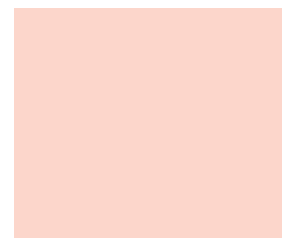


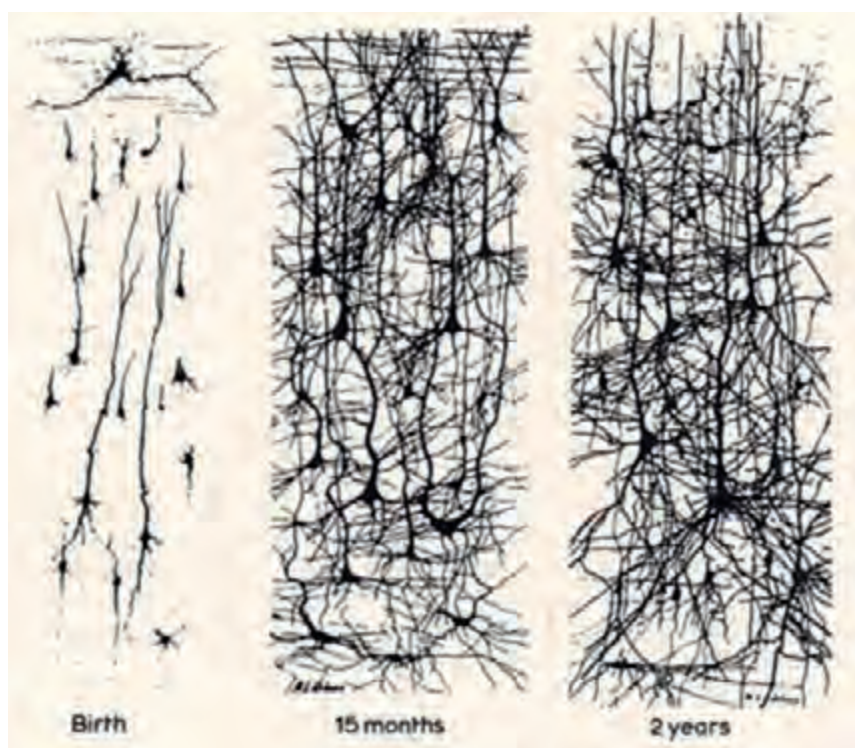
Foundations of Life
- First 1000 Days

Calderdale Public Health
Annual Report 2016



It is easier to build strong children than to repair broken adults

Frederick Douglass



Brain development

The image opposite shows the growth in synapses forming in the brain during the first two years of life.

These are key to how the brain processes information. Early brain development is the foundation of adaptability and resilience. Experiences have a great potential to affect brain development, children are especially vulnerable to persistent negative influences during this period.

On the other hand, these early years are a window of opportunity for parents, care givers and communities. Positive early experiences have a huge effect on children's chances for achievement, success and happiness.

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Introduction



Paul Butcher
Director of Public Health

Leadership

The Health and Wellbeing Board agree to lead actions making Calderdale a Child Friendly Borough.

Thank you for taking the time to read my Public Health Annual Report 2016. This is my independent assessment of the state of health in Calderdale.

This report focuses on the first 1000 days of life. This time frame is accepted to be the most significant in a child's development. Leading experts worldwide agree that care given during the first 1000 days has more influence on a child's future than any other time in their life.

Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being– from obesity, heart disease and mental health, to educational achievement and economic status. Later interventions, although important, are considerably less effective where good early foundations are lacking.

The first 1000 days determines much of an individual's future health and well being. **(pregnancy and the first two years of life 270+365+365=1000)**

Every parent has a story about the beginnings of their child's life. Many of them are joyful, some are heartbreaking, but all of them are important. And almost all of them will have at least one thing in common: the desire to give their child the absolute best start in life.

This report presents some of the most recent local evidence, trends and areas for further action. It draws on information from robust and reliable health systems, parental and professional views.

There is positive news, we have seen falls in infant mortality, smoking and teenage pregnancy, as well as improvements in school readiness. However much further progress can be made.

I call on all of us in Calderdale, ranging from individuals and families to services and organisations to take action to ensure that babies born now and in the future get the best possible start in life and to ensure implementation of the recommendations laid out in this report. This is not a call that will just ensure a healthier generation it is a call which will also lead to a wealthier, more productive and enriched society. Leadership to achieve this should be led by the Health and Wellbeing Board. An important step in this journey would be to establish Calderdale as a child friendly borough.

Calderdale is investing in large infrastructure projects e.g. Piece Hall, A629 transport developments to benefit the economy. There is compelling evidence that investment in the first 1000 days of life will bring prosperity and health. We need to stop thinking of the spend and cost on 'health' for children and young people and instead think of this resource as investing in the health of children and young people as a route to improving the economic health of our area.

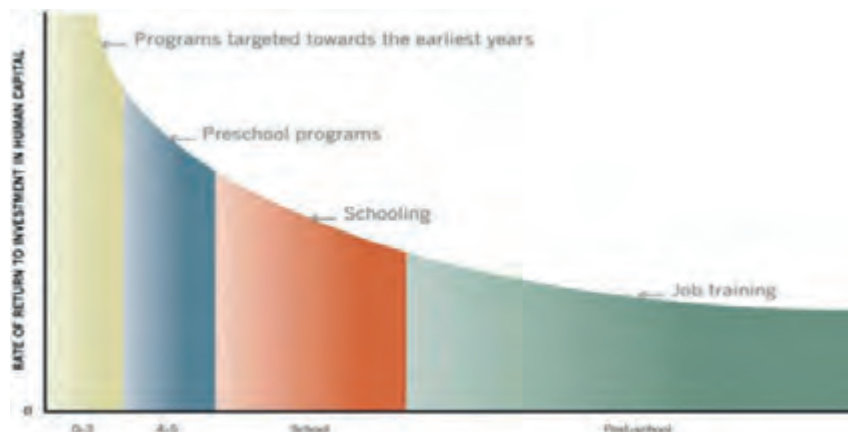
Our human instincts to nourish, nurture and protect our children from the moment we become aware of their existence has a scientific basis. It is a critical window of time that sets the stage for a person's intellectual development and lifelong health. It is a period of enormous potential, but also of enormous vulnerability.

There is much current focus on the strain in the health and social care system primarily related to the cost of new technologies and additional demands from chronic diseases amongst an ageing population. Whilst these are current pressing problems, it is also our duty and responsibility to ensure our next generation is able to maximise its potential for its own and society's health.



Return on investment

Graph showing the importance of Investing in early years services



The highest rate of return in early childhood development comes from investing as early as possible, from birth through age five, in disadvantaged families. Starting at age three or four is too little too late, as it fails to recognize that skills beget skills in a complementary and dynamic way. Efforts should focus on the first years for the greatest efficiency and effectiveness. The best investment is in quality early childhood development from birth to five for disadvantaged children and their families.”
 - James J. Heckman, December 7, 2012

Why focus on the first 1000 days

The early years are the greatest period of growth in the human brain.

25%

Babies are born with 25% of their brains developed

By age two this has rapidly increased to 75%

75%

From birth to age 18 month connections in the brain are created at a rate of 1 million per second

A child's developmental score at 22 months can serve as an accurate predictor of educational outcome at age 26



Pregnancy is a particularly important period during which the physical and mental wellbeing of the mother can have lifelong impacts on the child. For example, during pregnancy, such factors as **maternal stress, diet and alcohol or drug misuse** can place a child's future development at risk

Babies are disproportionately vulnerable to abuse and neglect. Around 25% of babies are estimated to be living within complex family situations where there are problems such as substance misuse, mental illness or domestic violence. ¹

What local parents said

Local parents said that during pregnancy their greatest concerns were around healthy eating (57%), breastfeeding (47%), preparation for parenthood (45%) and emotional wellbeing (38%). They were also concerned about their child's growth and development (39%). Around 17% were concerned about smoking. 76% of respondents rated the promotion of healthy pregnancy in Calderdale to be "good" or "excellent".

What the data tells us

In **2015**, there were **2,433** live births in Calderdale. Having increased steadily between 2005 and 2010 (an increase of over **10%**) the number of births now appears to be relatively stable.

This equates to a crude live birth rate of **11.7** per 1,000 females – similar to regional and national rates (**11.8** in Yorkshire & the Humber, and **12.1** in England, ONS VS1, 2015).

However, the gross fertility rate (GFR), which takes into account the size of the female population of childbearing age was 64.3 in 2015 - higher than regional and national rates (61.9 in Yorkshire & the Humber and 62.5 in England).

