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WALES

Bwrdd Iechyd Prifysgol  
Cwm Taf  
University Health Board

# 'One More Healthy Behaviour'

## Annual Report of the Director of Public Health 2015



## Foreword

I can start this year's Annual Report by sharing some very good news in Cwm Taf. Life expectancy and healthy life expectancy have increased in Cwm Taf for both males and females over the last five years. Also the inequalities in life expectancy and healthy life expectancy between the least and most affluent have reduced across all these measures. This has not been seen across other parts of Wales and is a great achievement. It demonstrates the efforts of individuals, communities, third sector and public sectors to improve lifestyles and provide healthier environments.

We know that improving healthy behaviours can reduce levels of chronic diseases and associated early deaths which are largely preventable. The five healthy behaviours are:

- Not smoking
- Maintaining a healthy body weight
- Undertaking regular physical activity in line with national guidance
- Eating a healthy diet including 5 portions of fruit and vegetables a day
- Maintaining any alcohol consumption within nationally recommended guidelines

The evidence from the Caerphilly Study shows that if we have four or five healthy behaviours we can reduce our risk of diabetes and cardiovascular disease by 69%, dementia by 58% and cancers by 33%. Yet in Cwm Taf only 11% of the population enjoy four or five healthy behaviours. So this is our challenge - in line with the aspirations of the Well Being of Future Generations Act - our collective aim is for:

*Every organisation within the Cwm Taf area to pledge to make one change to their practice or policy to encourage and support their clients, patients, employees or students to make a lifestyle change and take up 'one more healthy behaviour'.*



I would like to thank the editorial team: Diane Gibbons and Gail Murphy and the wider team for their contributions in the production of this report, especially Daniel Clayton, Emma Cahill, Anna Morgan, Ann Unitt, Margaret Munkley, Sara Thomas, Julie Powell Jones, Joanne Webb, Rachel Reed, Joanne Sullivan and Elizabeth McIntosh.

**Angela Jones - Interim Director of Public Health  
Cwm Taf University Health Board  
September 2016**

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## Introduction

In Cwm Taf, overall life expectancy and healthy life expectancy have improved in recent years, and the inequality gap between the most and least deprived has narrowed.<sup>(1)</sup> This has not been seen in other parts of Wales. It is very encouraging and demonstrates that the wide range of work being undertaken within Cwm Taf to tackle health inequalities is beginning to have an impact.

However, many challenges remain. Cwm Taf University Health Board area continues to serve the most deprived population in Wales. Despite improvements in recent years, this is reflected in our lower life expectancy, reduced years in good health and higher levels of chronic disease when compared to other areas in Wales. Unhealthy lifestyles are widely linked to social disadvantage and deprivation.

There is a considerable body of evidence outlining the relationship between unhealthy behaviours and illness, particularly in relation to cardiovascular disease, diabetes, many cancers, respiratory disease and dementia.<sup>(2,3)</sup>

Health related lifestyles are generally poor in Cwm Taf with the Welsh Health Survey (2008-13) identifying a number of areas within Cwm Taf as having statistically significantly higher proportions of people who smoke, are overweight or obese (have a raised Body Mass Index-BMI) or a sedentary lifestyle.<sup>(4)</sup>

Although there has been a downward trend in smoking prevalence in recent years, in 2014/15 levels remained static with the Health Board level at 23% of adults smoking. This is higher than the Wales average of 20%.

The latest Welsh Health Survey data (2014/15) indicates that overall levels of overweight or obesity are rising with 65% of adults in Cwm Taf now overweight or obese; this is significantly higher than the Wales average figure of 59%.

There has been little change in levels of physical activity over the past 10 years. In 2014/15 the new physical activity questions within the Welsh Health Survey indicated that 52% of adults reported being active for more than 150 minutes a week in line with the national guidelines but more worryingly 38% reported being active for less than 30 minutes a week.

These results combined with the poor diet and alcohol consumption levels of many of our residents contribute to creating a population that is vulnerable to developing high levels of chronic disease.

A recent illustration of lifestyle behaviours reported as part of the Welsh Health Survey (2013/14) indicated that only 11% of adults in Cwm Taf would be considered to have a healthy lifestyle, defined as enjoying four or five healthy behaviours.

Facilitating individual behaviour change is only one element of public health practice which needs to address the wider economic, social and environmental determinants of health to develop an effective, preventative approach. However, if significant numbers commit to making small positive changes then the impact on our population's health would be considerable.

The Caerphilly Prospective Study demonstrates this in a very similar community. It maintains that if healthy behaviours were successfully promoted and taken up then enormous benefits could be achieved across Wales. The Study reported for men who consistently followed 4-5 healthy behaviours there was a 69% reduction in diabetes, 69% in cardiovascular disease and 58% in dementia when compared to those men with one or no healthy behaviours. In examining the potential for Wales, researchers have estimated that if each participant had been advised at the start of the study to adopt 'one more healthy behaviour' and if 50% had done so then the cumulative, annual savings to the NHS from the reduction in chronic disease would have been an average estimated £56 million. The study is explored further in chapter 2.(5)

Although making a change is very much in the hands of the individual there are key opportunities for a wide range of partners to help facilitate these changes and develop supportive environments. Statutory, voluntary and community partners, employers and education settings all have a role to play.

The public sector in particular, has a crucial role to play. Public sector organisations are key employers within Cwm Taf. Approximately 8,000 people work for the Health Board, 530 are employed by the Northern division of South Wales Police and 2,800 and 11,000 by Merthyr Tydfil and Rhondda Cynon Taff Local Authorities respectively.

Even allowing for those who live out of the area, the reach across these organisations of over 22,000 employees, including their influence on their families and personal networks and their level of contact with the public,

is extremely wide. In addition these organisations are in positions of considerable influence regarding the services our population receive and the environments in which they live.

This report begins with a brief overview of the current picture of health and wellbeing within Cwm Taf then focuses on the role of healthy behaviours in contributing to this picture taking into account the experiences of the Caerphilly Study. It summaries some of the work already being undertaken to support our population to adopt healthier lifestyles and raises some of the opportunities to continue to develop this approach locally.

# Chapter 1

## A Profile of Health in Cwm Taf

### 1.1 Demography of our Population

The resident population of Cwm Taf University Health Board area (Merthyr Tydfil and Rhondda Cynon Taff) is estimated to be 296,600 in 2016.

The recently published 'Demography 2016 - A Welsh Summary Report' produced by the Public Health Wales Observatory indicated that the population of Wales is projected to increase by almost 9% by 2036.<sup>(6)</sup>

Within Cwm Taf an overall population increase of 2.1% is projected by 2026, falling to a 1.6% increase by 2036 when compared to the Welsh Government population projections for 2011. The Merthyr Tydfil population is projected to have the largest increase within Cwm Taf at 6.1% by 2036.

The 65 to 84 and 85+ age groups are projected to have the largest increase by 2036, when an estimated 1 in 4 people in Wales will be aged 65 and over.

Within Cwm Taf projected increases are outlined in Figure 1.

**Figure 1- Population Projections for the Cwm Taf UHB area**

**Population projections by age group, percentage change since 2011, Cwm Taf UHB, 2011-2036**

Produced by Public Health Wales Observatory, using 2011-based population projections (WG)

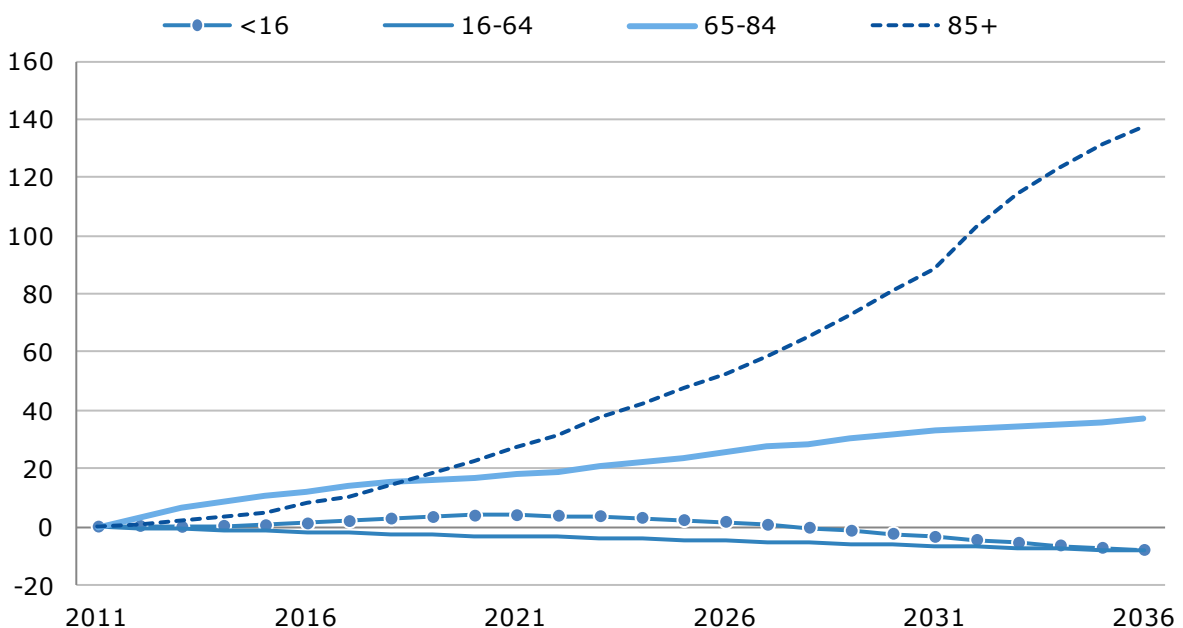
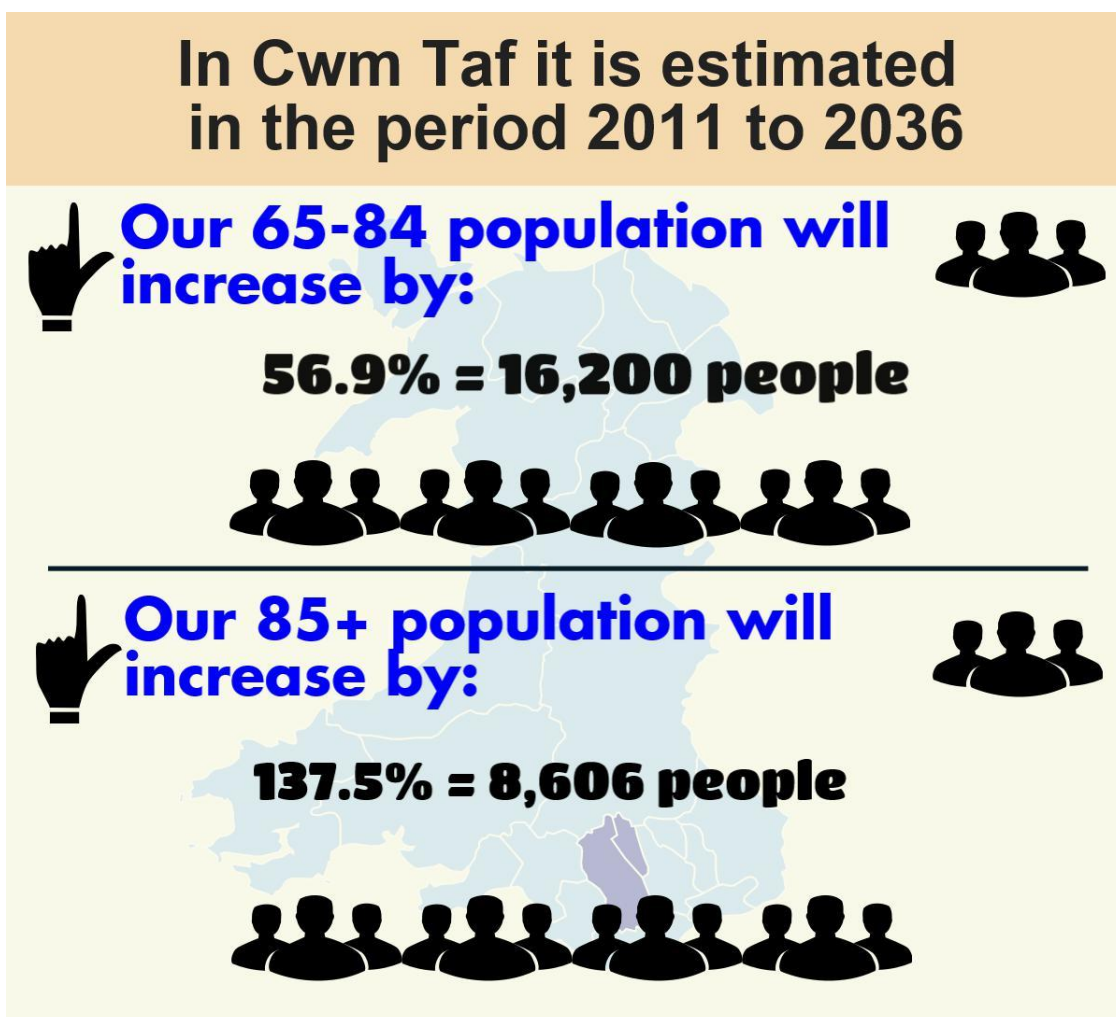


Figure 2 - Population Estimates for Cwm Taf



Our growing, older population is very positive for Cwm Taf, although it also has a number of consequences to service provision across the sectors including the potential for far larger numbers of our population to be living with chronic conditions with associated care needs. These projections further support the need for investment in prevention now to promote healthier ageing.





## 1.2 Inequalities in Health

Health inequalities are differences in individual's health, when comparing different people or groups, that are due to biological, social, geographical or other factors. This is illustrated in the representation of Dahlgren and Whitehead's model below.(7)

Some differences, such as ethnicity are fixed. Others are caused by social or geographical factors and could potentially be avoided or changed. Income, employment, education and environment can all commonly lead to inequalities in health.

These differences can have a huge impact and result in people who are worst off experiencing poorer health and shorter lives.

**Figure 3 – The Determinants of Health**



The Determinants of Health (1992) Dahlgren and Whitehead

**Life expectancy** at birth is a widely used statistical measure of the average expected years of life for a newborn based on currently observed mortality rates.

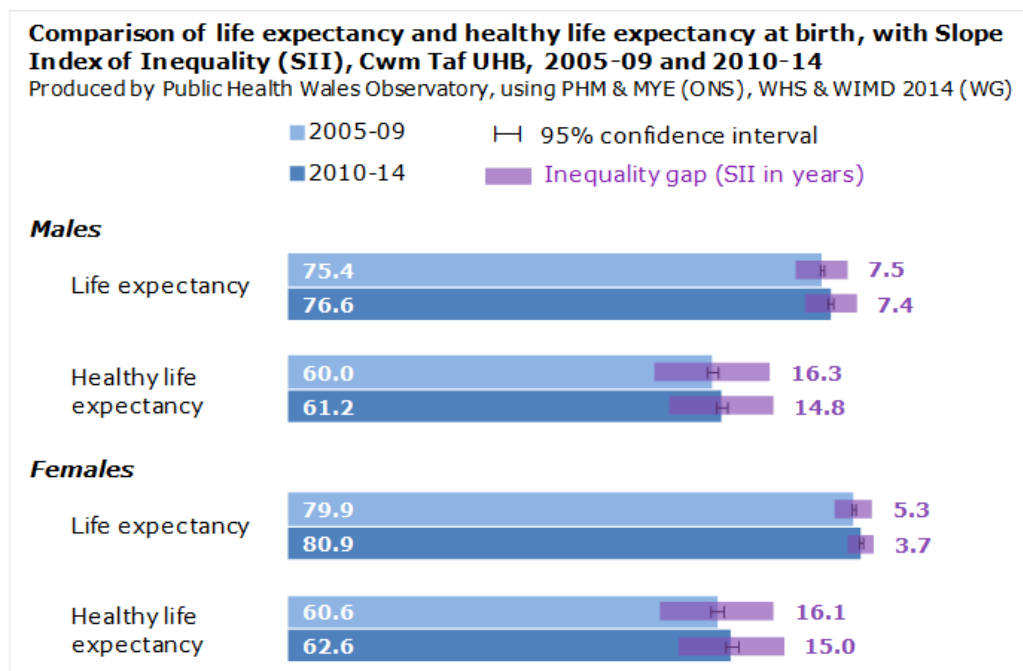
In addition to general life expectancy, it is important to consider quality of life.

