

Section 5.3a

Title: Draft 1 Baby and Children Health & Development

1. Overview

We know that even before birth, factors which can affect a baby's healthy life expectancy and life chances are already taking effect. At present, children born into poverty are more likely to be poor adults than those born into affluence. A baby born to a mother who is obese and smokes throughout pregnancy, is at greater risk of developing unhealthy lifestyles in the future which render them at greater risk of serious chronic conditions which will impact on their quality of life and their life expectancy. The effect on a person's health and life expectancy, of childhood experiences and health behaviours continue to impact and accumulate throughout childhood and into adult hood.

It is of great concern that the difference in prevalence of good health between people living in the least and most deprived areas is already apparent at age 0-15 years. This gap then grows as age increases, peaking in males at age 65-74 (79% in least deprived vs 52% in most deprived) and in females at age 55-64 (84% vs 56%). This is inequitable and if unaddressed underpins and perpetuates cycles of poverty in our most deprived areas.

However, this cycle of poverty, as with some health inequities, is not inevitable, it is preventable.

2. The story behind the data

Low birth weight

Babies born with a low weight (defined as less than 2500g), are at a greater risk of problems occurring during and after birth. They also have an increased risk of chronic diseases in adulthood. The percentage of low birth weight live births across the Gwent region in 2014 ranged from 5.8% in Newport to 8.2% in Monmouthshire. In Blaenau Gwent the percentage was 7.5%; it is above the Wales percentage (6.7). The number of live births in Blaenau Gwent with low birth weight was 58 in 2014 (Welsh Government 2016). A significant risk factor for low birth weight is maternal smoking.

Smoking in Pregnancy and early years

Currently in Wales 1 in 5 pregnant women smoke, resulting in higher risk of miscarriage, premature birth and low birth weight. (PHW 2016 Making a difference). The rate of smoking in pregnancy is much higher in the lower age groups at 32% (under 20) and 27% (age 20-24) according to other research, however rates in all age groups have fallen over the last decade.

Childhood exposure to tobacco smoke is of specific concern. One in five children aged 10-11 years are exposed to second hand smoke. Children are particularly vulnerable to second-hand smoke. They have smaller lungs, faster breathing and less developed immune systems, which make them more susceptible to respiratory and ear infections triggered by passive smoking.

The health of babies born into lower income households is disproportionately affected by second hand smoke. This can result in

double the risk of sudden infant death, 50 percent higher risk of lower respiratory infections and asthma and 571 hospital admissions for children every year.

Teenage conceptions

Some teenagers are amazing parents and raise healthy, happy children who lead fulfilling lives. However, teenage pregnancies are associated with poorer wellbeing outcomes for the parent and the child. Teenage mothers are at greater risk of suffering from mental health issues during the three years following birth as well as having a low birth weight and higher infant mortality rate, compared to older mothers. Teenage pregnancy is a possible cause and a consequence of child poverty, which therefore perpetuates health inequalities. Higher teenage conception rates are associated with areas of higher deprivation and areas of higher unemployment. Having a baby before the age of 16 is associated with a lack of education and training, leading to poor socio economic conditions later in life. The children of teenage mothers tend to experience poorer outcomes as young adults. They tend to have a poorer educational attainment, greater risk from economic inactivity and are more likely to become teenage mother's themselves.

Across the Gwent region the rate of under 18 conceptions per 1,000 females aged 15- 17 in 2014 ranged from 14 in Monmouthshire to 28 in Torfaen. At 26 per 1,000, the rate for Blaenau Gwent is in line with the Wales rate (25). All local authority areas in the region have seen a significant fall since 2010, mirroring the fall across Wales.

Healthy weight in pregnancy and early years

Maternal obesity and excess weight gain in pregnancy poses serious risks to the mother and child including: gestational and type II diabetes, pre-term deliveries, macrosomia, late foetal loss, stillbirth, congenital anomalies and increased neonatal intensive care. Managing healthy weight gain in pregnancy is important to reduce the risks in pregnancy and labour to mother and baby.

Rates of maternal obesity in Blaenau Gwent are likely to be slightly lower than the 27 percent in the total population as higher amongst areas of higher deprivation.

Outside of the Child Measurement Programme for Wales there are very little data available about overweight and obesity in children and young people. There are no current data for whether a child grows steadily in the first year of life or first two years.