Figure 1

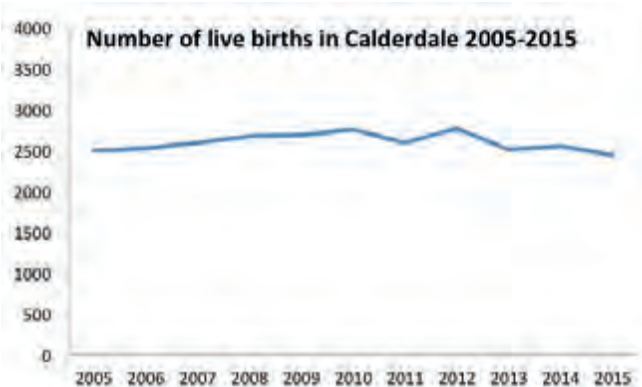


Figure 2

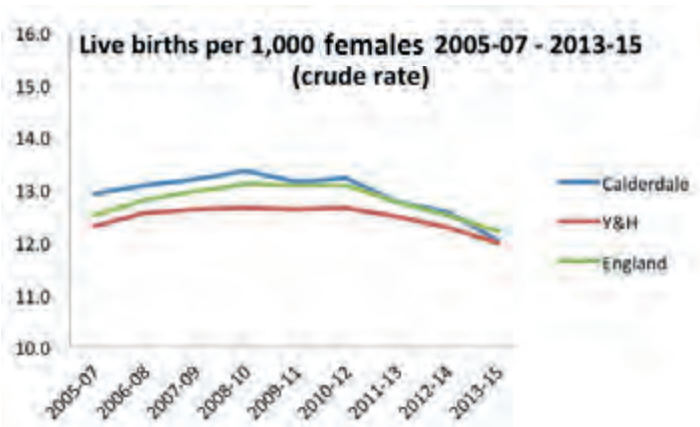
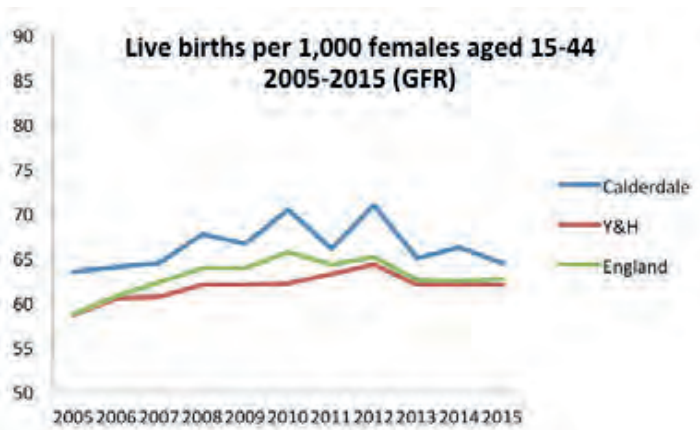


Figure 3



The GFR is significantly different to the district average in some wards. Most notably, it is particularly high in Park ward.

Table 1: Live births per 1,000 females aged 15-44, 2011-2015 (GFR) by ward (ONS VS1)

Significantly Higher

Similar

Significantly Lower

Ward	Rate (per 1000 Females)
Brighouse	55.88
Calder Valley	52.93
Elland	64.92
Greetland & Stainland	59.78
Hipperholme & Lightcliffe	60.07
Illingworth & Mixenden	65.43
Luddendenfoot	55.08
Northowram & Shelf	51.34
Ovenden	76.80
Park	96.32
Rastrick	53.97
Ryburn	55.65
Skircoat	64.23
Sowerby Bridge	65.19
Todmorden	66.46
Town	73.54
Warley	82.16
Calderdale	66.68



Teenage conceptions

The percentage of babies born to teenage mothers in Calderdale has shown a welcome fall in recent years in line with national trends.

In comparison to other areas in Yorkshire and Humber the Calderdale rate of teenage conceptions is in line with the England average (figure 5).

Whilst we warmly welcome the impressive 50% plus fall in teenage conception over the past 15 years it is still too high when compared to a number of other countries. The rate for teenage live births in the UK in 2014 was 6.8 per 1,000 (15-17 year olds), compared to 1.1 in Denmark and 1.3 in the Netherlands. ²

Of course not all teenage pregnancies are unplanned or unwanted but teenagers who become parents are more likely to have poorer health, education, social and economic outcomes. International evidence shows the many benefits of sex and relationships education (SRE), including the reduction of unplanned pregnancies. We can prepare our young people for healthy and responsible sexual relationships. We must continue to reduce teenage conception rates across Calderdale.

Recommendations

Review the extent, availability, quality and effectiveness of SRE provision across Calderdale

Further develop the system leader role of the integrated sexual health service to promote long acting reversible contraception (LARC) where appropriate.

Provide targeted support and services to teenage parents to support them through pregnancy and their child's early years through the family intervention team.

Figure 5: Teenage conception rates across Yorkshire and Humber 2014

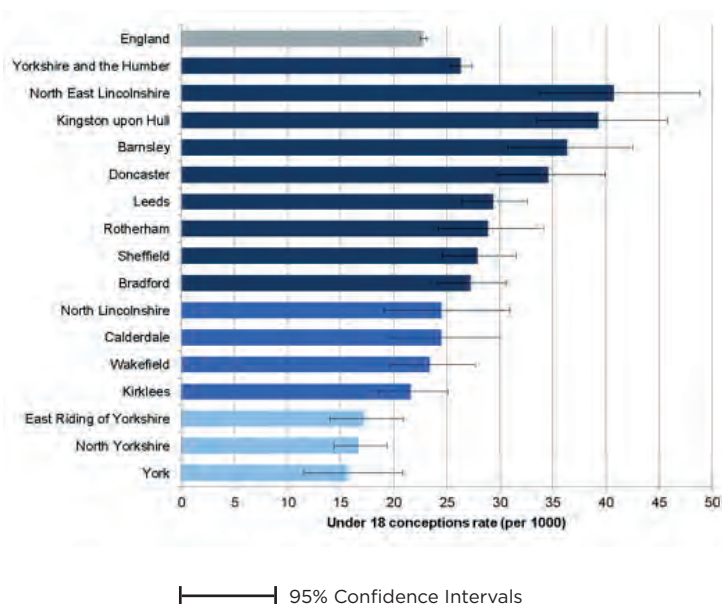
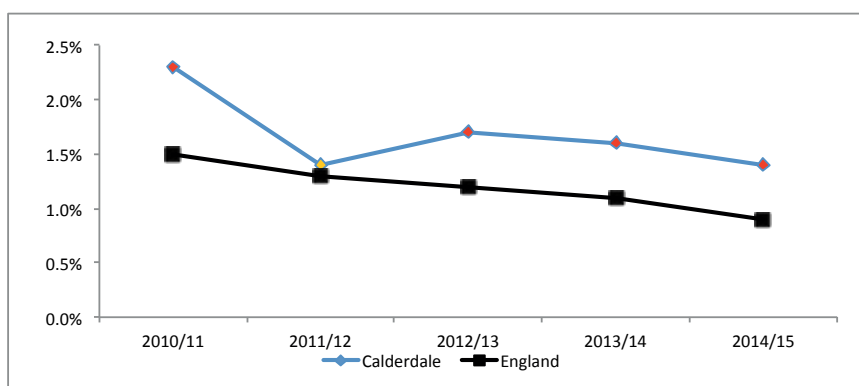


Figure 4: Percentage of deliveries where the mother is aged under 18'