- **Healthy life expectancy** at birth (HLE) represents the number of years a person can expect to live in good health.
- **Disability-free life expectancy** at birth (DFLE) estimates the number of years of life expected to be free from a limiting long-term illness or disability.

The Measuring Inequalities (2016) report shows that at a population level people are living longer and longer in good health in Wales as a whole. However, the report also indicates at a national level that the difference between life expectancy between the most and least deprived areas of Wales shows no sign of reducing. This is called the Slope Index of Inequalities (SII).(1)

Figure 4 compares life expectancy and healthy life expectancy for Cwm Taf. It provides a comparison between the time periods 2005/09 and 2010/14 and the variation in the Slope Index of Inequalities (SII).

**Figure 4**



The Slope Index of Inequality (SII) is a measure of the absolute difference in life expectancy between the most deprived and the least deprived whilst taking into account the distribution across all deprivation fifths.

In Cwm Taf, it is a very positive sign that life expectancy and healthy life expectancy (2010-2014) have improved since the previous report (2005-2009). The inequality gap between the most and least deprived has narrowed across all of the parameters. However, we still remain below the Wales averages and for male life expectancy in Rhondda Cynon Taff, the inequality gap has increased since the previous report from 7.4 years to 7.8 years demonstrating the variations within Cwm Taf.

**Figure 5- Life Expectancy within Cwm Taf**

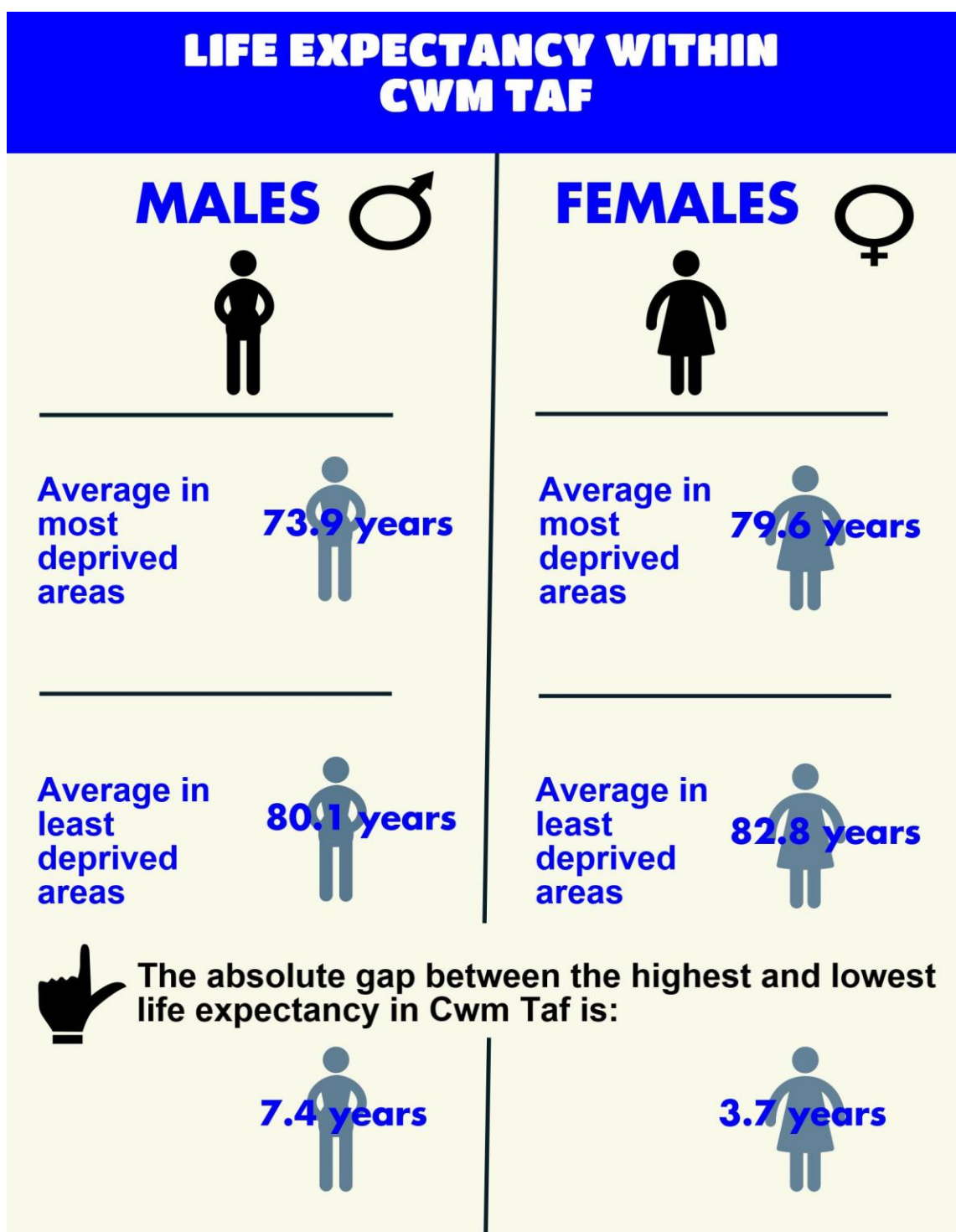
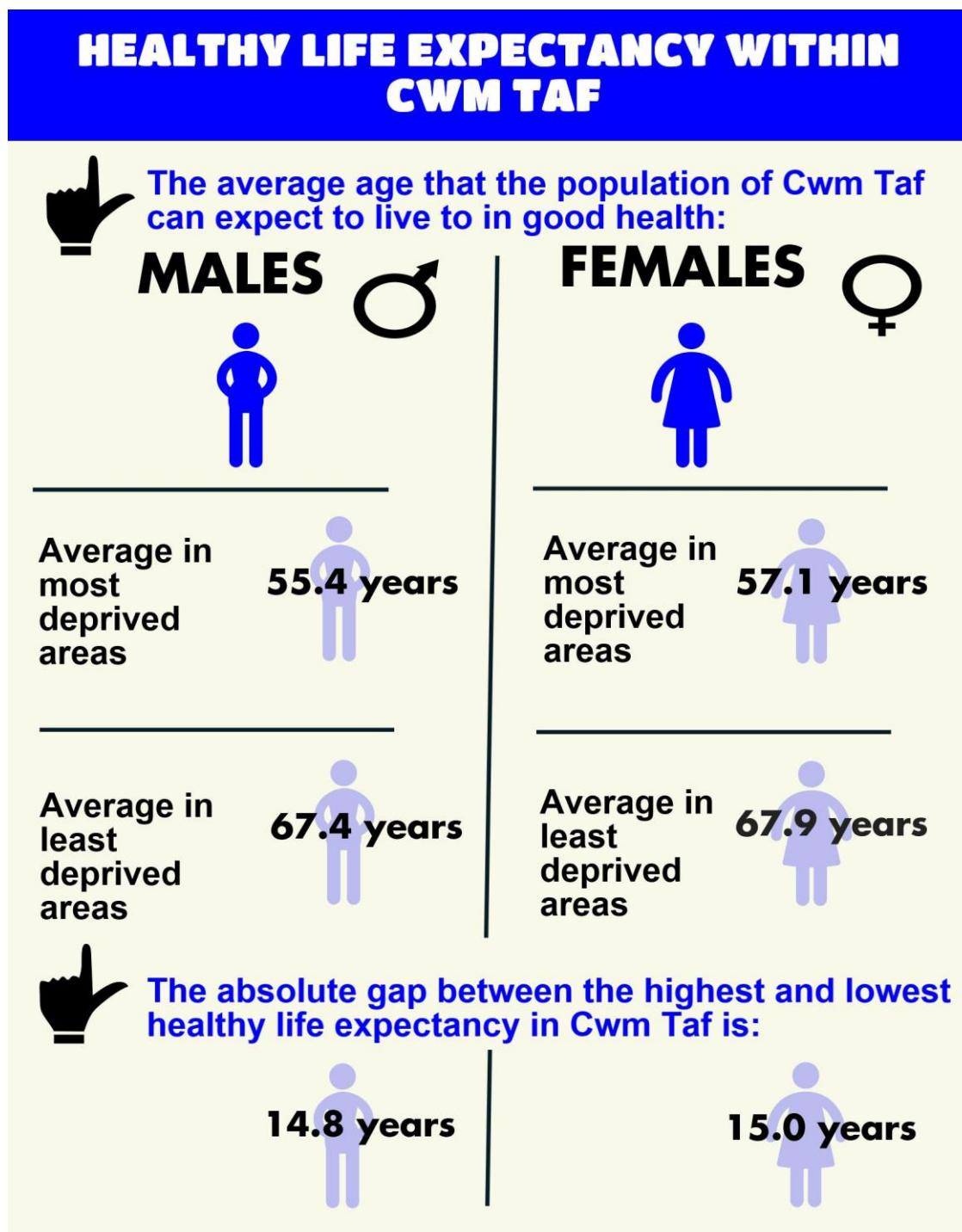


Figure 6- Healthy Life Expectancy within Cwm Taf



Further breakdown at a Health Board and Local Authority level is available at:

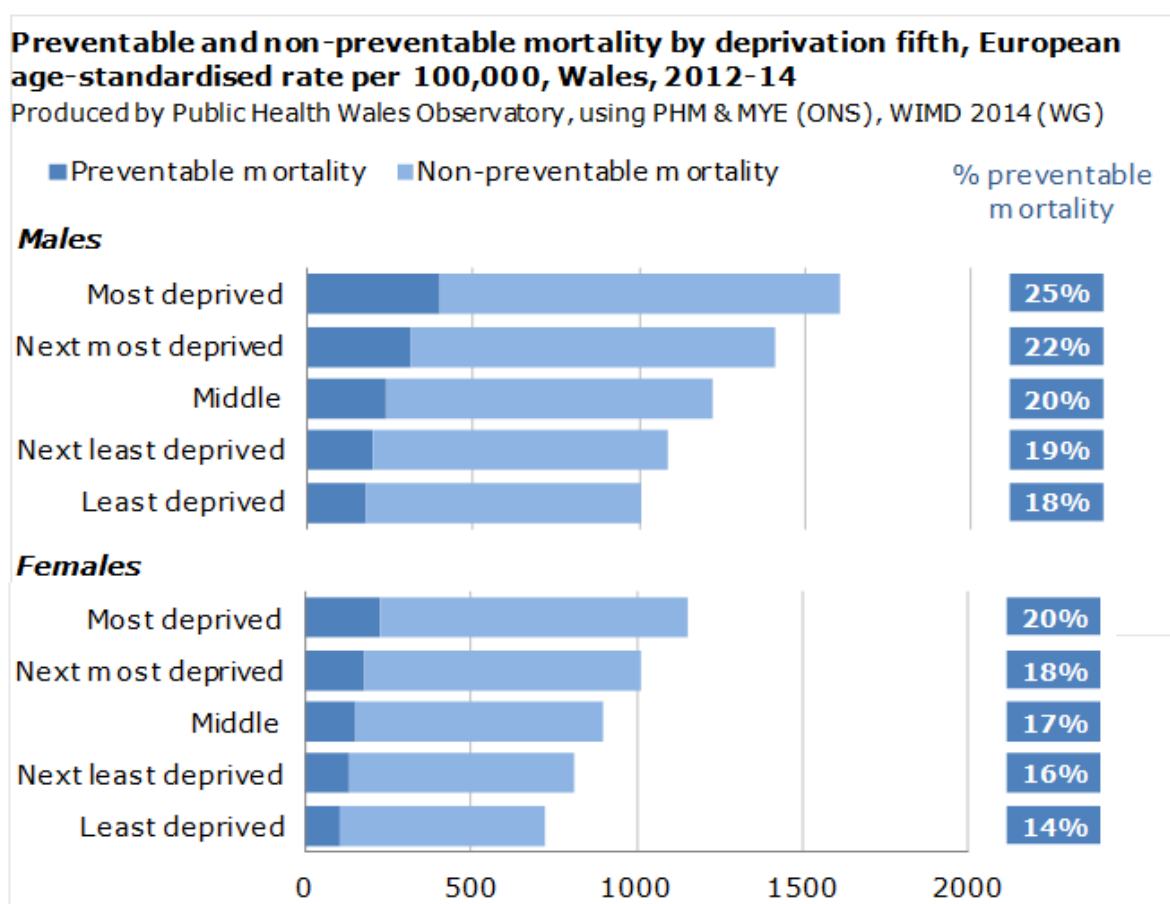
[www.publichealthwalesobservatory.wales.nhs.uk/inequalities](http://www.publichealthwalesobservatory.wales.nhs.uk/inequalities)

## Measuring inequalities in mortality rates

Overall in Wales, mortality and preventable mortality rates are lower than they were ten years ago, but again the inequality gap shows no sign of reducing.<sup>(1)</sup>

In the most deprived fifth of Wales, preventable mortality accounts for 25% of the overall mortality rate in males and 20% for females. This compares with 18% for males and 14% for females in the least deprived fifth.

**Figure 7**



According to the Welsh Index of Multiple Deprivation (2014), 30% of the Lower Super Output Areas (LSOAs)<sup>1</sup> in Cwm Taf are in the most deprived fifth in Wales.

<sup>1</sup> LSOA- Lower Super Output Area is a statistical geography with a mean population of 1500

Figure 8 shows the variation across Cwm Taf for premature mortality. Areas of higher incidence correlate to our areas of greater deprivation.

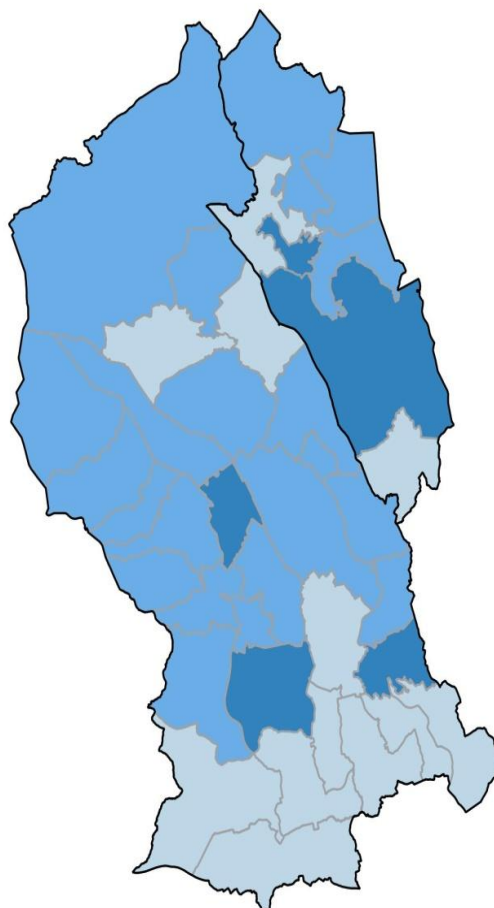
**Figure 8- All-cause Mortality under 75's**

**All-cause mortality, persons, under 75, Cwm Taf UHB, 2012-2014**

MSOA, European age-standardised rate per 100,000

- 657.3 to 782.1 [0]
- 532.4 to <657.3 [5]
- 407.5 to <532.4 [21]
- 282.6 to <407.5 [12]
- 157.7 to <282.6 [0]

- Local authority boundary
- MSOA boundary



Produced by Public Health Wales Observatory, using PHM & MYE (ONS)  
© Crown Copyright and database right 2016, Ordnance Survey 100044810



### 1.3 Chronic Disease levels within Cwm Taf

There are consistently higher proportions of people reporting key illnesses in Cwm Taf than across Wales (Welsh Health Survey). The prevalence of chronic conditions is generally higher in Cwm Taf than the Wales average (GMS Quality and Outcomes Framework) and this is likely to be an underestimate of the true prevalence in the population.