Breastfeeding

Breast feeding has benefits to both mothers and babies; it continues to be promoted as the most beneficial diet for babies. The presence of antibodies in breast milk helps to protect babies from common childhood illnesses. Breastfed babies are less likely to be admitted to hospital with infections and are more likely to grow up with healthy weight and without allergies (PHW 2016).

Exclusively breastfeeding infants, provides a wide range of benefits which begin immediately and track through to adult wellbeing. Breastfeeding produces benefits for the baby through reduced risk of infections, diarrhoea and vomiting, sudden infant death syndrome

(SIDS), childhood leukaemia, type 2 diabetes, obesity, and cardiovascular disease in adulthood.

Benefits of breastfeeding for the mother include lower risk of: breast cancer, ovarian cancer, osteoporosis, cardiovascular disease and obesity. Furthermore breastfeeding and the early bonding and attachment it brings, promotes optimal brain development of the baby and emotional resilience which tracks through adolescence and in to adulthood positively impacting on a number of wellbeing factors.

In Blaenau Gwent, the proportion of babies exclusively breastfed at 10 days following birth is about 17% which is significantly lower than the Welsh average.

Rates of breastfeeding are higher at initiation and drop off steadily as babies' age increases towards 6 months. Deprivation is strongly associated with breastfeeding rates with lowest rates in our most deprived communities.

Trend data cannot be produced as the data are only recently of adequate quality to use, trends will be able to be produced in the future.

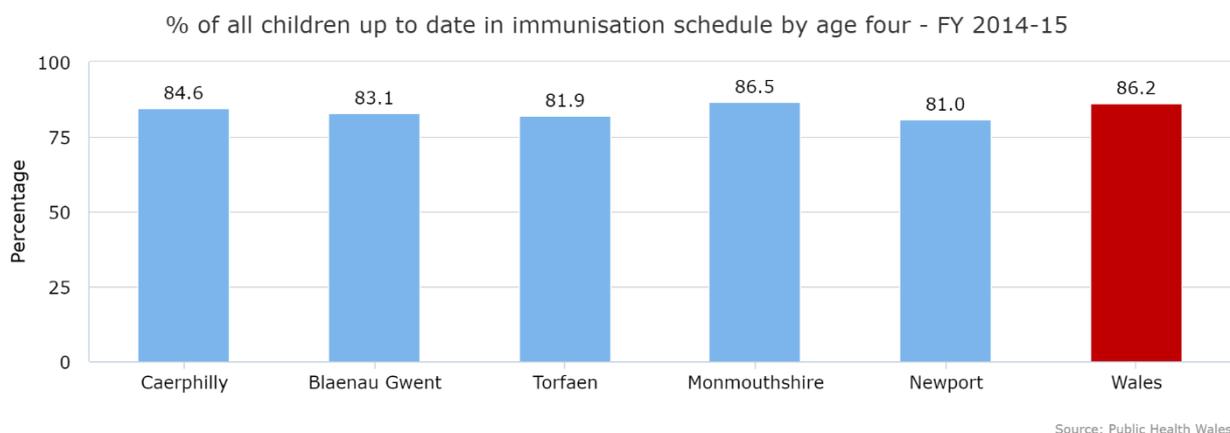
Childhood immunisations

The World Health Organisation estimates that 3 million lives are saved every year worldwide through immunisation alone. Vaccines are a very effective and needed public health protection intervention. Once common illnesses such as diphtheria and tetanus are now rare because of immunisation and whilst polio was declared eliminated in Europe through immunisation, the threat of other diseases such as measles and meningitis have not gone away in the UK today. globally about 400,000

children globally die every year from measles alone even though it is almost entirely vaccine preventable.

In Blaenau Gwent immunisation coverage for all vaccines due by age one year are above 95 percent affording good community level protection against a variety of communicable diseases (COVER, Q2 2016/17). However, the percentage of children up to date in their immunisations by age four years, when children enter school, is considerably lower, at just 83% in Blaenau Gwent. This is considerably lower than the 95% uptake required to give community immunity, protection to those who are under-vaccinated. This is also lower uptake than for Wales as a whole (86%). This means many of the children in Blaenau Gwent are not protected against preventable infectious diseases, such as measles, which remain relatively common in Wales and remain vulnerable to infection when cases occur, and increases our risk of outbreaks, which are costly to individuals and public services.