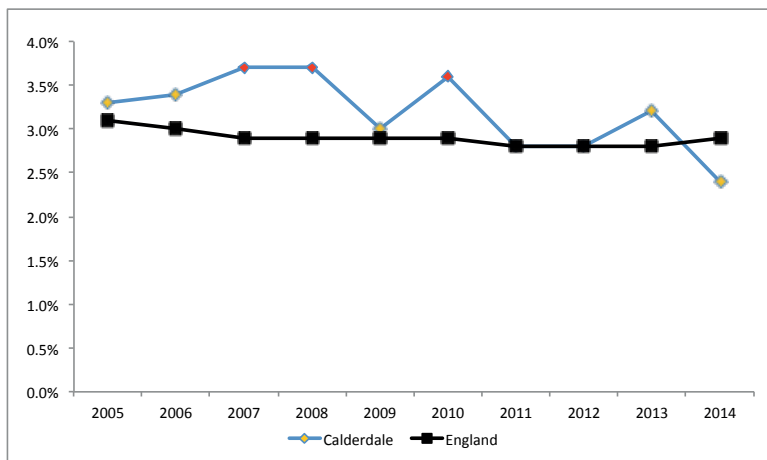


Low birth weight

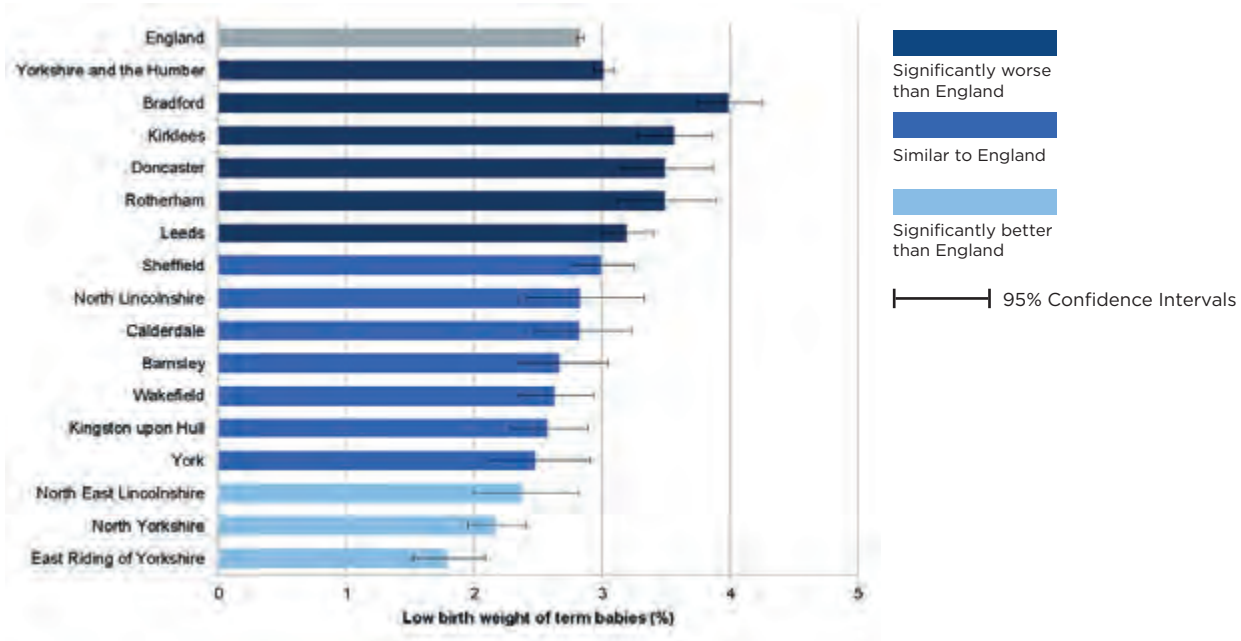
Low birth weight is an internationally recognised public health indicator. Whilst most babies with low birth weight will be healthy, there are links between low birth weight and health in later life.

In 2014, around 2.4% of full-term babies in Calderdale were born with low birth weight (<2500g). In Calderdale as a whole, and in most wards, this is similar to the national average. As can be seen from the table below there has been a welcome fall in the rate of low birth weight babies.

Figure 6: Low birth weight of term babies (PHE)



Low birth weight comparisons



Infant mortality

The loss of a baby takes a serious toll on the health and well-being of individuals and families.

The death of a baby before his or her first birthday is called infant mortality. The infant mortality rate is the number of infant deaths that occur for every 1,000 live births. This rate is often used as an indicator to measure the health and well-being of a nation, because factors affecting the health of entire populations can also impact the mortality rate of infants.

What are the causes?

Most newborns grow and thrive. However, for every 1,000 babies that are born, approximately 5 die during their first year. Most of these babies die as a result of

- **Birth defects**
- **Preterm birth (birth before 37 weeks gestation) and low birth weight**
- **Maternal complications of pregnancy**
- **Sudden Infant Death Syndrome**



**Become
healthy
before
pregnancy**

What can be done?

Pregnancy outcomes are influenced by a woman's health and differ by factors such as race, ethnicity, age, location, education, and income.

Preconception health focuses on actions women can take before and between pregnancies to increase their chances of having a healthy baby. It's important that prospective parents maintain or adopt a healthy lifestyle.

During pregnancy it is important to:

- **Take 10 micrograms of vitamin D each day throughout pregnancy and continue after the baby is born if the mother is breastfeeding**
- **Continue to take folic acid up to week 12 of pregnancy**
- **Achieve and maintain a healthy diet and weight, don't eat for two**
- **Be physically active regularly**
- **Quit tobacco use**
- **Preferably abstain from drinking**
- **Talk to your GP about screening and proper management of chronic diseases, including depression.**



Recommendations

Greater training and emphasis for health professionals including GPs to recognise signs of perinatal mental health.

Ensure psychological services recognise the specific needs inherent in perinatal mental health.

Develop system-wide perinatal mental health multi-disciplinary team (MDT).

Over the last two decades psychiatric disorder has been a leading cause of maternal mortality contributing to 15% of all maternal deaths in pregnancy and six months postpartum. ³

1. Why the early years are so crucial

What happens in pregnancy and early childhood impacts on physical and emotional health through into adulthood.

Supporting good maternal health is important for safe delivery and good birth weight to give babies the best start.

The prevention of adverse health factors in pregnancy is vital. Premature and small babies are more likely to have poorer outcomes.

A failure to act early comes at great cost, not only to individuals but to society as a whole. The cost of treating perinatal mental health alone costs £8.1 billion each year.

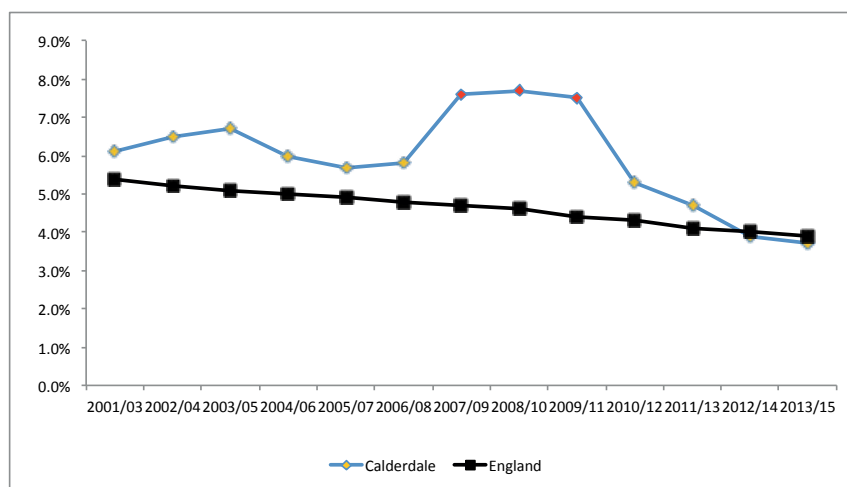
A loving, secure and reliable relationship with a parent or carer supports a child's:

- emotional wellbeing
- brain development
- language development and ability to learn
- capacity to form and maintain positive relationships with others

Infant mortality - what the data tells us

In previous years, infant mortality rates in Calderdale have been significantly higher than the national average. In recent years, rates have fallen and are now in line with national figures. At sub-district level, rates in all wards and localities for the latest time period are similar to the district average.

Figure 6: Infant mortality (PHE PHOF)



What parents said

In the first year after having a baby, parents greatest concerns about themselves were around healthy eating (around half) and emotional wellbeing, social support and breastfeeding (each concerning around 2 in 5). Parents greatest concerns for their children during this period were around weaning and illness (around half), and growth/development (42%), immunisation (36%) and socialisation (35%).

Respondents reported that they would have liked more support in the first year around breastfeeding and emotional wellbeing. They would also have liked more ongoing general support, advice and visits from professionals.

Opinions around the level of support for infant mortality were mixed - with 2 in 5 unsure, and 40% rating it "good" or "excellent".

What focus groups said

Focus group participants reported varying experiences around the level and source of support around healthy lifestyle, with some parents feeling that they and their children could have benefited from more professional advice around weaning and encouraging their children to eat a balanced diet. Informal support from parents and peers around what is “right” was highly valued, as were sessions run at Children’s Centres. Young parents who engaged with Family Nurses were happy with the level of support they had received around weaning. Though parents spoke of receiving leaflets around healthy lifestyles, these were considered less valuable than one-to-one support.