The highest percentages of people reporting key illnesses are generally in the Upper Super Output Areas<sup>2</sup> (USOAs) of Merthyr Tydfil, Rhondda Fach, Rhondda Fawr and South Cynon.

Cancers and circulatory disease are consistently the major causes of premature mortality in Cwm Taf. Despite the downward trend, early death rate from cardiovascular disease remains higher in Cwm Taf than Wales. The reduction is happening faster in our least deprived than our most deprived communities, resulting in a widening of the inequality gap for cardiovascular disease.

Lung cancer is one of the most common cancers in Wales and shows the widest inequalities. Survival from lung cancer is poor. Around 70 per cent of people die within a year of diagnosis in Wales. The age standardised lung cancer incidence rate in Cwm Taf University Health Board is statistically significantly higher than Wales as a whole and is the highest of all the health boards for both genders.<sup>(8)</sup> This is undoubtedly linked to having the highest smoking prevalence rates in Wales.

A similar link is seen with Chronic Obstructive Pulmonary Disease (COPD). Its main cause is smoking. A recent GP cluster profile report by the Public Health Wales Observatory using QOF data indicates that Cwm Taf has the highest percentage of adults with COPD in Wales amounting to 8,035 individuals on practice condition registers.<sup>(9)</sup>

Hypertension (high blood pressure) is strongly linked to unhealthy lifestyles. Persistent high blood pressure can increase the risk of a number of serious and potentially life-threatening conditions. Thirteen percent of adults in Cwm Taf are on GP hypertension registers.

Cwm Taf also has the highest chronic liver disease premature mortality rate in Wales, based on the most recent data (2009/13).<sup>(10)</sup>

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<sup>2</sup> Upper Super Output Area (USOA) is a statistical geography with a mean population of 32,000. There are nine USOAs in Cwm Taf.

In 2013/14 Cwm Taf had the highest level of hospital admissions for liver disease in Wales. The rate of admissions was statistically significantly higher than the Wales average and the levels in all other Health Boards.

Admissions for non-alcoholic fatty liver disease (NAFLD) were not significantly different to the Wales average, but admissions due to alcoholic (related) liver disease (ARLD) were statistically significantly higher than the Wales average and equivalent to the highest levels in Wales.

Dementia is the progressive loss of brain function. The most common kinds are Alzheimer's disease and vascular dementia. Dementia is a growing health issue in Wales with over one in twenty over the age of 65 affected and one in five over the age of 80. Using the Welsh Government 'Daffodil' system and LA population projections for Cwm Taf, it was projected that in 2015 there were approximately 3,685 over 65's affected by some form of dementia. It is estimated that this will rise to 5,455 by 2030 with the growing population in this age group. The strength of evidence around dementia prevention is currently limited, however it is suggested that the best current advice to prevent dementia includes advocating healthy lifestyles.

Although smoking and alcohol misuse levels have a generally downward prevalence trend, obesity levels continue to rise in Cwm Taf as do the levels of associated disease.

Diabetes II is a life changing condition which can lead to a variety of complications if not controlled effectively. Ninety percent of individuals with diabetes have the type II disease.

Diabetes is described by many as a ticking time bomb. There are currently around 3.5 million people in the UK with diabetes. This is expected to rise to 5 million by 2025.<sup>(11)</sup>

It is estimated that there are around 549,000 people in the UK who have diabetes but have not been diagnosed.

The cost burden of diabetes to the NHS has been estimated as being between 8-12% of total NHS resource expenditure.<sup>(12)</sup>

A recent impact statement released by the Public Health Wales Evidence Service (2016) indicates that obese individuals are approximately seven times more likely to develop type II diabetes, whilst those who are

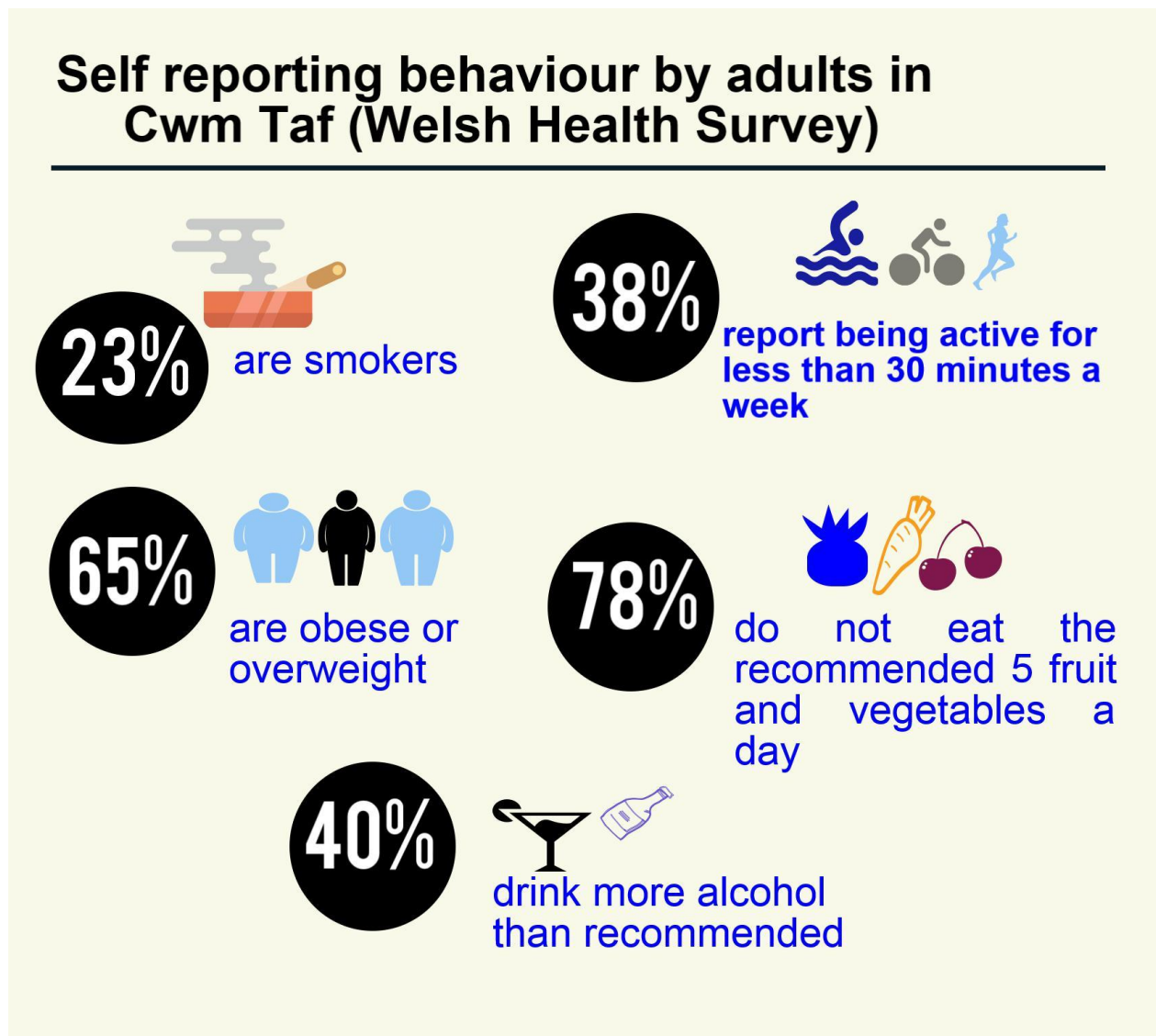


overweight are three times more likely to develop the condition, than those of normal weight. The risk of developing diabetes in obesity is slightly higher for women (eight times the risk) and slightly lower for men (six times the risk).(2)

7.4% of the adult population are on a GP register for diabetes in Cwm Taf. The Wales average is 7.1%. This equates to 18,168 individuals.

## 1.4 The Incidence of Healthy Behaviours in Cwm Taf

Figure 9 - Welsh Health Survey figures for incidence of Healthy Behaviours in Cwm Taf (2015)

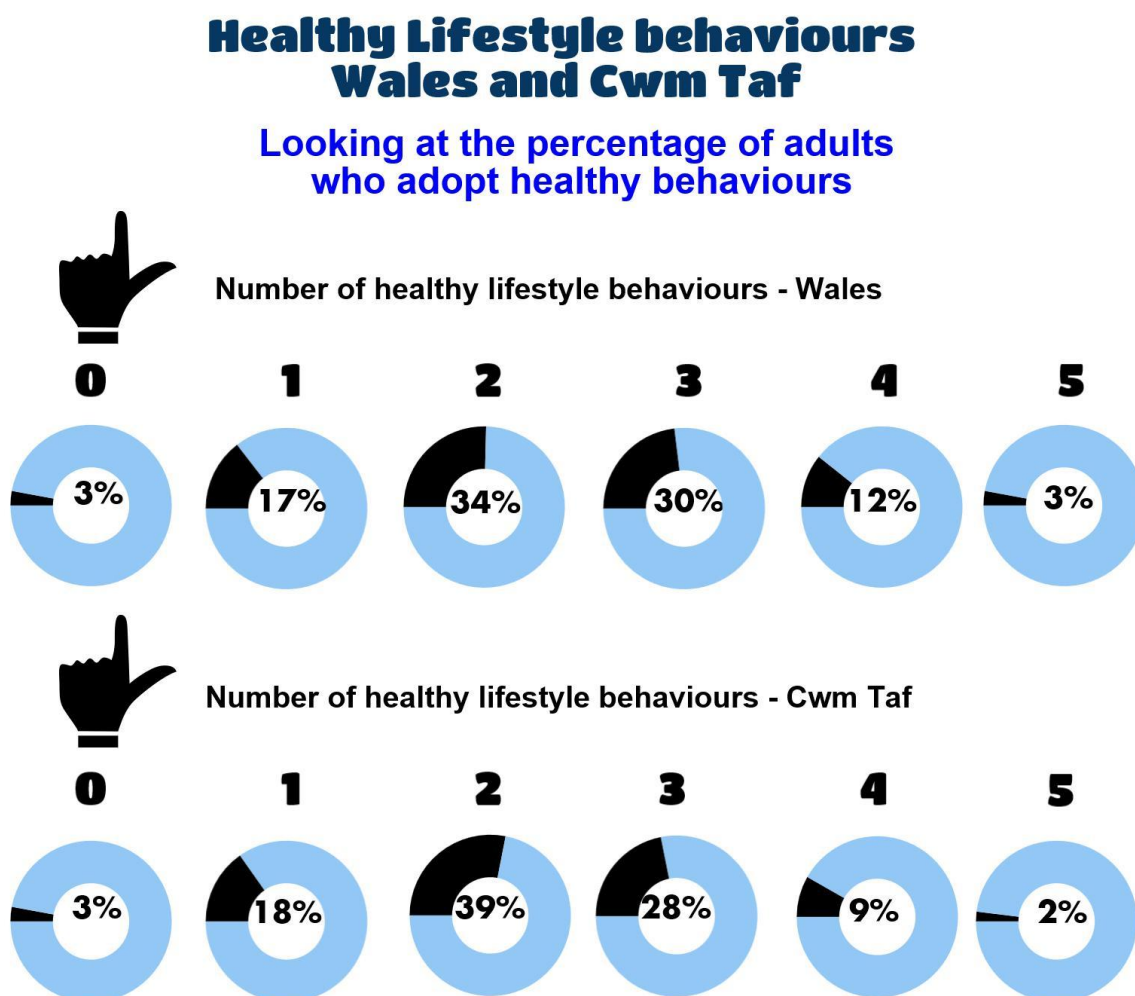


## Clustering of unhealthy behaviours

Recent studies indicate that the proportion of the UK's population with a high number of lifestyle risks reduced significantly in recent years however that reduction has not been seen in more deprived communities. It is clear that multiple unhealthy behaviours increase the risk of disease and also create a bigger challenge to individuals in reaching the goal of 4-5 healthy behaviours.(13)

A recent illustration of lifestyle behaviours reported as part of the Welsh Health Survey results for 2013/14 show that only 11% of adults in Cwm Taf would be considered to have a healthy lifestyle (4-5 healthy behaviours adopted) with the Welsh average not much better at 15%.

**Figure 10 - Healthy Lifestyle behaviours Wales and Cwm Taf**



The above is the percentage of the population with the given number of behaviours ie:  
 Not smoking: Not drinking above guidelines: Eating 5 or more portions of fruit and vegetables per day: Physically active at least 5 days a week: Healthy weight

Statistics produced by Public Health Wales Observatory, using WHS (WG) 2013/2014

## Chapter 2

# The benefits of a Healthy Lifestyle

## 2.1 Why do Healthy Lifestyles matter?

### Looking at the Caerphilly Prospective Study Experience

There is a considerable body of evidence outlining the relationship between unhealthy behaviours and illness particularly in relation to cardiovascular disease, diabetes and stroke. It is estimated that the leading risk factors for disease are responsible for 77% of premature deaths and 51% of years spent in ill health in the UK. Key contributors are tobacco, high blood pressure, high cholesterol, obesity and alcohol.

Of particular relevance to our communities in Cwm Taf are the findings of the Caerphilly Prospective Study.<sup>(5)</sup> The Study was set up in 1979 to look at a wide range of factors believed to be associated with the risk of heart disease. A team led by Professor Peter Elwood recruited over 2,500 men aged 45 to 59 in the Caerphilly area. Eighty nine per cent of the eligible population took part. Caerphilly was chosen as its age and social structure makeup was similar to much of the UK and it was an area of high cardiovascular disease incidence.

One of the key findings of the Study was the considerable benefits associated with adopting certain healthy behaviours:

These five behaviours are:-

- Not smoking.
- Maintaining a healthy body weight.
- Undertaking regular physical activity in line with national guidance.
- Eating a healthy diet including 5 portions of fruit and vegetables a day.
- Maintaining any alcohol consumption within nationally recommended guidelines.

One of the major issues to be identified was the small proportion of adults that follow a 'healthy lifestyle' that is those who adopt 4-5 of the above behaviours. Despite various forms of education and action taken in recent years, numbers haven't increased significantly. An illustration of lifestyle behaviours reported as part of the Welsh Health Survey results for 2013/14 show that only **11%** of adults in Cwm Taf would be considered to have a healthy lifestyle with the Welsh average not much better at 15%.