Graph 3.4.X: Percentage of children up to date with immunization schedule by age 4 years, local authorities and Wales



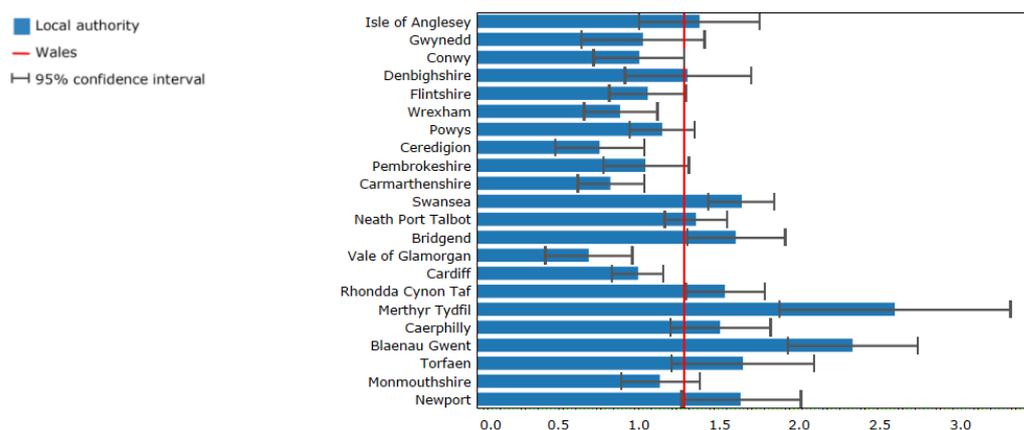
Oral health

Oral health is an indicator of a range of adverse life circumstances for children. Poor diets, often from birth, inadequate tooth brushing and infrequent visits to the dentist are the main causes of decayed, missing or filled teeth (DMFT) at age five years. Poor oral health can impact on health and well-being. There can be immediate problems resulting in pain and infection, but also other long term consequences on health. For example, for children poor oral health can make eating difficult, affecting nutrition and subsequently growth and development.

The Welsh Dental Survey shows the average number of decayed, missing or filled teeth in children aged 5 years. In Blaenau Gwent the average number of DMFT was 2.3, which is higher than for the whole of ABUHB at 1.6, and statistically, significantly higher than the number for Wales as a whole 1.3 DMFT, in 2014-15.

Decayed missing or filled teeth, average, children aged five years, local authorities and Wales

Decayed, missing or filled teeth (dmft), average, children aged 5 years, Wales and local authorities, 2014-2015