Table: Infant mortality 2010-2014 by ward and locality (ONS)

Ward	Rate (per 1000 Live Births)
Brighouse	3.45
Calder	0.00
Elland	4.15
Greetland And Stainland	1.60
Hipperholme And Lightcliffe	5.36
Illingworth & Mixenden	9.79
Luddendenfoot	0.00
Northowram & Shelf	7.68
Ovenden	3.83
Park	5.46
Rastrick	5.43
Ryburn	1.66
Skircoat	5.32
Sowerby Bridge	5.60
Todmorden	5.15
Town	4.48
Warley	7.66
Upper Valley	3.26
Halifax north and east	4.67
Halifax Central	6.20
Lower Valley	3.29
Calderdale	4.81

Total number of infant deaths between 2010 -2014 was 63

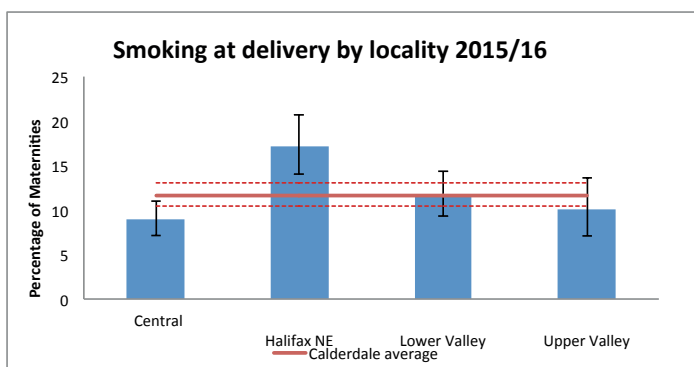
Stop press: In Calderdale, Total number of infant deaths between 2011-2015 was 54.

Key behaviour - Smoking

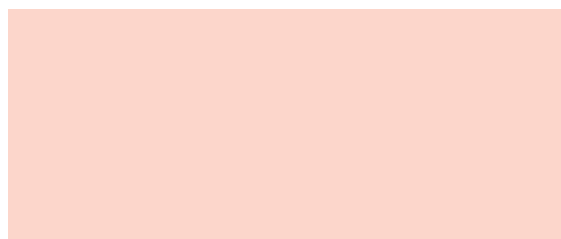
Smoking during pregnancy is associated with a range of serious infant health problems, higher rate of stillbirth and lower birth weight (which itself is associated with poorer long term outcomes, as summarised previously), and perinatal mortality. In addition, smoking during pregnancy has been associated with poor child behaviour at age 5.

The percentage of mothers smoking at the time of delivery varies across the district. It is significantly higher than the district average in some of the most deprived areas, and around twice the national average in the Halifax N&E locality.

Figure 7: Smoking at delivery (CHFT)



----- 95% Confidence Intervals



3. Staying healthy in pregnancy

A healthy woman is more likely to give birth to a healthy baby. Health professionals should support women, and their partners, to adopt positive health behaviours and reduce risk factors.

During pregnancy, women should be advised to eat a healthy diet and to be physically active. Being active and fit during pregnancy can help women to cope with labour and get back into shape after the birth.

There are a number of risk factors in pregnancy including:

- smoking
- drinking alcohol
- perinatal mental health
- being in an unsupportive relationship

Smoking in pregnancy

Smoking during pregnancy causes up to 2,200 premature births, 5,000 miscarriages and 300 perinatal deaths every year in the UK

It also increases the risk of complications in pregnancy and of the child developing a number of conditions later on in life such as:

<p>premature birth</p>	<p>low birth weight</p>
<p>problems of the ear, nose and throat</p>	<p>respiratory conditions</p>
<p>obesity</p>	<p>diabetes</p>

Table: Smoking at delivery by Ward 2015/16 (CHFT)

Significantly Higher
Similar
Significantly Lower

Ward	% Smoking at delivery
Brighouse	14.89
Calder	13.79
Elland	13.66
Greetland and Stainland	7.41
Hipperholme and Lightcliffe	6.45
Illingworth and Mixenden	17.12
Luddendenfoot	4.12
Northowram and Shelf	4.55
Ovenden	23.83
Park	8.43
Rastrick	18.42
Ryburn	6.52
Skircoat	4.65
Sowerby Bridge	11.19
Todmorden	14.85
Town	18.68
Warley	12.00
Upper Valley	9.82
Halifax North and East	14.38
Halifax Central	10.74
Lower Valley	12.17
Calderdale	11.63

The proportion of women smoking at delivery has shown a welcome fall over the past year. Programmes from stop smoking services and maternity services have clearly had an impact on the overall rates. However it is clear from the data that there is significant variation across Calderdale and as such further concerted effort to reduce smoking rates in high prevalence areas is required.



Recommendations

Undertake community based research and interventions which will support reduction in smoking rates in high prevalence areas.

Breastfeeding

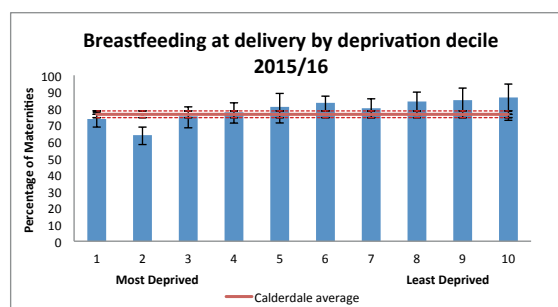
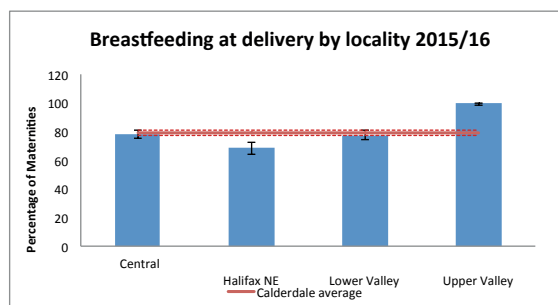
Breastfeeding has health benefits for both the mother and baby. It is an important public health measure illustrated by the inclusion of two breastfeeding measures in the public health outcomes framework.

Breastfeeding initiation and continuation rates vary across the district. In the most deprived areas, in Halifax N&E locality, and in particular wards, rates are significantly lower than the district average.

What parents said

Services to promote breastfeeding were rated as “good” or “excellent” by 76% of respondents, though parents would have liked more support during the first few weeks around breastfeeding, and emotional wellbeing. A number of parents reported that they would have liked more support and visits from professionals during this time as well.

Figure: Breastfeeding at delivery



Promoting breastfeeding

The Department of Health recommends exclusive breastfeeding for the first 6 months

Breastfed babies have lower rates of:

- gastroenteritis
- respiratory infections
- sudden infant death syndrome
- obesity
- allergies

The UK has some of the lowest breastfeeding rates in the world

Rates of any breastfeeding until 6 months:

- UK 34%
- US 40%
- Germany 50%
- Switzerland 62%

Table 3: Breastfeeding initiation and continuation by ward

Ward	% Breastfeeding at delivery	% Breastfeeding at 6-8 weeks
Brighouse	69.15	37.50
Calder	86.21	64.94
Elland	75.00	44.24
Greetland and Stainland	80.74	43.48
Hipperholme and Lightcliffe	81.94	39.37
Illingworth and Mixenden	64.83	20.83
Luddendenfoot	86.60	58.82
Northowram and Shelf	81.82	46.48
Ovenden	61.68	23.93
Park	77.49	45.85
Rastrick	85.53	44.83
Ryburn	82.61	53.42
Skircoat	85.51	54.70
Sowerby Bridge	76.12	34.55
Todmorden	81.19	46.84
Town	74.73	34.94
Warley	73.60	35.85
Calderdale	77.03	42.30

Insight from focus groups

The topic of infant feeding was quite emotive for parents participating in the four focus groups. Most had breastfed or tried to breastfeed their children. There was general consensus that the level of breastfeeding support available - including that from the baby café as well as Health Visitors and other professionals was adequate, concerns were expressed by some parents in relation to how professionals dealt with slow infant weight gain in breastfeeding, and confusion over understanding and managing demand feeding, which led to exhaustion.

There appear to be gaps around support with bottle-feeding, and pressure to continue breastfeeding, leaving parents with a feeling of guilt, and a sense that they had to “hide” their choice to bottle-feed, and rely on informal support.



Recommendations

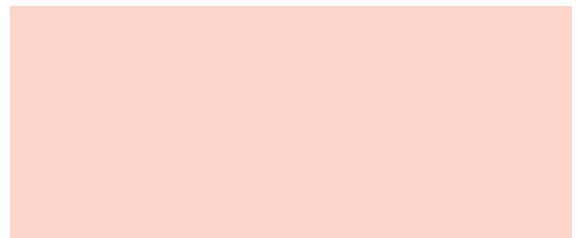
Focused project on the attitudes and the support required by women to breastfeed in areas with low breastfeeding rates.

Maternal obesity

Maternal obesity increases the risk of still birth and perinatal mortality (deaths occurring in first 7 days of life). Maternal obesity data has not been routinely available however this changed in June 2015 via the national maternity and childrens data set.