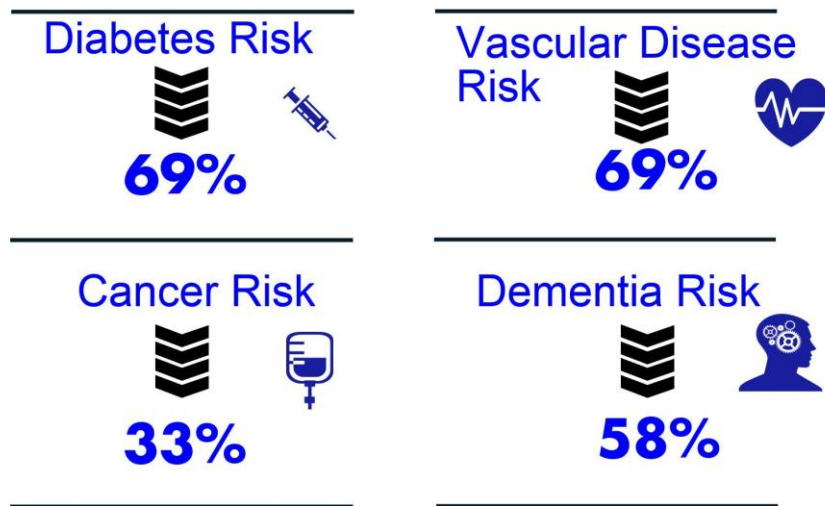
## 2.2 What could a change in our lifestyles achieve?

It is widely known that unhealthy behaviours contribute significantly to a range of diseases.

The Caerphilly Prospective Study maintains that if healthy behaviours were successfully promoted and taken up then enormous benefits could be achieved across Wales.


**Figure 11**

### FOR PARTICIPANTS OF THE CAERPHILLY STUDY WHO CONSISTENTLY FOLLOWED 4-5 HEALTHY BEHAVIOURS



Even for those individuals who did go on to develop a condition delay of onset was considerable:

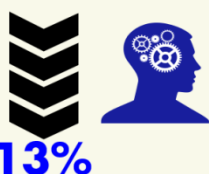


 Death by any cause was reported to be delayed by up to 6 years.

**Figure 12- Estimated Outcomes from the Caerphilly Study**

**It is estimated that had each participant in the Caerphilly Study been advised to adopt one more healthy behaviour at the start of the study and 50% had done so then:**

Dementia



Diabetes Risk



Vascular Disease



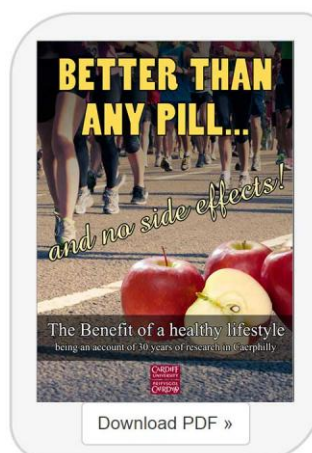
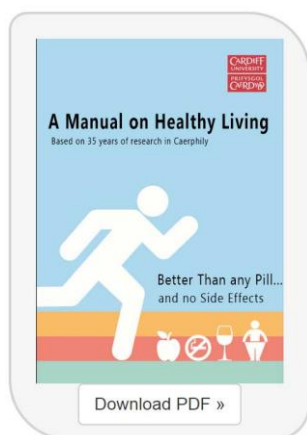
**= This scale of change could result in a saving of £56m to NHS**

The Caerphilly Study is still ongoing and continues to provide a strong body of evidence to support the importance of a preventive approach to health.

**More information can be found at:**

<http://healthylivingwales.co.uk/index.php>

The following documents can be downloaded via this site.



## Chapter 3

### Focussing on the 5 Key Healthy Behaviours

#### 3.1 Reducing the Prevalence of Smoking

##### Why is it important?

- Smoking is the largest single preventable cause of ill health and death in Wales.
- Second hand smoke is a carcinogen and there is no safe level of exposure.
- Smoking during pregnancy is harmful to mothers and their unborn babies and can lead to longer term health problems for babies, children and adults.
- Smoking contributes to 18% of adult deaths and costs the NHS in Wales £386 million a year.

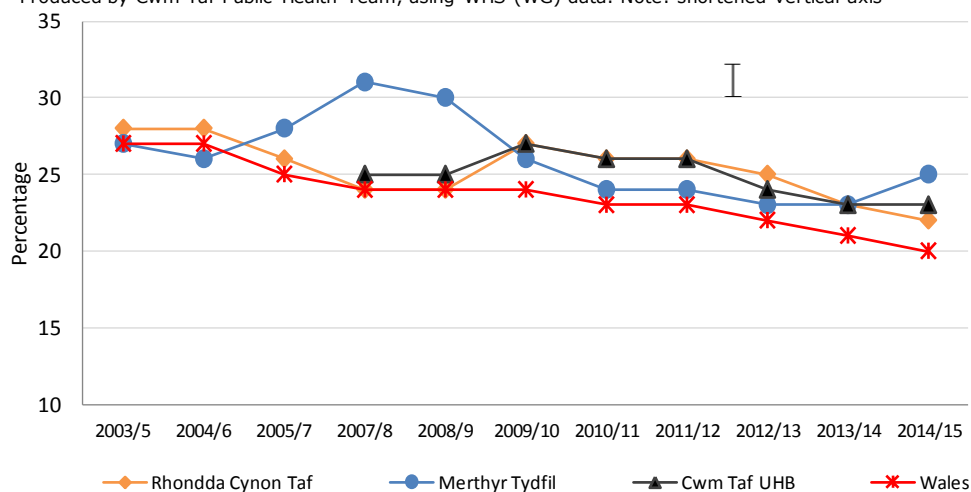
##### The current picture in Cwm Taf

Despite an encouraging downward trend in recent years, adult smoking levels within Cwm Taf stand at 23%, remaining higher than the Wales average of 20% (WHS 2014/15).

**Figure 13**

##### Adults who reported smoking daily or occasionally, percentage, age standardised, 2003/05 - 2014/15

Produced by Cwm Taf Public Health Team, using WHS (WG) data. Note: shortened vertical axis



Within Cwm Taf, data from the Maternal Information Technology System (MITS) for 2015 shows that approximately 24% of pregnant women are identified as smokers (carbon monoxide verified) at their booking appointment with a midwife. This equates to 823 smokers identified at booking.



The most recent Health Behaviour in School aged Children Survey (2014) indicates that 5% of 11 to 16 year olds smoke at least once a week.<sup>(14)</sup>

Two in three smokers start before age 18 and are at risk of becoming a long term smoker.

## **3.2 Maintaining a healthy body weight**

### **Why is it important?**

- Obesity is a major public health concern, with illnesses associated with obesity estimated to cost the NHS in Wales over £73 million per year.
- The Foresight Report assessed the impact of obesity on the incidence of disease in the future and indicated that the greatest increase in the incidence of disease would be for type 2 diabetes (a >70% increase by 2050) with increases of 30% for stroke and 20% for coronary heart disease over the same period.
- 60% of children who are overweight before puberty will be overweight in early adulthood, reducing the average age at which associated diseases become apparent.
- Maternal obesity and excessive weight gain during pregnancy are related to a number of health problems for both mother and child.

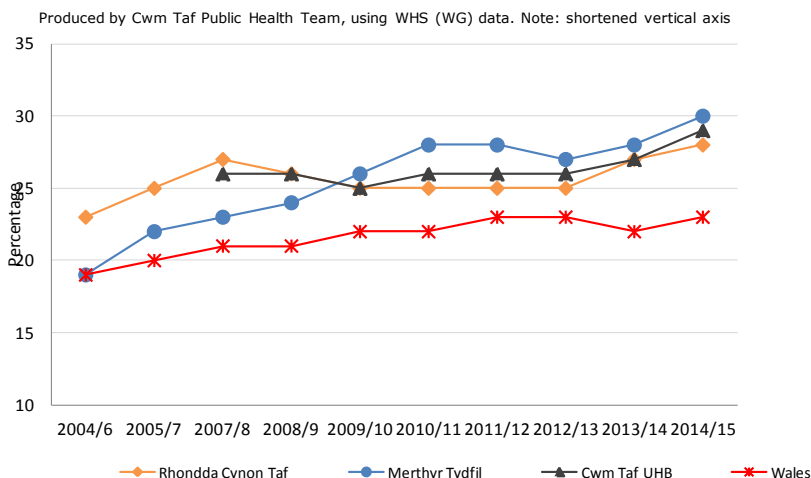
### **The current picture in Cwm Taf**

The proportion of the adult population classified as obese (BMI 30+) has risen consistently since 2005/7. At 29%, adult obesity in Cwm Taf is statistically significantly higher than the Wales average (23%) and is the highest among all health boards in Wales. What is more is that the gap between Cwm Taf and Wales is widening. The health board figure represents a 2% increase since the previous (2013/14) survey. In Merthyr Tydfil obesity has increased by 2% since the previous survey and is now at 30%. The figure for RCT has increased to 28%.



**Figure 14**

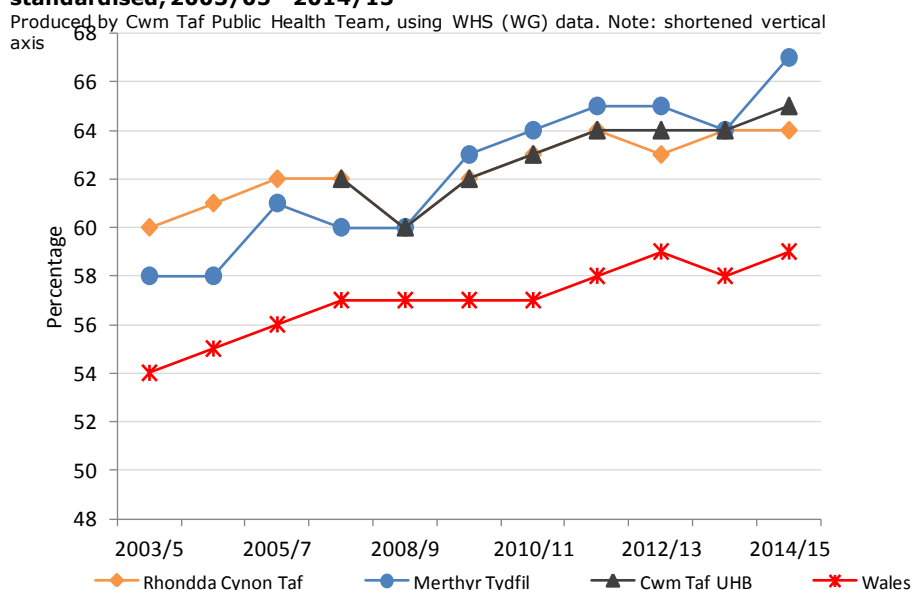
**Adults with a BMI classified as obese, percentage, age standardised, 2005/07- 2014/15**



The trend in overweight or obesity is also rising with 65% of adults in Cwm Taf now overweight or obese; this is significantly higher than the Wales average figure of 59% with the gap increasing. In Rhondda Cynon Taff the figure has remained the same as the previous survey at 64%, but in Merthyr Tydfil there has been an increase of 3% over the same period to 67%.

**Figure 15**

**Adults with a BMI classified as overweight or obese , percentage, age standardised, 2003/05 - 2014/15**

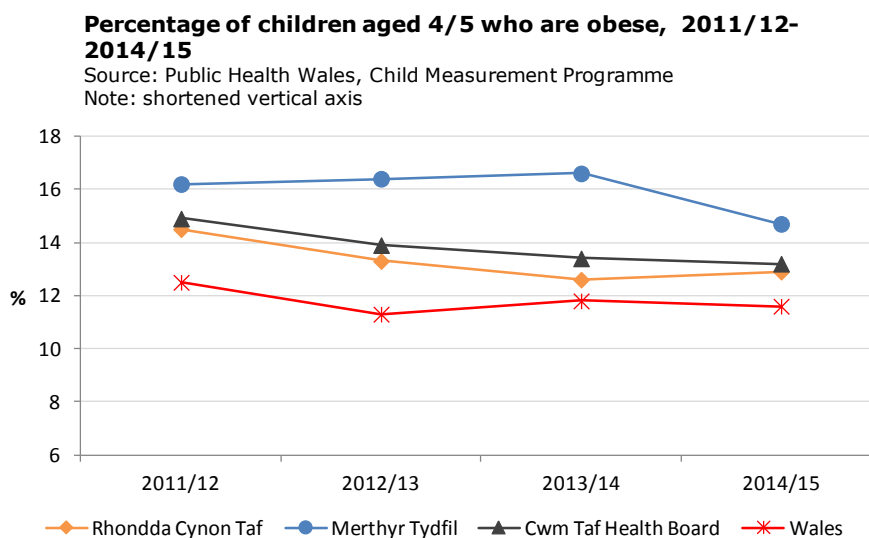


In Cwm Taf, data from the Maternal Information Technology System for 2015 indicates that the number of pregnant women who are obese with a Body Mass Index (BMI) of 30 or over, in early pregnancy is 32%. This is higher than the rest of Wales.

The Child Measurement Programme for Wales is an annual surveillance programme which measures the height and weight of children in the reception year (age four to five) age group.

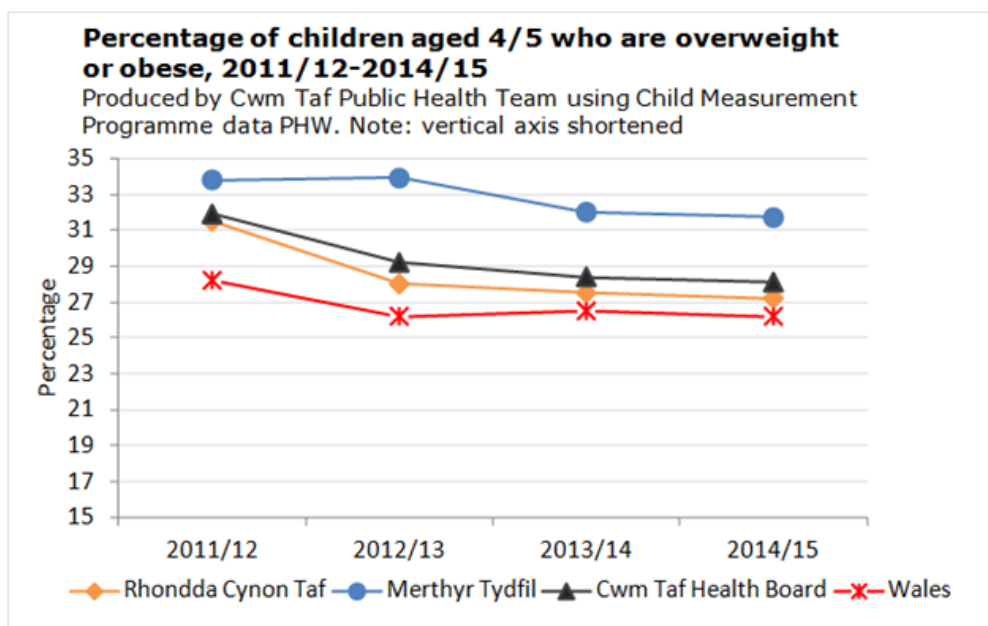
Although there has been a steady decline over the period of the programme, Cwm Taf has the highest rate of obesity in Wales at 13.2%. The rate in Rhondda Cynon Taff is 12.9% and in Merthyr Tydfil 14.7%.

**Figure 16**



For overweight and obesity in this age group, the Cwm Taf rate is 28.1% which is the second highest in Wales, with Merthyr Tydfil the highest LA in Wales at 31.7% and Rhondda Cynon Taff at 27.2%, both statistically significantly higher than the Wales average.

**Figure 17**



The Health Behaviour in School Aged Children Survey (2014) found 25% of 11 to 16 year olds to be overweight or obese using self reported height and weight to calculate BMI.