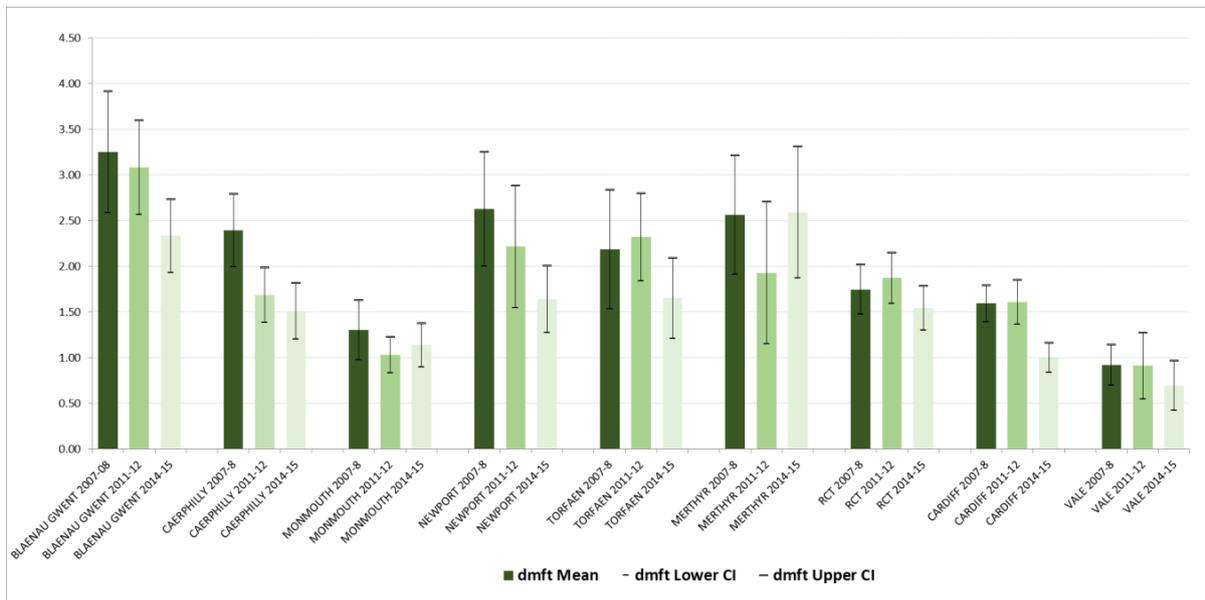


Please consult the technical guide for full details on how this indicator is calculated. Produced by Public Health Wales Observatory, using Welsh Dental Survey (WOHIU)

The Blaenau Gwent average number of DMFT per child is the second highest local authority areas in Wales. Variation in average DMFT by local authority shows that oral health is also related to deprivation.

In Blaenau Gwent, mean dmft has fallen over the last decade as illustrated below.

South East Wales – Mean dmft trends by Unitary Authority, 2007/08 to 2014/15

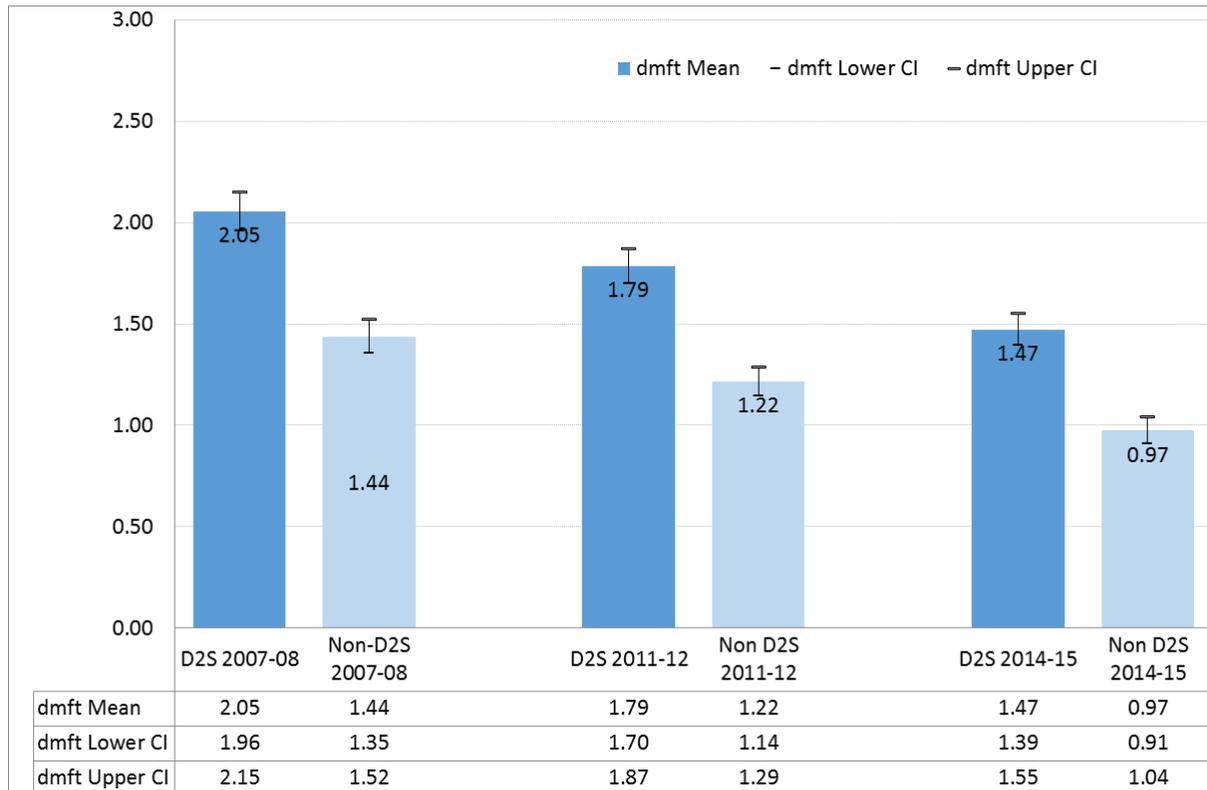


Tooth decay is preventable. Designed to Smile is a targeted oral health promotion programme for Wales which is focussed on preventing dental decay in children in pre-school and primary school settings. Work to roll the programme out across the whole of Wales was commenced in 2010, focusing on areas with higher deprivation.