The first 'picture' we have received from this set is of concern, with 18% of mothers classified as obese. The psychological impact of obesity during pregnancy is relatively unexplored. Issues raised in qualitative research include:

- a sense of greater social acceptance of increased body size during pregnancy
- difficulties experienced in adjusting to post-pregnancy body shape
- anxieties experienced by both women and healthcare professionals about raising the topic of obesity during pregnancy
- a lack of awareness of the risks associated with obesity during pregnancy amongst some women
- the potential for a negative impact on the psychological wellbeing of mothers by drawing attention to their weight



2. Achieving a healthy pregnancy




Health before and during pregnancy is vital. Pre-conceptual care includes giving advice on:

- full immunisation status
- vitamins and folic acid
- reducing alcohol consumption
- giving up smoking
- family planning and contraception services between pregnancies

The Healthy Child Programme is the heart of public health services for children and families. It brings together the evidence on delivering good health, wellbeing and resilience for every child.

It sets out the schedule for services covering care from 28 weeks of pregnancy through to age 5.

The best outcomes for both mother and baby happen when mothers are:

<p>not socio-economically disadvantaged</p> 	<p>managing stress or anxiety</p> 
<p>in a supportive relationship – and not experiencing domestic violence</p> 	<p>not smoking, consuming alcohol or misusing illegal substances</p> 
<p>enjoying a well-balanced diet</p> 	<p>not in poor physical, mental or emotional health</p> 

Maternal obesity can lead to the need for additional healthcare due to complications associated with the pregnancy. Resource implications relating to maternal obesity have been identified as:

- **increases in caesarean and operative deliveries**
- **admission to hospital for complications**
- **length of hospital stay**
- **requirements for neonatal intensive care**
- **a need for appropriate equipment to manage safely the care of obese mothers**

There are also technical issues to consider during pregnancy including difficulties in performing ultrasound examinations, the size of blood pressure cuffs required, issues concerning foetal monitoring, women having reduced awareness of foetal movements, problems encountered with surgical deliveries and equipment, and implications for regional and general anaesthesia.

Recommendations

Provide further information about the risks of obesity during pregnancy and support to lose weight during routine primary care consultations.

Develop accessible and appropriate physical activity opportunities.

Ensure effective weight loss programmes that are designed to meet local needs.

Support women to lose weight after pregnancy and before the next pregnancy.

Review nutritional education and awareness and co-develop ideas with parents re dietary support.



Healthy weight

What the data tells us

We do not collect routine data for healthy weight for 2 year olds. There is a statutory collection of data though the national child measurement programme at reception (age 4-5 years) year. This gives us a picture of the importance of addressing healthy weight,

nutrition and levels of activity in the first few years of life. In reception-aged children in Calderdale we had seen consistently significantly lower levels of overweight and obesity than the national average, though more recently rates have been in line with national rates. Rates are similar across Calderdale, though in Lower Valley are slightly less than the Calderdale average.

Stop press: Data for 2015/16 shows a further 1% reduction in excess weight for 4-5 year olds.

Figure: Excess weight in 4-5 year olds (PHE PHOF)

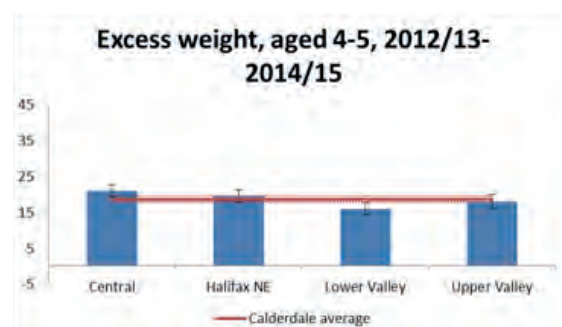
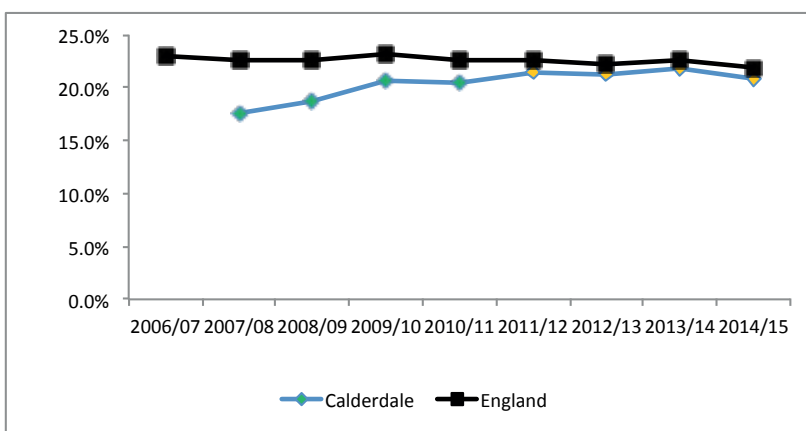
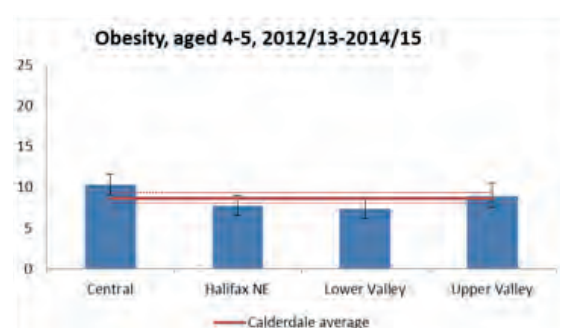
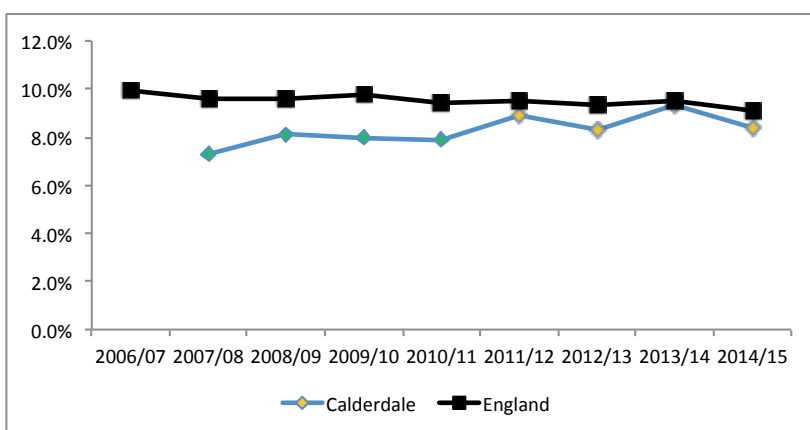


Figure: Obesity in 4-5 year olds (PHE NCMP LA Profile)



What parents said

During the preschool years, just 1 in 5 parents was concerned about their child being overweight, but healthy eating and exercise were the most frequently reported concerns for this age group, with 53% of parents concerned about healthy eating and 42% about exercise. Around half of parents considered services to prevent childhood obesity, accidents and tooth decay to be “average” or “good”, and just one in 10 rated these areas as “excellent”. The promotion of healthy eating was considered “average” by 40% of parents, and around 60% of parents did not “agree fully” that they had been able to find enough information and support about healthy eating.

Focus groups revealed that parents feel they receive inadequate information and support in relation to healthy lifestyle for their children. Few parents were aware of recommended levels of physical activity for preschool children, and relied on the assumption that children will get the level of physical activity they need. Overall, parents felt they had received little information and advice on healthy eating, physical activity, and oral health, but though they would have welcomed more advice, this was not of particular concern. However, the experience of parents whose children had specific health/dietary concerns was largely negative, with some feeling that there was a gap in Health Visitor and GP knowledge around allergies in particular.



Recommendations

Identify and develop further support and information needed for parents on child nutrition including weaning.

Physical activity

What are the benefits of movement?

- Develops motor skills
- Improves cognitive development
- Contributes to a healthy weight
- Enhances bone and muscular development
- Supports learning of social skills

Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.

Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (three hours), spread throughout the day.

All under fives should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Active Play is the main source of physical activity in early years. Defined as activities that are spontaneous, unstructured and intrinsically motivated. Such as running, catching and jumping. Typically these involve the large muscle groups.