### **3.3 Undertaking regular physical activity**

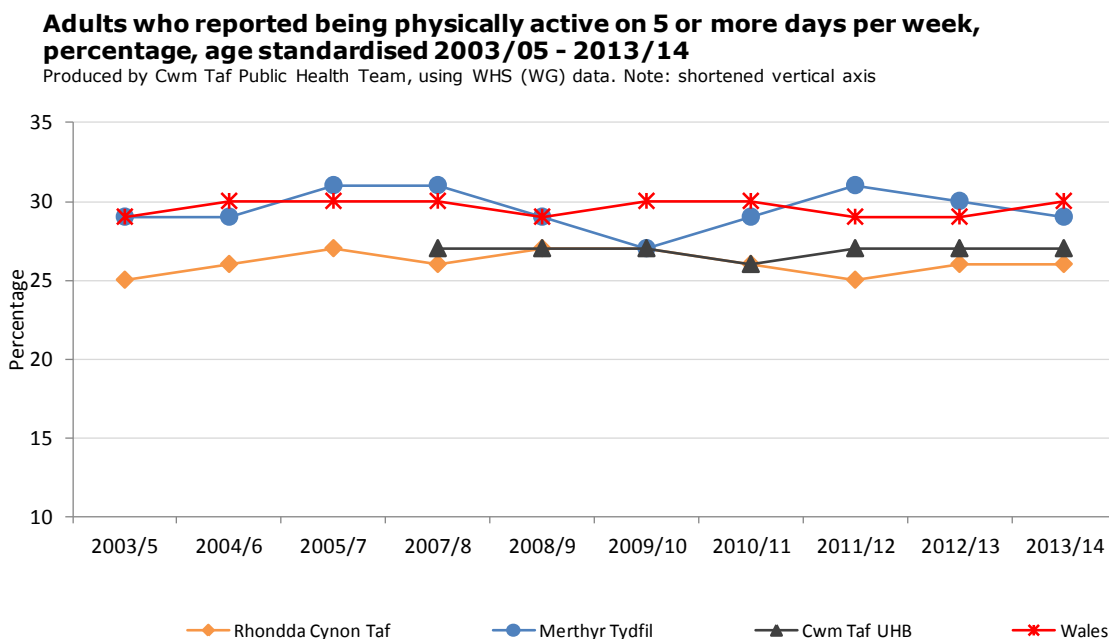
#### **Why is it important?**

- Physical activity contributes to well being and is essential for good health. Individuals who have a physically active lifestyle have less risk of developing coronary heart disease, hypertension, stroke, type II diabetes and some forms of cancer compared to those who have a sedentary lifestyle.
- It can aid weight control and help prevent obesity.
- It can make a positive contribution to dealing with stress and anxiety.
- Physical activity and sport have also been shown to have a beneficial link to educational attainment. Both can be used as tools to engage young people in education and vocational training.

## The current picture in Cwm Taf

Between 2003/05 and 2013/14 there was little change in the level of physical activity reported as per the graph below.

**Figure 18**

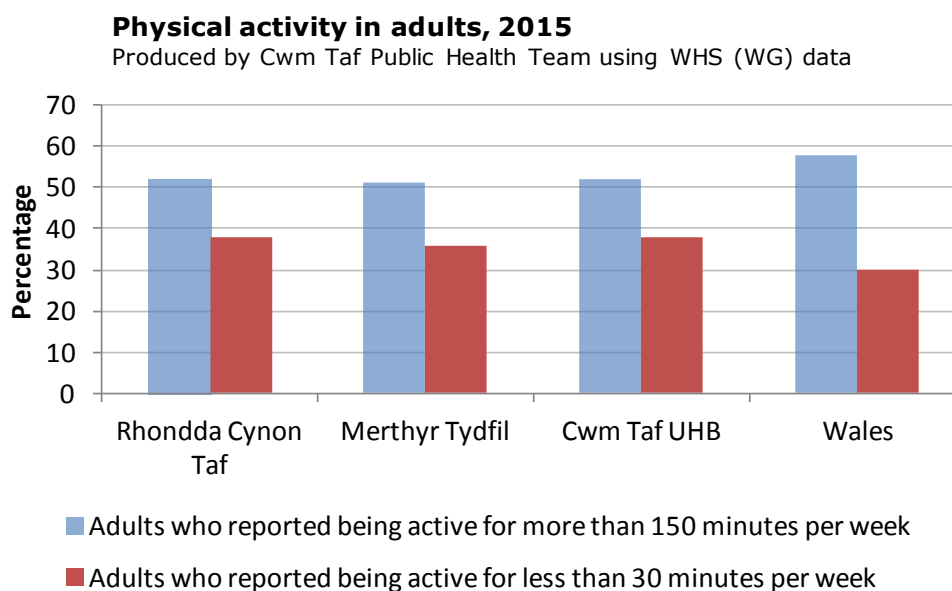


In 2014/15 the WHS questions relating to physical activity changed to:

- Adults who reported being active for more than 150 minutes per week.
- Adults who reported being active for less than 30 minutes per week.

The baseline data for these parameters is given below.

**Figure 19**



The new measures give a better understanding of physical activity levels and sedentary behaviour in Cwm Taf.

The Health Behaviour in School aged children Survey (2014) reports that only 27% of young people walk or cycle to school. The Welsh average is 32%.

However, the Sports Wales School Survey (2015) indicates that the numbers of pupils engaged in sporting activities continues to grow in both local authority areas. Full results are available at <http://sport.wales/research--policy/surveys-and-statistics/school-sport-survey.aspx>. There remains the challenge of engaging all children in some form of physical activity though and also of preventing the drop off in later teenage years particularly for girls.

### 3.4 Eating a healthy diet



#### Why is it important?

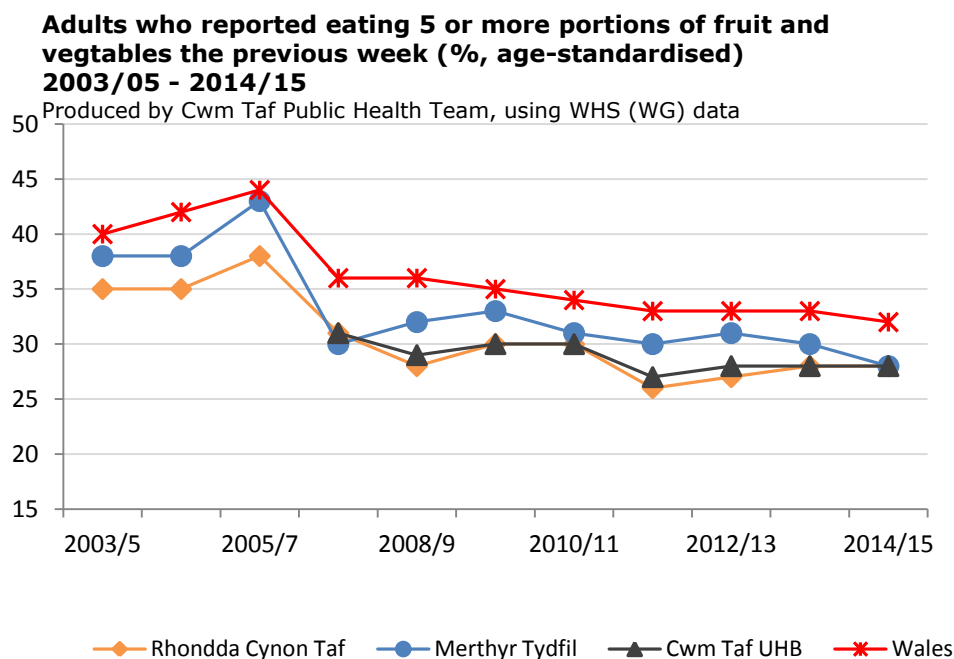
- Along with inactivity, an unhealthy diet is a major risk factor for obesity.
- Eating a minimum of 400g of fruit and vegetables a day has been shown to lower the risk of serious health problems, such as heart disease, stroke and some cancers.
- Trans fats found in processed foods are linked with higher levels of heart disease. Saturated fat is associated with raised cholesterol levels, a risk factor for cardiovascular disease.
- Salt has vital functions in our body but too much salt in our diets can lead to problems such as water retention, raised blood pressure, and ultimately a higher risk of heart attack, kidney disease and stroke.
- Although some foods contain sugars naturally, many processed foods contain often surprisingly high amounts of sugar. Too much sugar can lead to tooth decay and contribute to weight gain and its associated diseases.

For more information go to <https://www.bda.uk.com/foodfacts/home>

## The current picture in Cwm Taf

Only 28% of adults in Cwm Taf reported eating 5 portions of fruit and vegetables a day, the lowest of all Health Board areas. The Welsh Average is 32%.

**Figure 20**



The Health Behaviour in School age Children Survey reports that only 25% of young people aged 11-16 in Cwm Taf eat fruit once a day or more. This falls to 19% when the same question was asked regarding consumption of vegetables. Both are the lowest rates for Wales.

## 3.5 Reducing Alcohol Misuse

### Why is it important?

- Alcohol misuse is a major cause of death and illness. It is associated with many chronic health problems including liver disease, gastrointestinal, cardiovascular and neurological conditions and many cancers. Alcohol misuse can adversely affect mental health and wellbeing.
- Alcohol misuse contributes to a wide range of social harm including risk taking, violent and criminal behaviour that can harm both the drinker and others.
- Drinking alcohol during pregnancy can cause low birth weight, cognitive deficiencies and foetal alcohol disorders.
- Alcohol misuse is estimated to cost the NHS in Wales between £70 and £73 million annually.

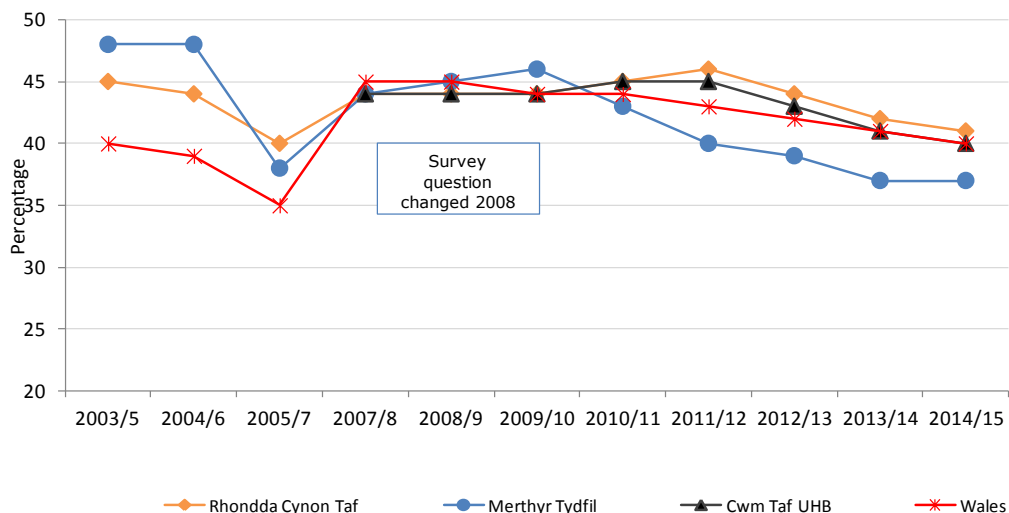
## The Current Picture in Cwm Taf

In the most recent WHS (2014/15) survey, consumption of alcohol above guidelines in Cwm Taf fell from 41% to 40%. This is the same as the Wales average. Consumption above guidelines in Merthyr Tydfil remained static at 37%. RCT showed a 1% fall in 2014/15 to 41%. This is a positive trend overall.

**Figure 21**

### Adults who reported consuming alcohol above guidelines percentage, age-standardised, 2003/05 - 2014/15

Produced by Cwm Taf Public Health Team, using WHS (WG) data

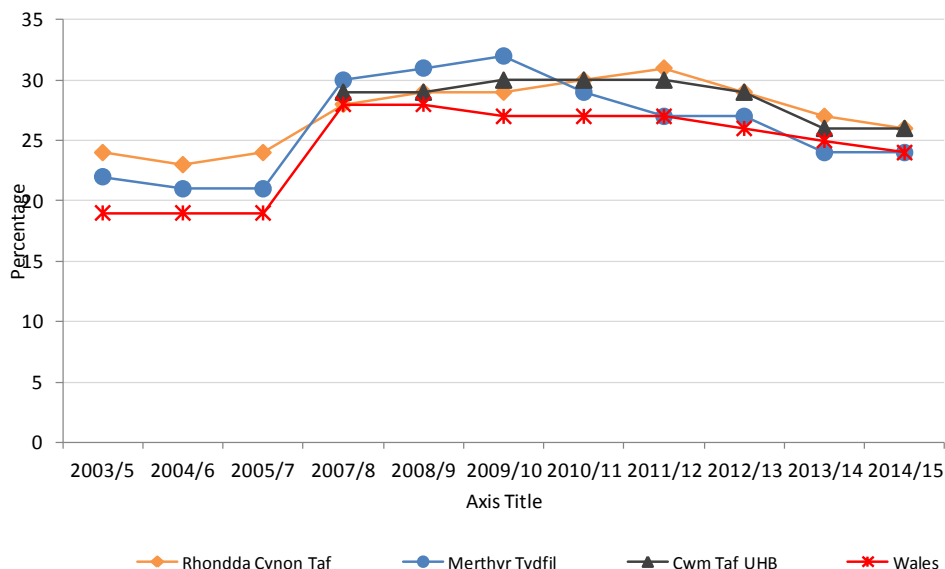


As shown in Figure 22, there has been little change in binge drinking since the previous survey. For Cwm Taf the figure remained static at 26%, Merthyr Tydfil remained static at 24% (the same as the Wales average). RCT fell by 1% to 26%. Again, this is encouraging overall.

**Figure 22**

### Adults reporting binge drinking of alcohol, percentage, age standardised, 2003/05 - 2014/15

Produced by Cwm Taf Public Health Team, using WHS (WG) data



The Health Behaviour in School aged Children Survey 2014 reported that 10% of young people aged 11-16 in Cwm Taf drink alcohol at least once a week. This compares to a Welsh average of 6%

There is no safe level of drinking for someone under the age of 15.

Social harms overlap with health harms, or can lead to them. The underlying causes of the social harms are often a complex interaction of social, individual and environmental factors, in addition to the alcohol:

The social harms of alcohol are common, numerous and serious. They include:

- Violence and intentional injuries.
- Vandalism.
- Public disorder.
- Family problems – divorce/marital problems, domestic abuse, parenting and child abuse.
- Other interpersonal problems.
- Financial problems.