Over the last 3 surveys samples included 5 year old children from schools involved in the initial Designed to Smile pilot and from schools that are now being included in the Designed to Smile programme as it is rolled out. It also surveyed children who are not taking part in Designed to Smile. Whilst these surveys were not specifically designed to evaluate Designed to Smile, and mean dmft has reduced in all schools since 2008, it is notable that the reduction in mean dmft is slightly greater in Designed to Smile Schools. A similar improvement pattern is seen in the

proportion of children with experience of decay. This is encouraging and indicates participation in the programme across Blaenau Gwent would be beneficial.

Mean dmft for children attending primary schools by participation in Designed to Smile, 2007/08 – 2014/15



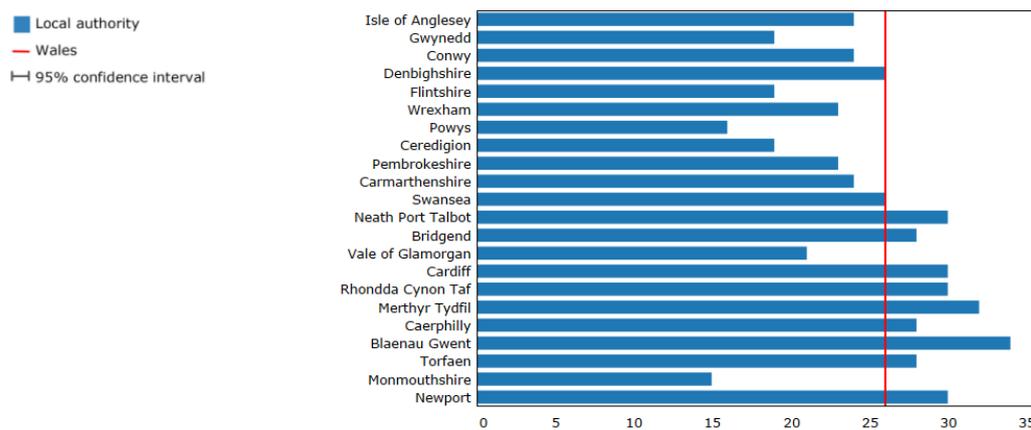
Other life circumstances related to child health and wellbeing: Child poverty

The root causes of families being in poverty are worklessness and low earnings (either not working enough hours or not being paid enough). Children in workless families are three times as likely to be living in relative poverty compared to families where at least one parent works, and they are more likely to go on to become poor adults. Children in families with a disabled adult are over a third more likely to be in poverty than children in families with no disabled adult (22% compared to 16%) (

DWP 2013). On average, people experiencing worklessness have worse health and poorer wellbeing. Ill health is one of the key family characteristics which make it harder for some poorer families to work their way out of poverty, as is having low qualifications.

Proportion of children living in poverty, local authorities and Wales

Children living in poverty, percentage, aged 0-18, Wales and local authorities, 2015



This is not based on the national indicator definition. Please consult the technical guide for full details on how this indicator is calculated. Produced by Public Health Wales Observatory, using Welsh Index of Multiple Deprivation (WIMD) and small area population estimates (ONS)

The proportion of children and young people living in poverty is higher in Blaenau Gwent than any other Local Authority area in Wales and the rate is considerably higher than the Wales rate.

Given the current levels of worklessness and the high proportion of adults with low educational qualifications in Blaenau Gwent, taking a preventative approach to tackle persistent, intergenerational poverty from occurring or getting worse is important.

The Childhood Poverty Strategy and Action plan for Wales highlight the importance of addressing factors which are barriers to parents working,

and also raising the educational attainment of poor children since this is essential in breaking the cycle of poverty.

Key family characteristics which make it harder for some poor children to do well at school include a poor home environment, under-developed “character” skills (e.g. social skills, self-esteem, resilience), Special Educational Needs or disabilities or ill health, a parent being ill, having parents with low qualifications, and low family income (HM Government 2014).