There has been a decline in active play due to:

- High traffic density
- Negative perceptions of neighbourhood
- Parental fears
- Inaccessibility to open spaces
- Containerisation - being confined to playpens, pushchairs, high seats etc for hours at a time
- Increased screen time

5. Ready to learn at 2

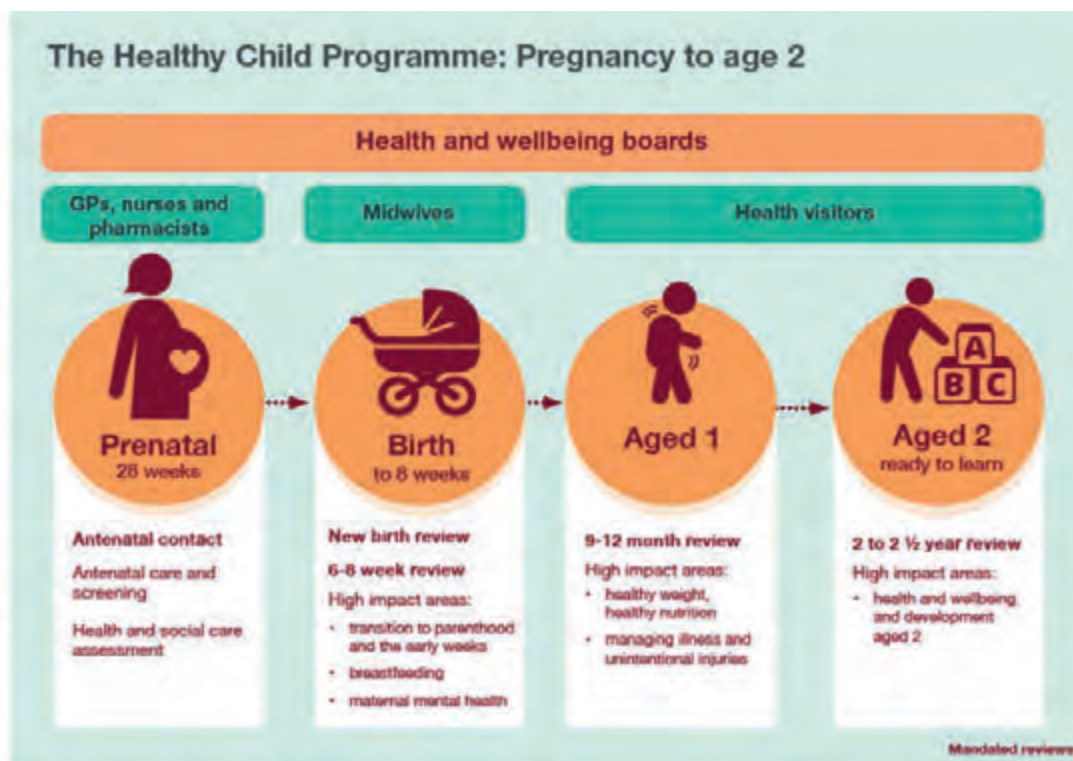
Everyone involved in public services needs to think family and children and young people at every interaction.

Health and wellbeing boards are uniquely positioned to take a holistic view of the needs of children and to build settings and services around them to ensure that they are able to reach their potential.

The six early years high impact areas can help inform local authorities around the commissioning of the health visiting service and integrated children's early years services.

The universal two year review provides an opportunity to identify children who are not developing as expected and require additional early intervention.

The Healthy Child Programme: Pregnancy to age 2



For infants who are not yet walking, physical activity refers to movement of any intensity and may include:

- 'Tummy time' - this includes any time spent on the stomach including rolling and playing on the floor.
- Reaching for and grasping objects, pulling, pushing and playing with other people.
- Parent and baby swim sessions

Floor-based and water-based play encourages infants to use their muscles and develop motor skills. It also provides valuable opportunities to build social and emotional bonds.

Minimising sedentary behaviour is also important for health and development and may include:

- Reducing time spent in infant carriers or seats
- Reducing time spent in walking aids or baby bouncers (these limit free movement).
- Reducing time spent in front of TV or other screens

Recommendations

The Active Calderdale programme should ensure that adequate information and support systems are in place for parents to encourage recommended levels of physical activity.

Establish further new ways of providing lifestyle information to parents.

Support schemes in conjunction with childrens centres and nurseries to encourage greater play amongst under 5's.



Oral health

The mean level of tooth decay in Calderdale for (2011/12) was 1.88 decayed teeth per child - significantly higher than the national average of 0.94. In the same period, 39.2% of children aged 5 in Calderdale experienced tooth decay (defined as one or more decayed, missing or filled teeth) - significantly higher than the England average of 27.9% (all figures PHE PHOF).

Improving oral health is a priority. It causes unnecessary suffering for young children and leads to high numbers of hospital appointments for tooth extractions. The NHS in England spends £3.4 billion per year on primary and secondary dental care (2014) (with an estimated additional £2.3 billion on private dental care). Tooth decay was the most common reason for hospital admission in children aged 5 to 9 in 2014/15 with over 26,000 children admissions for an almost entirely preventable disease.

In Calderdale 14/15 there were 299 tooth extractions due to decay for children admitted as in patients to hospital, aged 10 and under. A crude rate of 1052.4 per 100,000 significantly higher than the England rate of 462.2. For 0-4 years in the last 3 year period there were 238 extractions a rate of 751.5 per 100,000 significantly higher than the England rate of 322.

Recommendations

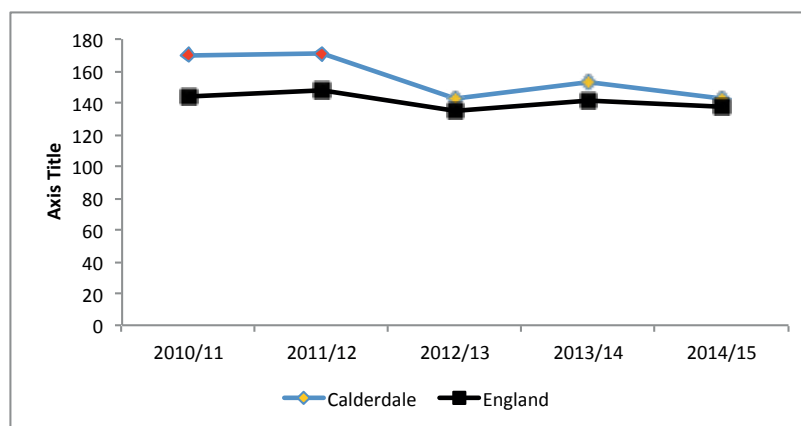
Ensure that oral health interventions as identified by NICE and PHE are delivered.



Unintentional and deliberate injuries

Previously, the rate of hospital admissions caused by unintentional and deliberate injuries in preschool-aged children has been significantly higher than the national average, though more recently there has been a welcome slide and is now in line with national trends.

Hospital admissions caused by unintentional and deliberate injuries in children ages 0-4 years



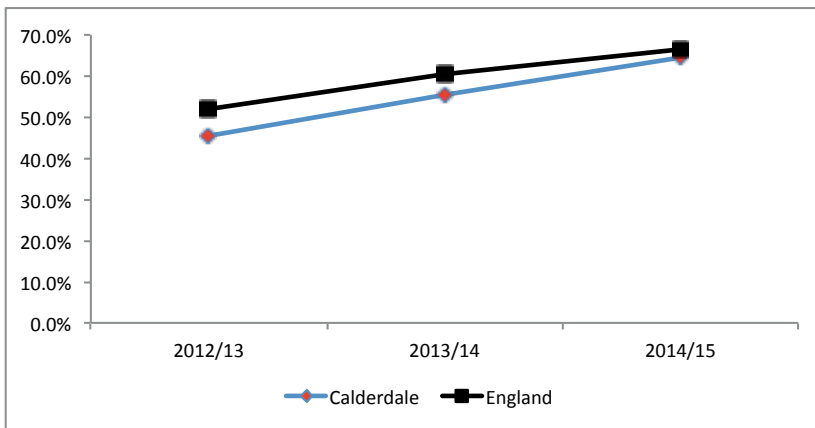
School readiness

Whilst this report is primarily focussed upon the first 1000 days I have made the links between this important stage and subsequent development at school reception.