## Chapter 4

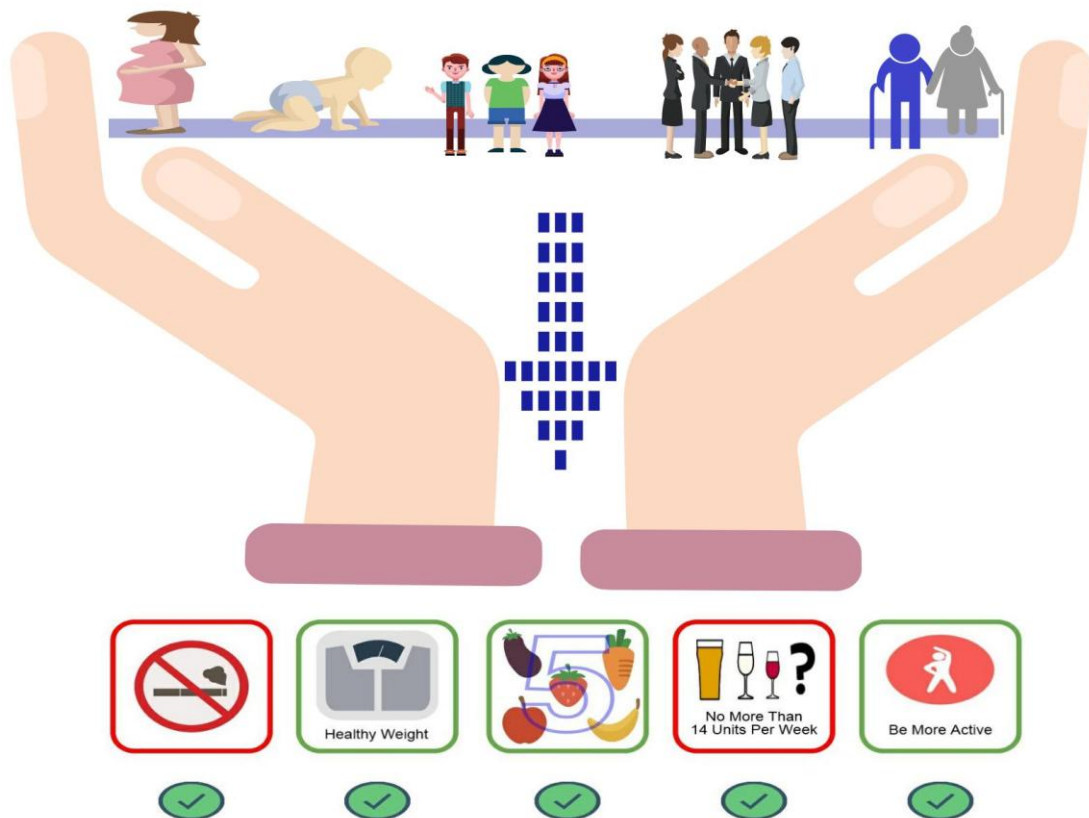
### Throughout our lives - the opportunities

Our health and the lifestyle choices we make are influenced by a number of factors including:

- Our knowledge and skills.
- Our own beliefs and assumptions.
- Our level of social support from our families and our peers.
- The access we have to healthy choices.
- The media.

As outlined in Chapter 1, these are known collectively as part of the wider determinants of health. The influence that they have can be both positive and negative but importantly they are modifiable.

This Chapter explores some of the opportunities that we have to influence these factors and support individuals to make healthier choices through the life course.



## 4.1 Preconception and Pregnancy

The life chances of our children are influenced by the circumstances and experiences they are exposed to from before birth and throughout pregnancy and childhood.

In deprived areas there is a greater likelihood that women may have unhealthy lifestyles that affect their preconception health and potentially their pregnancy and child.

Teenage pregnancy is strongly associated with the most deprived and socially excluded young people. Although being a teenage mum can be a positive experience for some, there are many associated risks to both young mums and their babies. Young mothers living in deprived areas have a higher prevalence of low birth weight babies, which in turn is associated with lower life expectancy, higher risk of developing cardiovascular disease and diabetes in adulthood and lower educational attainment and life prospects.

Once a woman becomes pregnant, her health and lifestyle have a major influence on her unborn baby. As life in the womb is a period of rapid growth and development, poor nutrition and/or exposure to harmful substances at this stage may alter a baby's body structure and function in a way that increases risk of future health problems.

Smoking during pregnancy is harmful to mothers and their unborn babies and can lead to longer term health problems for babies, children and adults<sup>1</sup>. This is because the baby needs oxygen to grow and smoking reduces the oxygen in the mother's blood.

It is important that women are a healthy weight before pregnancy. Obesity and weight gain during pregnancy are related to poor health for both mother and child.

Drinking alcohol during pregnancy can cause low birth weight, cognitive deficiencies and foetal alcohol disorders.

Pregnancy is a powerful motivator for change and may present the ideal opportunity to consider lifestyle change.

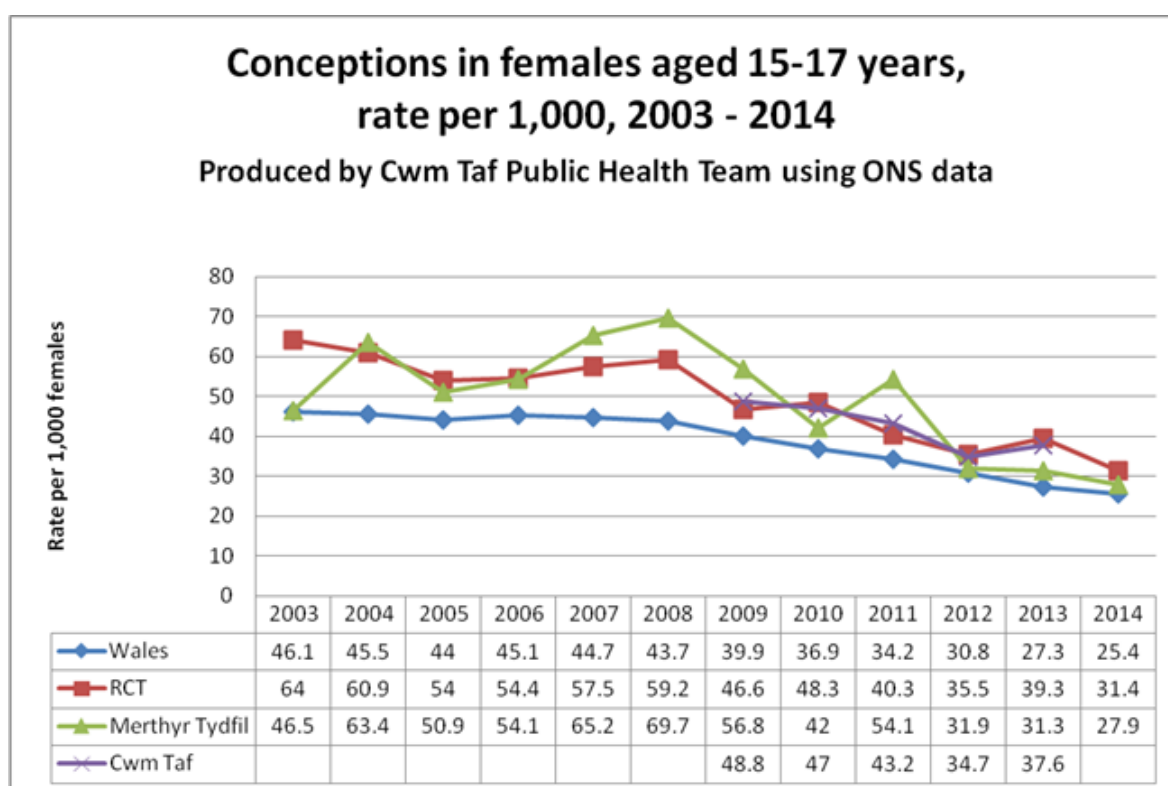
### **Where are we now?**

A Strategic Vision for Maternity Services in Wales (2011) set the direction for development of services in Wales and prioritised the importance of promoting health lifestyles for pregnant women and their families. This has helped facilitate closer working between public health and maternity

services in Cwm Taf and the development of a number of successful programmes which provide support for mothers to maintain healthy behaviours throughout pregnancy and beyond.

One of the key priorities for Cwm Taf Sexual Health Advisory Board has been to reduce rates of teenage pregnancy via a multiagency action plan. The trend in teenage conception rates in Cwm Taf has largely declined since 2008 and the rates from 2014 were the lowest recorded in both Rhondda Cynon Taff and Merthyr Tydfil. However, Cwm Taf continues to have the highest rate of teenage conceptions in Wales and is consistently above the Welsh average, which highlights the need to continue this work.

**Figure 23**



## Examples of good practice locally

### Models for Access to Maternal Smoking Cessation Support (MAMSS)

In 2013, a research study commenced in Cwm Taf to evaluate the effectiveness of delivering smoking cessation support from within maternity services via a trained Maternity Support Worker, with Midwife supervision. This service was implemented in line with NICE guidance (PH26). The results showed a huge improvement in the numbers of pregnant women accessing support to stop smoking

Evaluation has indicated pregnant smokers exposed to the MAMSS intervention were 10 times more likely to become a treated smoker compared to women treated with usual care, via Stop Smoking Wales Service (SSW) and 7 times more likely to quit smoking.

Women are referred automatically if their CO reading is 4 or above or if they disclose that they smoke. It is then the role of the maternity support worker to make contact, explain what is on offer from MAMSS in a non-judgemental and encouraging way and to arrange appointments.

Appointments are carried out on a one to one basis and at a place that is best for the woman; this is usually in their own home

743 women were referred to the service last year.

Feedback from users of the service has been very positive:



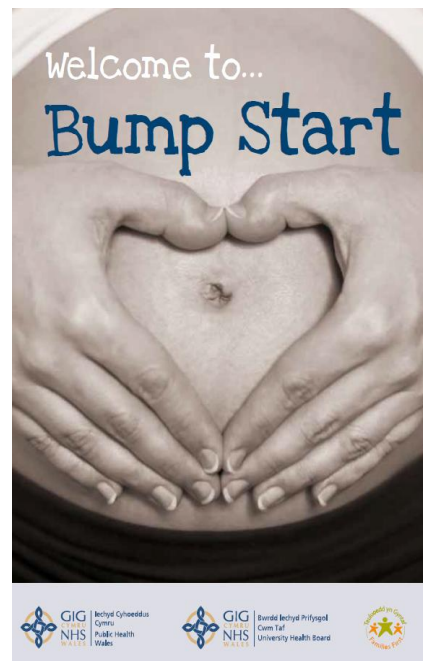
**“ I have tried to quit many times in the past-  
having such positive, impartial support has made  
the world of difference to me and my baby and  
the whole family”**

## BUMP START

Funded by Families in First Rhondda Cynon Taff and working in partnership with Cwm Taf UHB, 'Bump Start' is a specialised, antenatal service to help women with a BMI of 35 or over to monitor their weight during pregnancy and limit weight gain to healthy levels.

As part of their routine antenatal care, women are seen by the Healthy Lifestyle Midwife and Dietitian at 16, 24, and 36 weeks of their pregnancy. They are offered support, dietary advice and a programme to support behaviour change.

Women who have gone through Bump Start have told us...



## Moving Forward Further Opportunities to make a difference

### How we can do this?

Ensure all pregnant women have access to consistent advice and services to support them to stop smoking and drinking alcohol, maintain a healthy weight, be active

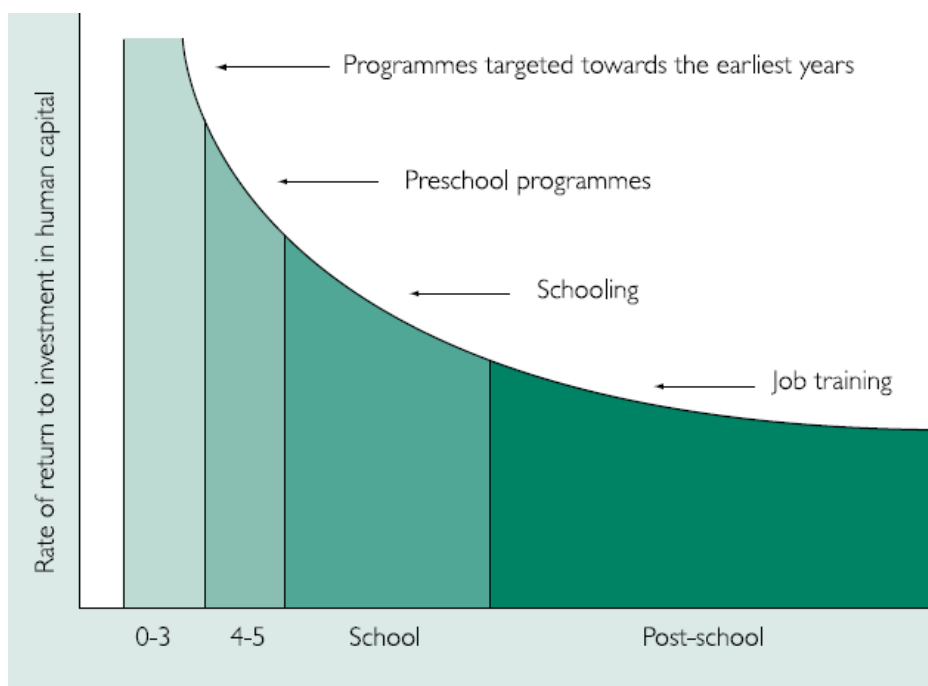


## 4.2 Early Years

Following on from pregnancy, a child's life up to age two significantly influences the outcomes throughout their life course.

Earlier interventions produce better outcomes and are cost effective in the long term, as shown in the following graph.(13)

**Figure 24: Rate of return on investment in early years**



Adapted from Heckman and Tremblay (2006)

We know that there are a number of health behaviours that if supported during early years will have long term positive outcomes. These include:

- **Breastfeeding**

Breastfeeding gives babies protection from disease and infections, and breastfed babies are less likely to develop asthma, eczema and diabetes. Mothers who breastfeed have a lower risk of breast or ovarian cancer and are more likely to achieve a healthy weight after giving birth. There is an inverse association between breastfeeding and socio-economic status. Low maternal age, low educational attainment and low socioeconomic position all have a strong impact on patterns of infant feeding. If babies were breastfed exclusively for the first six months, the health inequalities experienced by mothers and children in low-income families would be reduced.

- **Healthy Weaning and early diet**

During the first year, a baby grows more quickly than at any other time in his or her life. Research shows babies can get all the nutrients they need from breast milk or infant formula until they are around six months old. Waiting till then gives their digestive system time to develop fully so it can cope with solid foods. It is vital that weaning follows a healthy balanced diet. In addition, the UK Health Department recommends that all babies aged six months onwards should be given a supplement containing vitamins A, C and D, unless they are drinking 500ml (about a pint) of infant formula a day.

- **Immunisation**

Immunisation is a proven tool for controlling and eliminating life-threatening infectious diseases and is one of the most cost-effective health interventions.

Childhood immunisation rates in Cwm Taf are overall the best in Wales. This has been achieved through close partnership working between the Immunisation Co-ordinator, Primary and Secondary Care staff, including Health Visitors and School Health Nurses and by taking evidence-based approach to target interventions to improve uptake.

- **A smoke free environment**

Children who live with smokers and are exposed to second hand smoke are more likely to develop serious lung and ear infections, asthma, coughs and colds.

- **A stable, nurturing environment – Minimising Adverse Childhood Experiences (ACEs)**

Parenting is obviously a major factor in a child's development and health. There is a growing body of evidence to show that children who are exposed to Adverse Childhood Experiences such as neglect, violence or are exposed to substance misuse have higher risks of premature ill health and developing unhealthy lifestyles.

Findings from the first Welsh Ace Survey identified that 47% of the population reported having experienced at least one ACE, and 14% experienced four or more ACEs. As the number of ACEs increases, so does the risk of harmful outcomes.



**Compared to individuals with no ACEs, those with 4+ ACEs are:**

- **4 times more likely to be a high risk drinker**
- **6 times more likely to smoke**

### **Where are we now?**

A number of different programmes and services are now in place in Cwm Taf to support our most vulnerable families:

**Families First.** Since 2010, Cwm Taf has been one of the pioneer areas for this programme, which aims to support the whole family by making sure that different services and teams work well together.

**Flying Start** is a programme for families with children who are 0 - 3 years of age. It includes free childcare, parenting support, intensive health visitor support and support for early literacy.

The **Communities First** programme exists to provide local people with opportunities to play an active role in shaping the future of their community and engage mainstream services. There is a wide range of work being undertaken targeted at supporting the most disadvantaged families and children.

The **Integrated Family Support Service (IFSS)** is the Welsh Government policy to support vulnerable families with complex needs. It provides intensive targeted family support where there is some level of risk or welfare concern for the child.

