<b>8%</b>	<b>14%</b>	<b>1%</b>

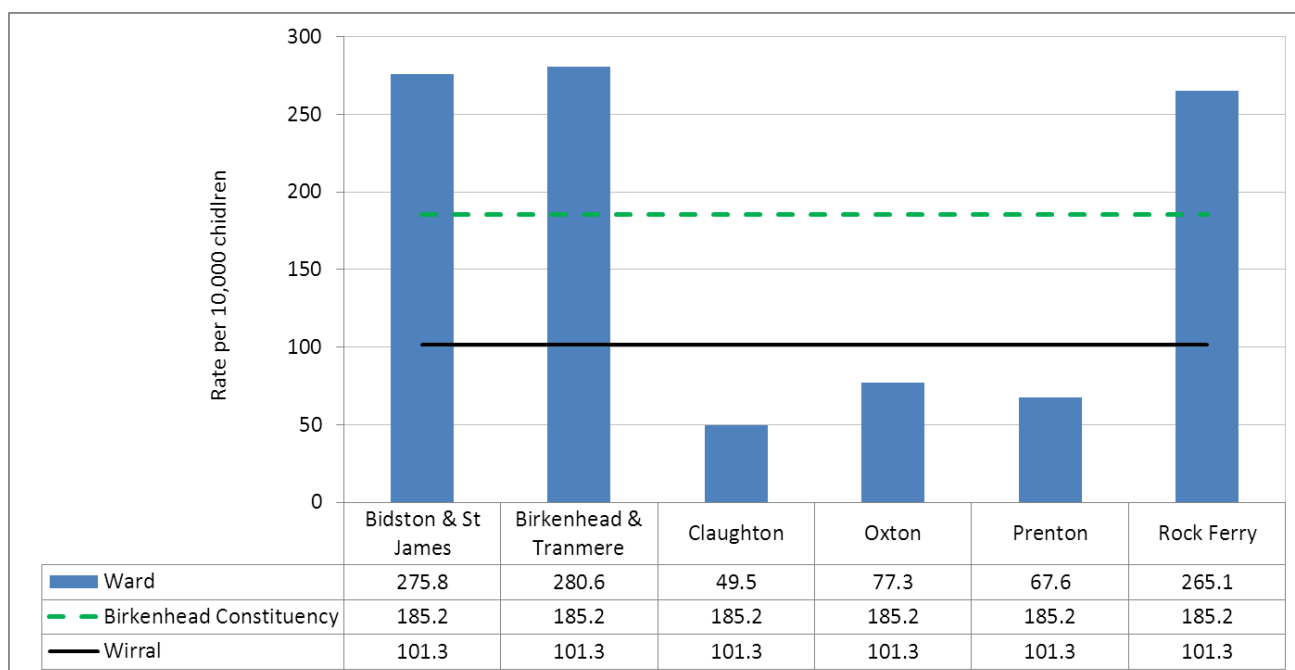
Source: National Child Measurement Programme

As the Table shows, Birkenhead Constituency had the highest rate of overweight and obesity amongst Reception aged children of any of the four Wirral constituencies. This is unsurprising, as obesity is increasingly linked to deprivation and Birkenhead is the most deprived constituency in Wirral. For further information and maps detailing Wirral's child measurement programme go to: <http://info.wirral.nhs.uk/instant-atlas/NCMPAnnualReport/atlas.html?select=00CBFE>

### **Looked After Children (LAC)**

More than half of all the Looked After Children in Wirral are from the Birkenhead Constituency area (55%). The rate of LAC (all children aged 0-17) in Birkenhead constituency is more than double those found in the other three constituencies (and more than three times higher than England). Looking at particular wards, the variation is even more stark, with rates in Bidston & St. James and Birkenhead & Tranmere of 275.8 and 280.6 per 10,000 children. This is almost five times the overall England rate. In actual numbers, there are more looked after children in the Birkenhead constituency area than in all of the other three Wirral constituencies combined. Unfortunately, rates for children aged 0-4 were not available at this time.

**Figure 9:** Looked After Children (LAC): Birkenhead Constituency, March 2012



**Table 10:** Looked After Children: Birkenhead Constituency, March 2012

Ward of Residence	Number*	Rate Per 10,000
Bidston and St James	110	275.8
Birkenhead and Tranmere	115	280.6
Claughton	15	49.5
Oxton	20	77.3
Prenton	20	67.6
Rock Ferry	95	265.1
<b>Birkenhead Constituency</b>	<b>375</b>	<b>185.2</b>
Wallasey Constituency	150	90.6
Wirral South Constituency	35	53.8
West Wirral	50	85.5
<b>Wirral</b>	<b>675</b>	<b>101.3</b>
North West	11,360	76.0
<b>England</b>	<b>67,050</b>	<b>59.0</b>

\* Numbers may not sum due to rounding (to nearest 5)

**Notes and Definitions**

1. Looked after children are: children who are in the care of the Local Authority and are between the ages of 0 to 17 years old.
2. The rates have been calculated using Wirral ONS 2011 mid-year populations for children aged 0 to 17 years. The rates are per 10,000 population.

Source: Swift Database/DCSF Annual Statistical Return SSDA903

## School Readiness

School readiness is a key measure of early years development across a wide range of developmental areas, hence it's inclusion in the [Public Health Outcomes Framework](#) (PHOF). Children from poorer backgrounds are more at risk of poorer development and the evidence shows that differences by social background emerge early in life. Children are defined as having reached a good level of development if they achieve at least the expected level in the early learning goals in the prime areas of learning (personal, social and emotional development; physical development; and communication and language) and the early learning goals in the specific areas of mathematics and literacy.

There are now four indicators for School Readiness in the PHOF (2 relating to children at the end of the Reception Year, 2 related to children starting in Year 1). The table below shows how Wirral compared to England on all of them in 2012/13. These figures are not available by Constituency at the current time.

**Table 11:** School Readiness indicators from the PHOF, Wirral, NW & England, 2012/13

School Readiness Indicator	Wirral	NW	England
1.02i: The % of children achieving a good level of development at the end of Reception	47.2%	50.4%	51.7%
1.02i: The % of children with free school meal status achieving a good level of development at the end of Reception	27.7%	34.3%	36.2%
1.02ii: The % of Year 1 children achieving the expected level in the phonics screening check	67.8%	68.7%	69.1%
1.02ii: The % of Year 1 children with free school meal status achieving the expected level in the phonics screening check	58.3%	55.3%	55.8%

As Table 11 shows, Wirral children under-perform compared to regional and national comparators, on all but one of the four indicators shown. The gap in development between children receiving free school meals and those not receiving free school meals appears greater for Reception children compared to those in Year 1.