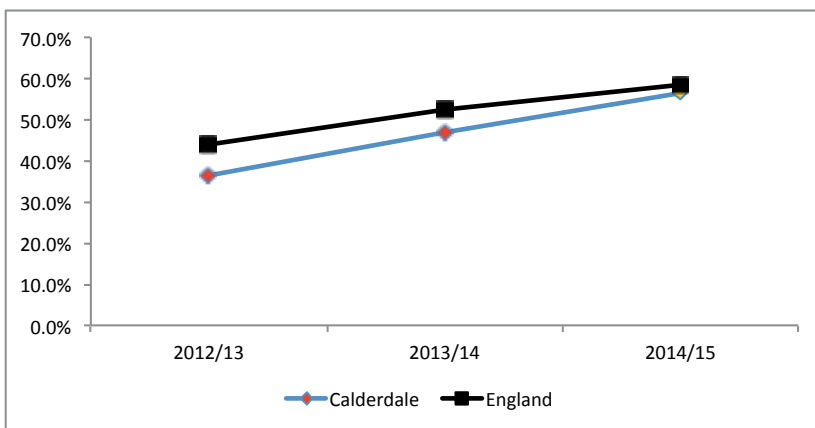
School readiness is a measure of how prepared a child is to succeed in school cognitively, socially and emotionally. The good level of development (GLD) is used to assess school readiness. Children are defined as having reached a GLD at the end of the Early Years Foundation Stage if they achieved at 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 in the specific areas of mathematics and literacy.

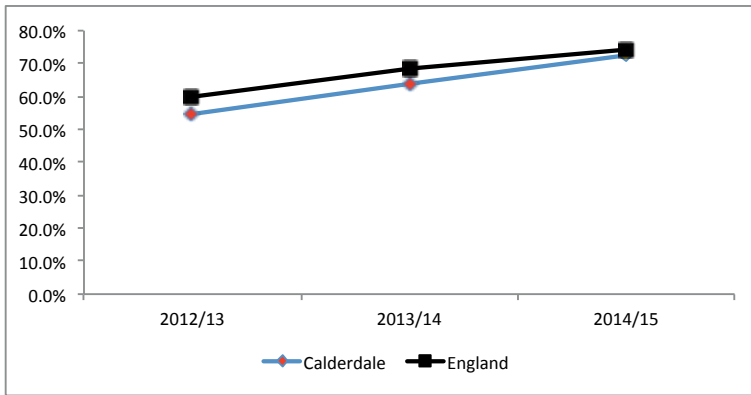
The proportion of children achieving a good level of development by the end of the Early Years Foundation Stage is lower in Calderdale than the national average, though this varies by gender and by Free School Meal status (an indicator of deprivation). However, the gap between Calderdale and the England average has been closing over the past 3 years. The exception to this is seen in girls who receive free school meals which has plateaued. It is unclear why this exception exists.

School readiness: Percentage of children achieving a good level of development at the end of reception (persons) (PHE PHOF)

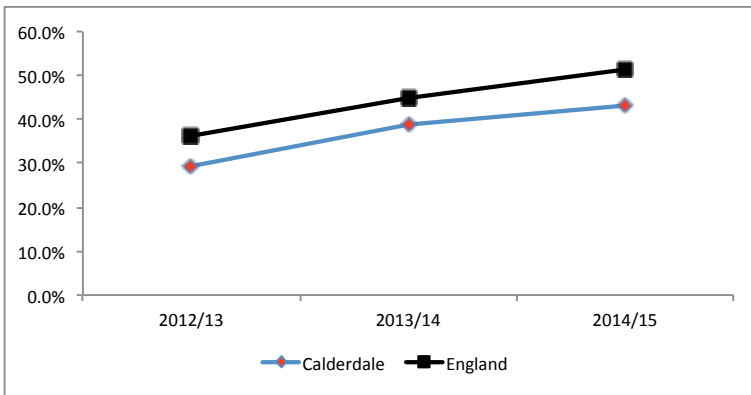


School readiness: Percentage of children achieving a good level of development at the end of reception (male) (PHE PHOF)

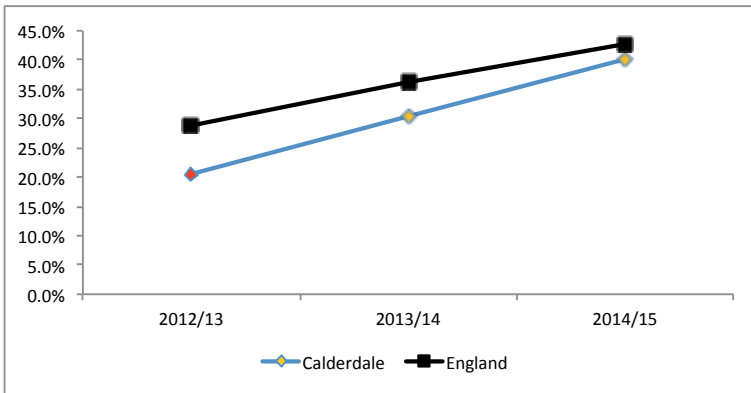




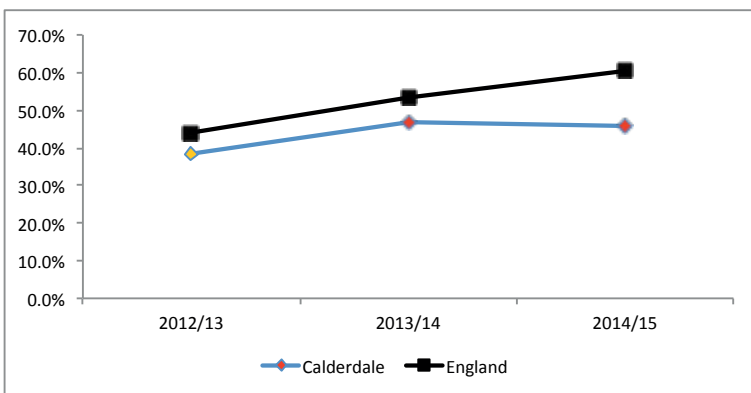
School readiness: Percentage of children achieving a good level of development at the end of reception (female) (PHE PHOF)



School readiness: Percentage of children with free school meals status achieving a good level of development at the end of reception (persons) (PHE PHOF)



School readiness: Percentage of children with free school meals status achieving a good level of development at the end of reception (male) (PHE PHOF)



School readiness: Percentage of children with free school meals status achieving a good level of development at the end of reception (female) (PHE PHOF)

What parents said

During the preschool years, parents would have liked more support and information around child development and school readiness, and more groups for older children. Although around half of respondents felt support to help their children play was “good” or “excellent”, 60% did not “agree fully” that they had been able to find enough information and support about their child starting school. The promotion of school readiness was considered “average” by 29% of parents.

Insights from focus groups

A lack of understanding of the term “school readiness” was a key theme across the four focus groups, coupled with confusion around sources of support in this area. Parents recognised the preschool period as a crucial stage in their children’s lives, and expressed a desire for more information support in this area. There was confusion around where advice around school readiness should come from, and concern about the rigidity of the formal education system.

Recommendations

Confirm and communicate the definition of school readiness to parents, schools and early years practitioners.

Investigate the reasons behind the levelling off in school readiness achievement for girls in receipt of free school meals.



Health protection

Levels of vaccination coverage for preschool children in Calderdale are consistently high across years and across vaccination types. The promotion of childhood immunisation was considered to be “good” or “excellent” by 70% of parents.

Whilst as a parent, you will not like seeing your baby or child being given an injection, the vaccination will help protect them against a range of serious and potentially fatal diseases. It is important for our populations’ health that we continue to see the high level of vaccine coverage.

Evidence from the local Asylum and Refugee Needs Assessment identified that there was a successful vaccination catch up campaign with this vulnerable group of children.



The importance of parenting and the parent-child relationship

Evidence suggests that parenting behaviour and the quality of the parent-child relationship are strongly associated with children's outcomes.

Effective loving and authoritative parenting gives children confidence, a sense of wellbeing and self worth. It also stimulates brain development and the capacity to learn.

Parents who develop 'open, participative communication, problem-centred coping, non punitive patterns of parenting and flexibility' tend to manage stress well and help their families to do the same.

In contrast, harsh, negative or inconsistent discipline, lack of emotional warmth or supervision and parental conflict all increase the risk of emotional and behavioural problems that can lead to anti-social behaviour, substance misuse and crime. ³

The early years are also when language is being acquired, hence the importance of providing an environment rich in spoken language. Research shows that, from birth, children's learning results from their interaction with people and their environment.



Children need a natural flow of affectionate, stimulating talk, to describe what is happening around them, to describe things that they can see, and to think about other people. This is critical for children's language and cognition, their general capacity to engage with new people and new situations, and their ability to learn new skills.

Children begin to recognise sounds, and associate them with objects and ideas, within six months of birth. The brain translates sounds into language, but to do so effectively it needs input, in the form of positive and warm interaction with adults.

Language development at age two is very strongly associated with later school readiness, with the early communication environment in the home providing the strongest influence on language at age two - stronger than social background. The number of books available to the child, frequency of visits to the library, being read to by a parent, parents teaching a range of activities, the number of toys available and attendance at pre-school are all important predictors of two-year-old children's vocabulary. As children grow older, vocabulary at age five becomes the best predictor of later social mobility for children from deprived backgrounds.