'**Team Around the Family**' models are being developed so that vulnerable families are identified early and their needs are assessed holistically. Partners work proactively at a local level to support families with additional needs to become resilient and independent.

**Healthy Pre-Schools Scheme.** The scheme provides a structured framework for pre-school settings and their communities to ensure that the youngest members of our community have a very healthy start in life that in turn will bring lifelong benefits.

**Community 'Nutrition Skills for Life' Team** As part of this programme training and ongoing support is delivered locally by Public Health Dieticians to a range of early years settings.

A key priority for our public health team has been to work with all these initiatives to embed prevention and the importance of healthy lifestyles into their work with families.

Additional resource has been directed towards some of the key lifestyle issues. As part of the work to tackle childhood obesity a multiagency steering group has been set up to develop a pathway for children, young people and their families to access appropriate support.

Work has been undertaken via community partners and via our local Community Health Network to take initiatives such as Smoke free homes to our most deprived communities.

## **Examples of best practice locally**

### **Breast feeding Campaign**

Mothers in Cwm Taf have the lowest uptake of breastfeeding compared with other health boards in Wales. Latest figures show that only 22.5% of babies in Cwm Taf are exclusively breastfed at 10 days after birth.

A variety of initiatives have been undertaken to improve rates of breast feeding from peer support initiatives to a local social marketing campaign: Merthyr babies: The Best Start.



This campaign resulted in the call for a localised leaflet which was developed with local midwives, health visitors and mothers. It is currently being evaluated prior to wider distribution.

### **Cwm Taf Healthy and Sustainable Pre-School Scheme**

The Healthy and Sustainable Pre-School Scheme has successfully been rolled out across Cwm Taf since January 2012. The Scheme is an extension of the well established Healthy Schools Scheme, and is managed locally by Cwm Taf Public Health Team. Its aim is to improve the health behaviours of children, through developing and implementing a range of health promotion and health protection activities for all members of the early years setting. To date, 76 Early Years settings are actively participating on the programme. A phased approach is taken to address each of the health topics which are; Nutrition and Oral Health, Physical Activity and Active Play, Mental and Emotional Health, Wellbeing and

Relationships, Environment , Safety, Hygiene, and Workplace Health and Wellbeing.

The Healthy and Sustainable Pre-School Scheme (HSPSS) supports the development of learning environments which actively promote and embed physical, mental and social health and well-being, working in the most deprived areas of the community. We expect children to make healthier choices as a result of this programme.

Three Early Years settings have successfully completed the Scheme and are about to embark on the re-accreditation process. The settings have shown outstanding commitment to the health and wellbeing of the whole setting community.



### Ten Healthy Steps

Public Health Wales has developed a 10 step approach to preventing childhood obesity, advocating the need for action at each step to ensure that future generations grow up to be a healthy weight.

Locally work is underway to incorporate this approach into the childhood obesity work.



## Moving Forward Further Opportunities to make a difference

### How we can do this?

Embedding policy and practice to promote healthier lifestyles into all childcare, early education and family support settings

Utilising our network of community based networks to ensure clear consistent messages are promoted to the public

Recognition of, early intervention and action to minimise the effects of Adverse Childhood Experiences (ACEs)

Training staff to increase knowledge and skills to embed prevention into their daily practice



## 4.3 School Years

School years are often the time when behaviours whether healthy or unhealthy are embedded. As children become older new challenges emerge as they become exposed to far wider influences and situations, including the temptation to try 'risky behaviours' such as smoking and drinking alcohol.

It is predicted that 60% of children who are overweight before puberty will be overweight in early adulthood. This can lead to the development of 'adult diseases' from an early age, and if obesity continues into adulthood, the risk of further health consequences. In addition, the children and young people today will be the parents of tomorrow; parental and in particular maternal influence, further adds to the risk of a child becoming overweight or obese. This can develop into an inter-generational cycle with obesity amongst the adult population continuing into future generations.

### **Where are we now?**

A great deal of work has been undertaken in recent years to engage schools, education settings and youth provision, where children and young people spend a large proportion of their time, to invest in the health of our next generations. One of the most prominent programmes of work has been the Cwm Taf Healthy Schools Scheme whose membership includes all 157 schools in the area.

Local partners in leisure services have developed their programmes for children and young people to provide a wide range of activities to support increased engagement and developing key working relationships with education.

## Examples of good practice locally

### Cwm Taf Healthy Schools Scheme

The Welsh Network of Healthy School Scheme (WNHSS) is a partnership between health and education, with a network in each of the 22 local authority areas in Wales. It covers nursery, primary, secondary and special schools.

A healthy school is one in which there is a whole school approach in thinking about health. This includes not only what is taught in the classroom, but also the whole school environment and ethos.

**All** of the 157 schools in Rhondda, Cynon Taff and Merthyr Tydfil are enrolled on the WNHSS. Seven health topics are addressed during a school's involvement on the Scheme and include: *Food and Fitness; Mental and Emotional Health and Wellbeing; Substance Use and Misuse; Personal Development and Relationships; the Environment; Hygiene and; Safety*. Membership of the scheme culminates in achievement of the WG National Quality Award, when upon all seven health topics are addressed from a whole school approach, and verified by National assessors. In Cwm Taf, schools who are awarded the NQA are invited to join a Professional Learning Community to maintain and disseminate good practice.



**JustB SmokeFree** is a school based smoking prevention programme for Year 8 (12-13 year olds) students to enable them to discuss the risks of smoking and the benefits of being smoke free.

The programme which is lead by Public Health Wales is engaged with 11 schools in Cwm Taf targeted in areas with higher smoking prevalence. For more info

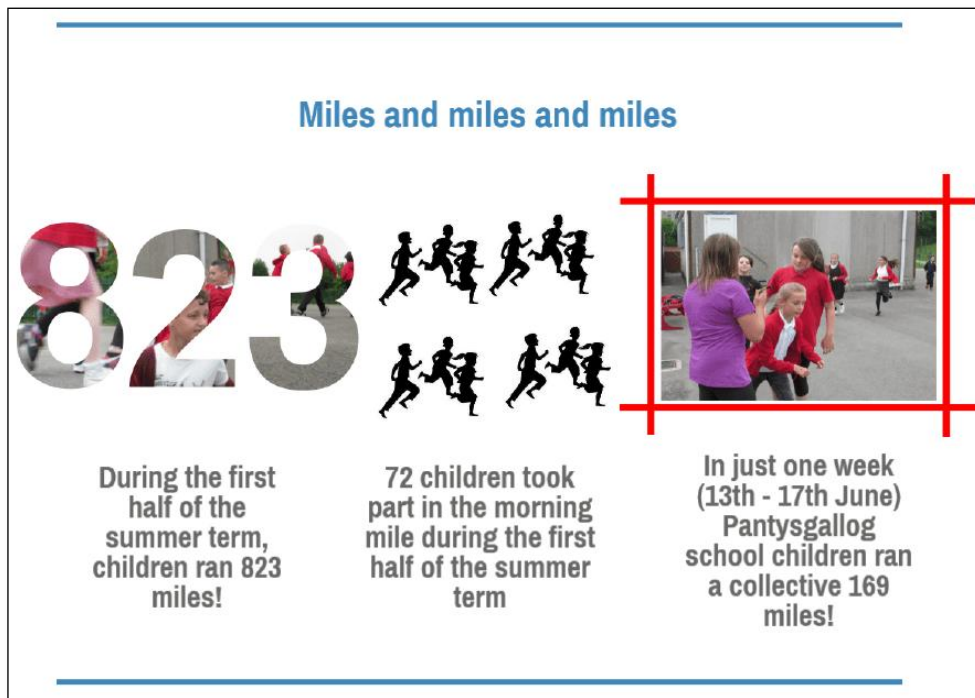
<http://www.wales.nhs.uk/sitesplus/888/page/85145>





## 'The Morning Mile' School Project

Teachers at Pantysgallog Primary School were inspired to increase pupil participation in physical activity following the pride of Britain awards 2015. Each school morning, in most weather conditions, the pupils take part in the morning mile. The run takes place during breakfast club, but can easily be fitted in at other times within the school day.



### Feedback from teachers and pupils is positive:-

***"I like the morning mile because it gets me pumped up and energetic. It helps me concentrate on my work". Year 4 Pupil***

*"The morning mile was really hard at first but it's got easier and now I can do it no problem. It's really good fun."* Year 6 pupil

***"The morning mile has had a massive improvement on behaviour and children are more engaged"* Head teacher**

*"I'd recommend any school to give it a go. You will find children who are disengaged improve their punctuality and concentration."* Year 3/4 teacher

# Moving Forward

## Further Opportunities to make a difference

### How we can do this?

Embedding policy and practice to promote healthier lifestyles in all education and youth settings

Support all schools to work towards the National Healthy Schools Scheme Quality Award

Continue to develop productive working relationships between health and education

Recognition of, early intervention and action to minimise the effects of Adverse Childhood experiences





## 4.4 Adults and Older People

As individuals progress through adulthood, lifestyle and behaviour choices are increasingly important factors in influencing health status and reducing the risk factors for chronic disease. There is also the responsibility for influencing the next generations, as individuals raise their own families.

### **Where are we now?**

Driven by national and local strategic partnerships and plans, a multitude of statutory and community partners have undertaken a range of work in recent years to reduce the levels of deprivation and inequality within Cwm Taf. A range of initiatives have been undertaken to help increase employment, educational attainment, reduce poverty and improve our local environment and housing stock. These will all indirectly affect our lifestyles in Cwm Taf.

Many organisations and employers have begun to take responsibility for change and embraced initiatives to improve the health and wellbeing of their staff and clients.

Healthy behaviours are so important to our population's health that a number of behaviour specific working groups with associated plans have been developed. 'Smoke free Cwm Taf' and 'Healthy Weight Healthy Valleys' have both promoted a multi faceted, multiagency approach.

'The Together for Health' chronic condition plans have recognised the importance of primary and secondary prevention in tackling disease and all plans contain a prevention and early identification section that help embed prevention into many aspects of healthcare.

The work underway to increase screening uptake in Cwm Taf also provides the opportunity for promoting healthier lifestyles. Screening is a process of identifying apparently healthy people who may be at increased risk of a disease or condition. They can then be offered information, further tests and appropriate treatment to reduce their risk and/or complications arising from the disease or condition.

The Screening Division's Annual Report for the Director of Public Health (2015) highlights the inequalities in screening uptake across Cwm Taf, with participation for all of the adult screening programmes decreasing with increasing deprivation (except Abdominal Aortic Aneurysm). Tackling inequities is a key priority for Screening. These unfair differences are

being addressed at both strategic and operational level, working with partners and service users.

Although the emphasis of this report is on primary prevention and working 'upstream', identification and management of risk factors for individuals with potential and established disease is vital.

There are many opportunities within individual's interactions with health and wider services that can act as a teachable moment. The examples of practice described in this section span across primary and secondary prevention aiming to open up as many opportunities as possible to engage with individuals about their lifestyles.

## **Examples of good practice locally**

### **The Joint Care Programme**

Osteoarthritis is a condition that causes joints to become painful and stiff. Being overweight or obese is a key risk factor for knee and hip osteoarthritis and can make symptoms worse. The Joint Care Programme (JCP) is a 16 week, community based programme targeted at patients who are obese and have chronic knee and/or hip pain. The programme supports them to lose weight, and increase activity levels as well as improving their overall health and well being.

#### **Case Study**

John joined the programme at Rhondda Sports Centre in June 2015. Although slightly dubious, John believed he had 'nothing to lose' from attending the first few sessions which included some light exercise, healthy eating advice, practical cookery skills and goal setting.

John continued to attend the weekly sessions which he says were "so much fun" and "nothing like I expected". Incredibly, at the end of the 16 week course John had lost a total of 3 stones, reduced his cholesterol and was in better control of his diabetes.

Following on from the JCP John continued with the National Exercise Referral Scheme and lost another 2 stones in weight.



## Drink Wise, Age Well

Drink Wise, Age Well is a major new, multi component programme of work which aims to address the challenges of alcohol-related harm in older adults.

The programme which is funded by Big Lottery and involves a number of third sector partners has both a delivery and research arm. Cwm Taf is one of 5 demonstration sites across the UK.

A locality manager and team of 17 staff work across Cwm Taf delivering a range of services related to four key work streams:

- Prevention and Campaigning
- Training and Education
- Building Resilience
- Direct Engagement and Support



Since commencement in June 2015, the team has engaged with over 2,000 individuals via a variety of community events. Five local media campaigns have also been undertaken.

277 individuals have been referred for direct ongoing support. The programme also offers befriending services to individuals at danger of isolation, which is supported by local volunteers.

As part of the research element a large scale survey led by the University of Bedfordshire, with over 16,000 respondents has been undertaken to explore the drinking behaviours of over 50's. The resulting report is available on the programme website [www.drinkwiseagewell.org.uk](http://www.drinkwiseagewell.org.uk)



## Making Every Contact Count

Making Every Contact Count (MECC) is an approach that recognises staff across health, local authority and voluntary sectors have thousands of contacts every day with individuals from the resident population. All are in an ideal position to promote health and healthy lifestyles. It aims to empower staff working in health services to recognise the role they have in preventing illness and supporting behaviour change. This recognition should extend not only to their interaction with clients/patients, but also to their own health and wellbeing and that of their friends, families and colleagues. This will allow us to move to a position where discussion of lifestyle and wellbeing is routine, non-judgemental and an integral part of everyone's professional and social responsibility.

### MECC in Cwm Taf

Within Cwm Taf the local public health team are delivering a level 2 programme providing staff with the language and communication skills to raise the issue of healthy lifestyles as well as making staff aware of the many local services we have in Cwm Taf to support patients to make positive changes. Over the year we have trained staff groups including Macmillan nurses, podiatry, health check staff, the Cynon primary care cluster, staff within stroke services and a variety of community project staff.



Staff are provided with a signposting booklet specific to their role and locality within Cwm Taf. This one stop guide ensures they can always have the information to make an appropriate referral to those who are ready to change.

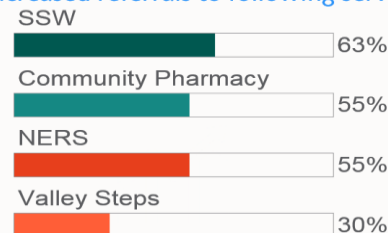
### Does MECC make a difference in practice?<sup>3</sup>

#### 8 week follow up feedback:

Percentage of respondents who have felt more confident to raise the issue in practice (by behaviour)



Percentage of staff reporting to have increased referrals to following services:



Additional outcomes include: set up and use of e-referral with staff groups, changes to paperwork to trigger BI, positive use of the booklet as a one stop shop for signposting.

<sup>3</sup> BI- Brief Intervention involves a structured, opportunistic discussion during which the practitioner offers information, advice and encouragement to help engage and motivate the individual to consider behaviour change

In addition to reporting an increase in raising the issue with patients and making more referrals, staff felt more knowledgeable, confident and informed to have the conversation to improve behaviours of their patients.