Education is an important determinant of health. People with more educational qualifications have usually had a good start in life and a supportive background suffering fewer adverse experiences, they have better jobs with more control and higher wages and they are able to engage better with services to keep well and use community assets enjoying more leisure and culture – they have better health and wellbeing. Parents with more educational skills and qualifications often recognize the value and set the conditions for their next generations.

Financial exclusion from contemporary society causes stress and stigmatization as well as exclusion from a range of cultural and leisure opportunities which also have a preventative effect on longer term health. When the breadth and strength of association between deprivation and health and wellbeing outcomes are considered, children living in poverty and their families have to be a target for more intense and more tailored-to-be-accessible interventions across this section of the wellbeing plan.

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are chronic stressful experiences in childhood that can directly hurt a child (such as abuse or neglect) or affect them through the environment in which they live (such as growing up in a house with domestic violence or with individuals with alcohol and other substance use problems).

ACEs are known to have direct and immediate effects on a child's health. However, exposure to ACEs can alter how children's brains develop as well as changing the development of their immunological and hormonal systems. The psychological changes affect the body, thus increasing the risk of premature ill health such as cancer, heart disease and mental illness (eg schizophrenia). There is also increased risk of developing poor mental wellbeing, in terms of how people feel emotionally and how they interact with others, including attachment. In addition, children who experience stressful and poor quality childhoods are more likely to adopt health-harming behaviours (for example smoking, problem drinking, poor diet, low levels of exercise and risky sexual behaviour), often during adolescence, which can themselves lead to increased risk of non-communicable diseases such as mental health illnesses and disease such as cancer, heart disease and diabetes later in life.

ACEs can also lead to individuals developing anti-social behaviours, including a tendency for aggressive and violent behaviour, and ultimately problems with criminal justice services. Individuals' engagement in education, their ability to gain qualifications and ultimately their contribution to the economy can all be affected by the combination of anti-social behaviour, difficulties with social adjustment and ill health.

ACEs tend to be ‘passed down’ through families and lock successive generations of families into poor health and anti-social behaviour. There are thus long-term, inter-generational benefits from breaking the cycle. Preventing ACEs in future generations could reduce levels of heroin/crack cocaine (lifetime) use by 66%; incarceration (lifetime) by 65%, violence perpetration (past year) by 60%, violence victimisation (past year) by 57%, cannabis use (lifetime) by 42%, unintended teen pregnancy by 41%, high-risk drinking (current) by 35%, early sex (before age 16) by 31%, smoking tobacco or e-cigarettes by 24%, poor diet (less than by 16%.

Addressing ACEs also links with the Violence Against Women, Domestic Abuse and Sexual Violence Act (Wales) 2015.

As the table below shows, 47% of adults in Wales suffered at least one ACE during their childhood, and significantly 14% suffered 4 or more.

Prevalence of the number of ACEs in Wales

Number of ACEs	%
0	53
1	19
2-3	13
4+	14

These proportions are comparable to those found in other parts of the UK as well as further afield. It is also known that those living in areas of deprivation are at greater risk of experiencing multiple ACEs.

The table below illustrates what percentage had experienced each type of ACE. Verbal abuse was the most common, experienced by 23% of individuals.

Prevalence of individual ACEs experienced

	Individual ACEs	%
	Parental separation	21
Child abuse	Verbal abuse	23
	Physical abuse	17
Household dysfunction	Sexual abuse	10
	Mental illness	14
	Domestic violence	16
	Alcohol abuse	14
	Incarceration	5
	Drug abuse	5

In Wales the impact of ACEs may include being responsible for nearly a quarter of current adult smoking, over a third of teenage pregnancy and more than half of the violence, heroin/crack use and incarceration reported. ACEs could also be responsible for almost a third (27%) of adults reporting low mental wellbeing.

Prevalence of harmful behaviours increases with the number of ACEs experienced, even after accounting for socio-demographics (age, sex, ethnicity and deprivation), as shown in the table below.

Number of times those with 4+ ACEs more likely to have harmful behaviours than those with no ACEs

	Number of times
High-risk drinker	4
Had or caused unintended teenage pregnancy	6
Smoked e-cigarettes or tobacco	6
Had sex under the age of 16 years	6
Smoked cannabis	11
Victim of violence over the last 12 months	14
Committed violence against another person in the last 12 months	15
Used crack cocaine or heroin	16
Incarcerated at any point in their lifetime	20

Adults with 4+ ACEs were five times more likely to have low mental wellbeing than those with no ACEs.