Evidence from the Millennium Cohort Study 4 indicates that, at 5, children from the most advantaged groups were over a year ahead in vocabulary, compared to those from the most disadvantaged backgrounds.

Evidence shows that parents with lower qualifications engage less frequently than better educated parents in some home learning activities, such as reading.

It can be seen that some groups of very young children are more likely than others to experience factors that promote or hamper their language development.

The association of poor development with several risk factors together can be stronger than its association with a single risk factor.



For example, the Millennium Cohort Study (MCS) demonstrates correlations between income group and parenting with the likelihood of achieving good development by age five. The percentage of each of the following groups of five year olds in the MCS sample whose Foundation Stage Profile assessments showed good development were as follows:

	No Poverty	Poverty
Positive Parenting	73%	58%
Poor Parenting	42%	19%

Poor parenting had nearly double the impact of persistent poverty.

In the study, on average, development at age 5 was depressed by 19% by persistent poverty and by 35% by poor parenting. ⁴

It can be seen that the combination of persistent poverty and poor parenting had a stronger association with poor development (than either poverty or parenting in isolation).

However, risk factors often do not exist in isolation; they come together around individual families. Poverty, unemployment, lone parenting, having a large family, poor or overcrowded housing, having a difficult childhood, parental illness and substance misuse, can have a negative impact on parenting. In combination, the factors are linked and mutually reinforcing.

Children from families with multiple problems such as those outlined above often have poorer life chances, which becomes especially apparent when they are in their teens. Research evidence shows that children aged 13-14 who live in families with five or more problems are 36 times more likely to be excluded from school than children in families with no problems, and six times more likely to have been in care or to have contact with the police. ⁵

Getting help for intimate partner domestic violence

A number of studies suggest there can be an increased incidence of domestic violence during or shortly following pregnancy. For example, a survey of 1,207 women attending GP surgeries in Hackney found that pregnancy in the past year was associated with an increased risk of current violence. One in 6 abused women reports that her partner first abused her during pregnancy.

Overall, it is important that those providing services to pregnant women are aware of potential risks to mothers' and babies' welfare and development, and identify where these risks are heightened. Prolonged and/or regular exposure to domestic violence can have a very serious impact on children's safety and welfare and it rarely occurs in isolation. Parents may also misuse drugs or alcohol, experience poor physical or mental health or have a history of poor childhood experiences themselves. Domestic violence impacts on children in a number of ways they are at risk of physical injury during an incident, they can experience serious anxiety and distress which can express itself in anti-social or criminal behaviour – and domestic violence can also impact on parenting capacity and attachment.

There is also research evidence indicating that children who have been exposed to domestic violence are more likely to be abused themselves than those from non-violent households. Research shows that children who have been exposed to domestic violence are 3 times more likely to be abused themselves than those from non-violent households. ⁶

Health and social care providers and women can work together before and during pregnancy to address problems if they arise and improve women's chances for healthy outcomes.

Recommendations

Review all early years programmes in order to directly promote activities in which parents and children can engage together as these are more likely to be beneficial for young children.

Continue support to programmes and services that have a crucial role to play to ensure parents are able to parent well by helping them cope with or avoid other stresses. eg. Children's Centres.

Child poverty

Poverty can be defined and measured in multiple ways. In the UK, it is most commonly used in relation to relative poverty, ie when an individual's "resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities" (Townsend, 1979).

Poverty has significant and long lasting effects on children and young people. It affects their ability to join in and impacts negatively on emotional and physical health, wellbeing and future life opportunities.

Tackling child poverty has been a key concern of social policy think tanks, charities, local authorities and Government over many years. The impact of child poverty is well documented, with children living in poverty at increased risk of poor education outcomes, poorer health, poor housing and social exclusion.

There is research evidence indicating that experiencing low socio-economic status at both 9 months and 3 years is associated with increased likelihood of poor behavioural, learning and health outcomes at age 5. These associations are stronger where the experience was persistent at both time points rather than being single episodic experiences.

There is a two to three fold increased risk in the onset of emotional/conduct disorder in childhood if children have an unemployed parent and a three-fold risk of mental health problems (15% compared to 5%) if children are in families with lower income levels. ⁷

Further evidence on associations between socio-economic status and longer term outcomes has been summarised by the University of Sheffield in a series of evidence reviews commissioned by the National Institute for Health and Clinical Excellence (NICE) to support preparation of draft guidance on promoting social and emotional wellbeing in the early years.

In Calderdale, child poverty rates appear to have stayed fairly static in the last five years.



The Calderdale needs assessment into asylum seekers and refugees identified that the increased number of respiratory problems with this group was believed to be related to poor damp housing.

Around 8,500 (20%) children under the age of 16 in Calderdale live in poverty. This figure is similar to the Yorkshire and Humber average, and is significantly worse than the England average (Public Health England (PHE) Public Health Outcome Framework (PHOF)). Child poverty varies considerably by ward. There is a 10 fold variation in levels of poverty across Calderdale.

Recommendations

Develop specific financial inclusion projects aimed at children and families.

Work with private and public sector landlords to provide housing which has effective standards of energy efficiency.



Recommendations

Leadership

The Health and Wellbeing Board agree to lead actions making Calderdale a Child Friendly Borough.

Teenage conception

Review the extent, availability, quality and effectiveness of SRE provision across Calderdale.

Further develop the system leader role of the integrated sexual health service to promote long acting reversible contraception (LARC) where appropriate.

Provide targeted support and services to teenage parents to support them through pregnancy and their child's early years through the family intervention team.

Infant mortality

Greater training and emphasis for health professionals inc GPs to recognise signs of perinatal mental health.

Ensure psychological services recognise the specific needs inherent in perinatal mental health.

Develop system-wide perinatal mental health multi-disciplinary team (MDT).

Smoking

Undertake community based research and interventions which will support reduction in smoking rates in high prevalence areas.

Breastfeeding

Focused project on the attitudes and the support required by women to breastfeed in areas with low breastfeeding rates.

Maternal obesity

Provide further information about the risks of obesity during pregnancy and support to lose weight during routine primary care consultations.

Develop accessible and appropriate physical activity opportunities.

Ensure effective weight loss programmes that are designed to meet local needs.

Support women to lose weight after pregnancy and before the next pregnancy.

Review nutritional education and awareness and co-develop ideas with parents regarding dietary support.

Physical activity

The Active Calderdale programme should ensure that adequate information and support systems are in place for parents to encourage recommended levels of physical activity.

Establish further new ways of providing lifestyle information to parents.

Support schemes in conjunction with Children's Centres and nurseries to encourage greater play amongst under 5's.

Oral health

Ensure that evidence based oral health interventions as identified by NICE and PHE are delivered.

School readiness

Confirm and communicate the definition of school readiness to parents, schools and early years practitioners.

Investigate the reasons behind the levelling off in school readiness achievement for girls in receipt of free school meals.

Parent-child relationship

Review all early years programmes in order to directly promote activities in which parents and children can engage together as these are more likely to be beneficial for young children.

Continue support to programmes and services that have a crucial role to play to ensure parents are able to parent well by helping them cope with or avoid other stresses. eg. Childrens Centres.

Poverty

Develop specific financial inclusion projects aimed at children and families.

Work with private and public sector landlords to provide housing which has effective standards of energy efficiency.

All these recommendations will be reviewed in 2017 to ensure progress is made against them.

References and thanks

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Calderdale Public Health Directorate (2016) Calderdale Asylum and Refugee Needs Assessment

The sections on what parents said and focus groups involved some 75 parents from across Calderdale with interviews undertaken on line and face to face with public health staff.

Special thanks to Stuart Karray for the design work for this report. Also wish to express my thanks to the public health team in the preparation of this report with in this instance special mention to Naomi Marquis, Paula Holden, Emily Powell, Ben Leaman, Rachel Smith, Caron Walker and Kate Horne.

Abbreviations

NCMP - National Child Measurement Programme

PHOF - Public Health Outcomes Framework

ONS - Office for National Statistics

Further information

www.calderdale.gov.uk/v2/residents/health-and-social-care/joint-strategic-needs-assessment

<https://fingertips.phe.org.uk/>

www.healthprofiles.info

www.ons.gov.uk

The Report

Directors of Public Health in England have a duty to write an Annual Public Health Report to demonstrate the state of health within their communities. It is a major opportunity for advocacy on behalf of the health of the population and as such can be extremely powerful both in talking to the community and also to support fellow professionals in public health. As the reports are aimed at lay audiences, the key feature of the reports must be their accessibility to the wider public which offers an opportunity for the DsPH to reconsider their rhetoric and focus on the key impact messages they want to convey.