3. What we know from engagement



During the Blaenau Gwent We Want Engagement exercise, the partnership undertook and attended numerous engagement activities and events throughout the borough to gather people's views.

Residents also took part via the Blaenau Gwent We Want Facebook page and partnership websites. Links to an online questionnaire were also distributed to many residents known to the partnership, such as members of the Blaenau Gwent Citizen Panel.

Residents were encouraged via the methods above to answer a range of questions that sought to capture:

- Citizen values, aspirations and priorities;
- Citizen needs – insight into the needs they and their communities encounter within daily life and what the best solutions may be and
- Citizen assets –what people can and already contribute themselves such as self-care, citizen and community action and volunteering.

Q1. What do you think is special about BG?

Q2. What things are important to you to live well and enjoy life?

Q3. What would make BG a better place?

Q4. What can you do to help make BG a better place?

Approximately 1,000 residents were engaged with (across all groups) during the engagement phase.

During phase 1 of the engagement phase we have received very limited feedback on this important area. For this reason, within phase 2 we will directly engage with parents groups within the borough to seek their views. Within this consultation we would also welcome any observations you might have that could inform the picture of Blaenau Gwent on the asset of the area and any unmet needs.

4. What we know from existing research

In terms of value for money as well as quality of life, there is considerable evidence to support early interventions, in the first 1000 days of life, which optimise the potential for good health in the future and minimize the risk of harm. Some of the key indicators in the first 100 days are discussed below including childhood poverty, low birth weight, smoking in pregnancy and maternal weight. Other indicators of health outcomes are also described below, such as child dental health and immunisation rates. There is increasing evidence that adverse childhood events (ACE) have lasting impact on a child's physical as well

as psychological development, which means their impacts on a person's health and wellbeing are long term.

A Welsh ACE Survey was undertaken in 2015 by Public Health Wales in collaboration with Liverpool John Moores University. Although data are not available at a local level, it identified that prevention of ACEs is likely not only to improve the early years experiences of children born in Wales but will also reduce levels of health-harming behaviours across the life course.

Investing in early years universal (population wide) interventions along with additional resource proportionate to need for vulnerable children is cost-effective and essential to ensure a healthy and productive Wales.

Investing in targeted interventions, universal child care and paid parental leave could help address as much as £72 billion worth of the cost of social problems such as crime, mental ill health, family breakdown, drug abuse and obesity for Wales.

5. What this tells us about Well-being in Blaenau Gwent

Because many positive health and wellbeing outcomes are negatively associated with socio economic deprivation, it is unsurprising that many child health and development indicators in Blaenau Gwent are worse than for Wales as a whole. However, this is not inevitable. Many factors are modifiable and poor outcomes are preventable

To achieve better health and wellbeing in our next and future generations, collectively we need to work to nudge people's expectations and aspiration whilst challenging some of the cultural norms in Blaenau Gwent which lead to health inequities. For example, reducing a child's exposure to tobacco smoke has physical benefits to

the child, but by reducing the visibility of smoking in public places, it challenges the child's perception that smoking is the norm and this has a positive impact on the prevalence of smoking in younger people, which will eventually lead to reduced population level smoking with all of the associated benefits.

It is essential people are given accurate information and education regarding factors which effect their child's health, but also that the conditions are in place to support healthier choices and health and social services are available and accessible where the need is greatest.

Focussing on the first 1000 days of life and giving children the best start in life sets the foundations for resilience and greater wellbeing later in life.

By comparison, exposure to ACEs has a major impact on the development of health-harming behaviours which can affect health across the life course. The prevention of ACEs is likely not only to improve the early years experiences of children, but also reduce levels of health-harming behaviours throughout the life course, and across generations. Investment in the early years is crucial, as interventions can be more effective to address issues as early as possible in life.

The benefits of preventing ACEs are not limited to health, but also impact on violent crime and social issues such as teenage pregnancy. Addressing ACEs is therefore in the interest of health, education and criminal justice agencies as well as to the long-term economic benefit of the country.

ACEs may be prevented through:

- enhanced public and professional awareness

- evidence-informed universal service specifications
- effective pathways into additional support, monitoring of intervention coverage and content
- routine audit of fidelity to intervention specifications.

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