## Inverse Care Law Cardiovascular Risk Programme



The Cwm Taf UHB CVD Risk Reduction Programme aims to improve the health and wellbeing of adults aged 40-74 years through promoting and improving the early identification and management of the individual behavioural and physiological risk factors for vascular disease and other conditions associated with these risk factors. The programme forms part of the Cwm Taf University Health Board's 'Inverse Care Law' Programme approach in primary care which seeks to address the mismatch between need and access to services identified by Professor Julian Tudor Hart<sup>1</sup>

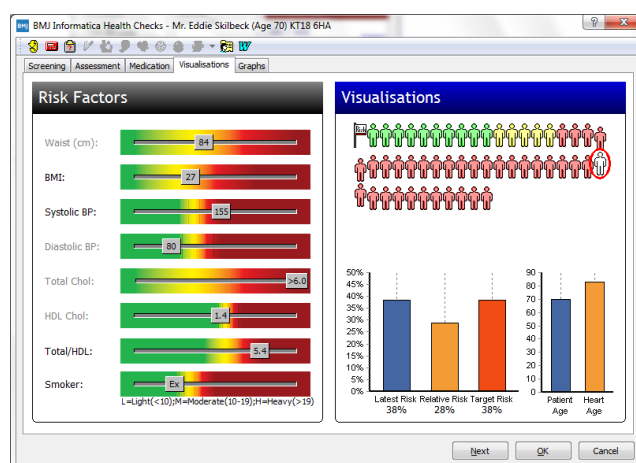
***“The availability of good medical care tends to vary inversely with the need for it in the population served.”***

*Inverse Care Law, Julian Tudor Hart, Lancet 1971*



Patient assessments are undertaken by trained Health Care Support Workers (HCSWs) using the menu driven IT package. Appointments include measuring blood pressure, pulse, height and weight, blood testing, patient history and assessment of lifestyle factors. Based on this information a revised “heart age” and risk of developing CVD over the next 10 years was calculated and explained to the patient.

**Figure 25- Visualisation tools to show the patient their CVD risk**



Using brief intervention techniques, patients are encouraged to look at potential lifestyle changes to reduce risk provided with personalised information regarding their risk and where appropriate, referred to other services for ongoing support. Patients with abnormal results are referred back into the normal practice system for further clinical assessment and management.

## Stop Smoking Champions

We now have **104** smoking cessation champions across most wards and departments within Cwm Taf. Champions are recruited to promote smoking cessation support services. All champions have received training to increase their skills, knowledge and confidence in implementing the smoking cessation bundle and providing smoking cessation advice. More training is being planned for autumn 2016 for the new champion 'recruits' and also all healthcare frontline staff.

The smoking champions work is part of a wider programme to encourage uptake of smoking cessation support locally.

Around 15% of smokers that quit using NHS support have still successfully quit at one year, compared to around 4% who quit without behavioural or pharmacological support, such as nicotine replacement products. Support is available via Stop Smoking Wales and our Community Pharmacy Support Programme within 49 of our pharmacies.

**2,132 smokers used smoking cessation services in Cwm Taf last year**





## Moving Forward

### Further Opportunities to make a difference

#### How we can do this?

Embedding policy and practice to promote healthier lifestyles into all public sector organisations, workplace and community settings

Providing targeted communication at all levels to commissioners, public services, employers, educational settings and the public

Training staff across the public sector and wider to increase knowledge and skills to embed prevention into their daily practice



## **A crucial link throughout....**

### **Mental Health and Well being**

Although this report focuses on increasing the five healthy lifestyle behaviours within our population, it is vital that we appreciate the importance of good mental health and wellbeing in achieving this goal as the thread that needs to run through all our work.

Mental health is associated with increased risk of unhealthy behaviours, poorer physical health and lower educational attainment and employment prospects.

Inequality is a key determinant of mental ill health and mental ill health can increase inequalities. Early life experiences such as abuse, neglect or unstable family environments can have considerable long term effects on mental health and well being. The recent Public Health Wales study of Adverse Childhood Experiences (ACEs) indicates that the number of adults living with low mental well being in Wales could be reduced by more than a quarter (27%) if no individuals in Wales were exposed to harmful experiences in childhood.

The Welsh Health Survey (2014) reported that 15% of adults in Cwm Taf were being treated for any form of mental illness, compared to the Welsh Average of 12%.

As well as the ongoing development of mental health services to support this population, work has been undertaken to improve the provision of early support and prevention through a variety of community based initiatives, such as Valley's Steps and the programme of Mindfulness and stress control self help courses.



### Achieving 'one more healthy behaviour' How can we help make this happen?

In order to achieve continued improvement in our population's health, there needs to be a considerable shift in policy and practice across all our local organisations, with an ongoing commitment towards a more preventative approach.

There is a growing body of evidence to indicate what interventions are effective and just as importantly in the current climate 'good value for money'. A summary taken from the recent review by Public Health Wales indicates the type of interventions that have been identified as producing a return on investment.<sup>(14)</sup> Some need intervention at a Government level, but others can be incorporated into the practice of local organisations.

**Figure 26**

<b>Behaviour</b>	<b>Interventions include:</b>
Reducing smoking prevalence	There are a range of cost effective interventions to reduce smoking ranging from advertising bans, taxation and enforcing smoke free environments to offering support and counselling to smokers to stop.
Maintaining a healthy Weight	Effective approaches include use of restrictive policy and taxation on unhealthy foods, restrictions on marketing campaigns, aimed at children for unhealthy food and drinks, education campaigns around healthy diet, promoting healthy eating in education settings and work places.  Providing counselling and access to behaviour change initiatives particularly via primary care is an important aspect.
Eating a healthy diet	Effective approaches are very similar to those to maintaining a healthy weight with added emphasis on access and availability of choices.
Taking regular exercise	There are a range of interventions shown to increase activity levels including media

	<p>campaigns, active travel strategies and various initiatives to promote physical activity in education settings, workplaces and wider communities.</p> <p>Providing tailored advice in primary care together with the option of referring to supported exercise programmes such as the National exercise referral scheme (NERS) can prompt change.</p>
Reducing alcohol misuse	<p>A combination of restricting access through effective licensing, advertising bans and raising taxation with a minimum unit price per unit are all effective interventions if fully enforced.</p> <p>Brief, motivational interviewing techniques used by health professionals to raise the issue of alcohol and encourage the patient to modify their intake if appropriate, signposting to support if needed have found to be cost effective.</p>

More information can be found at:

[http://www.wales.nhs.uk/sitesplus/documents/888/Making%20A%20Difference Evidence%28E web%29.pdf](http://www.wales.nhs.uk/sitesplus/documents/888/Making%20A%20Difference%20Evidence%28E%20web%29.pdf)

## **Approaches to Behaviour Change**

There are many theories of and approaches to behaviour change.

NICE guidance (PH49) makes recommendations on individual-level interventions aimed at changing health-damaging behaviours.

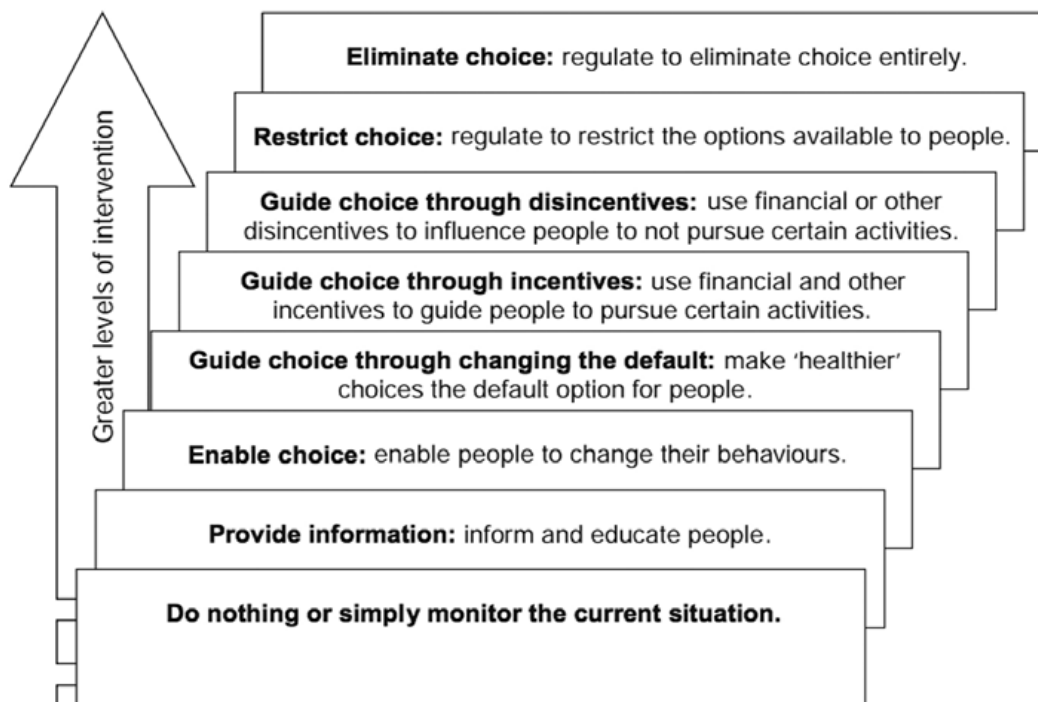
Available via: <https://www.nice.org.uk/guidance/ph49>

One approach that has gained popularity in recent years is the 'Nudge theory'. This approach recognises that there are a variety of ways that behaviour can be influenced from legalisation-restricting behaviour to encouraging and incentivising people, through to subtly guiding choice in a certain direction. This would include making an environment less conducive for someone to make an unhealthy choice. This can be as simple as making salad a default option as a side instead of chips.

Promoting social norms can encourage people to change behaviour because they want to be alike.

The Nuffield Council on Bioethics 'ladder of intervention' illustrates the range of interventions that can be applied to support behaviour change.

**Figure 27 - Nuffield Council - Ladder of Intervention**



Other terms have started to be used to describe interventions other than nudges. Techniques like direct incentives, such as vouchers in return for healthy behaviour, are being labelled hugs, while the tougher measures that restrict choice, like restricting takeaways from schools are shoves. Bans such as the restriction on smoking in public places are described as smacks. More information is available at:

<http://www.local.gov.uk/documents/10180/11463/Changing+behaviours+in+public+health+-+to+nudge+or+to+shove/5ae3b9c8-e476-495b-89b4-401d70e1e2aa>

Although only one approach, this can be a useful tool for organisations when looking at what they can reasonably do to support their clients, patients, students or workforce to adopt healthier choices.

A variety of practical examples include:-

- Promotion of active travel-walking and cycling.
- Looking at food provision across the organisation's reach: canteens, cafes, vending, restaurants, and buffets – primacy of healthy vs. unhealthy choices.
- Flexible working where possible to allow time for staff to access smoking cessation support, leisure activities etc.
- Promotion of fruit and vegetable intake – allotments, patio schemes, food co-ops etc.
- Smoke free environment policies.
- Preventative approach to run through the practice of Human Resource and Occupational Health departments.

## Chapter 6

### Strategic Context and Principles for taking this approach forward

Current Welsh policy is very supportive of enabling an effective preventive approach across all sectors.

The Single Integrated Plans at local authority level, began to prioritise prevention and early intervention and acknowledge the challenges faced due to inequalities. This approach will be further developed from April 2017 when local policy and planning will be determined by the Wellbeing of Future Generations Act. This act requires public bodies in Wales to take a joined up approach and work better with people and communities to achieve seven wellbeing goals. More information is available at:

<http://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en>

#### Figure 28

Cwm Taf has established a single Public Service Board across its two local authority areas to drive this act forward.



Other legalisation such as the Social Services and Wellbeing (Wales) Act 2016 and the Active Travel (Wales) Act 2013 contribute to this agenda.

Also key to taking this work forward are the 5 Sustainable Development Principles which need to be embedded into our Public Service Practice nationally and locally:

#### 1. Focus on Prevention

Invest in preventative interventions that are evidence based and cost effective

#### 2. Adopt a long term view

The benefits of preventative work can take time to show fully. A long term approach is needed to policy development and investment to improve the health of our population

#### 3. Integration

Utilise Health Impact Assessment across Welsh Government, Local Government and the public sector in order to consider the impact of any decision and intervention on health, well-being and inequalities.

#### 4. Collaboration and 'Systems working'

Working in partnership and synergy across all sectors

## 5. Involvement and Co-production

Ensuring the public are fully involved in decisions that affect their health and well-being and the services they receive.

*(Adapted from Making a Difference- Investing in Sustainable Health and Well being for the People of Wales, PHW 2016).*

Complementing these are 4 Key principles of Prudent Health Care outlined in figure 29 below, which need to be considered in all our health service planning.

**Figure 29- Principles of Prudent Healthcare**



Running alongside this is the need to move towards a more 'assets based' approach. Whereas the traditional 'deficit' approach identifies problem, needs and deficiencies, an assets based approach identifies the psychological, physical and social resources that individuals and communities have to help them find solutions to their problems.

A health asset has been defined as: '*any factor or resource which enhances the ability of individuals, communities and populations to maintain and sustain health and wellbeing*'.

Lastly, our focus needs to include a population wide approach, but one which ensures our most vulnerable and disadvantaged individuals are included. A key message from the Marmot Review, Fair Society- Healthy lives (2010) is particularly applicable to our population:

*'Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this **proportionate universalism**.*'

For further information the full report is available at:

<https://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review>

## Chapter 7

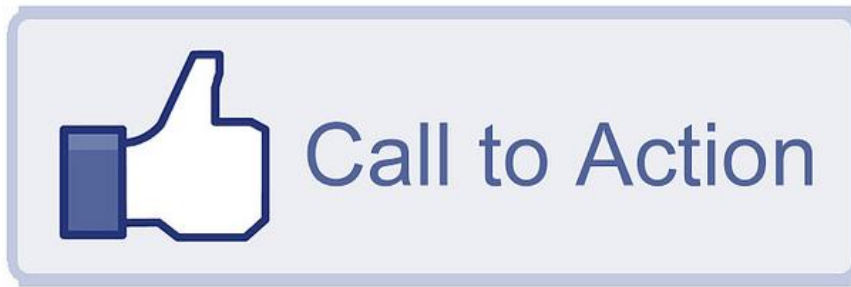
### Conclusions

Lifestyle choices have a huge impact on our population's health and well being. The burden of disease driven by unhealthy behaviours creates a huge impact on individuals and their families, as well as the NHS and wider services.

Despite the fact that we currently have more information about healthy lifestyles available instantly at our fingertips than ever before, there is often inconsistency of clear messages, a lack of identification with the recommendations made and too many perceived barriers to change in place.

To help change our lifestyle profile in Cwm Taf we need to continue and increase our wide ranging work to reduce inequalities, but on an individual basis we need to ensure that our population has clear messages relevant to their circumstances and a commitment from a wide range of partners to help facilitate these changes and develop supportive environments. Statutory, voluntary and community partners, employers and education settings all have a role to play.

If every organisation within the Cwm Taf area could pledge to make one change to their practice or policy to encourage and support their clients, patients, employees or students to make a lifestyle change and take up 'one more healthy behaviour', then the cumulative effect would be considerable.



## **Achieving 'one more healthy behaviour' How can we help make this happen in practice?**

### **❖ Raise the Profile**

- **Develop a localised, multi media campaign to promote 'One more Healthy Behaviour' for the Cwm Taf population including elements of social media and making full use of existing networks and partnerships.**
- **Develop targeted messages for vulnerable groups and challenge social norms regarding unhealthy behaviour.**
- **Support current annual campaigns such as No Smoking Day or Dry January.**

### **❖ Gain commitment from public sector organisations to support the prevention agenda by the following:**

- **Ensure all plans and policies are developed including a health impact assessment even when health isn't the primary objective.**
- **Consider prevention in all planning applications.**
- **Give a commitment to adequate funding for preventive work within their commissioning plans.** Despite unhealthy lifestyles being accountable for over 50% of chronic disease in Wales the NHS budget for prevention is less than 5% of the total.
- **Commit to 'Making Every Contact Count' training for all client facing staff using a 'train the trainer' approach to increase capacity.**
- **Work with partners to utilise all opportunities to raise the issue of healthy behaviours with their staff and clients, provide easily accessible information about support services and ensure effective referral pathways are in place.**

- **Work with partners to utilise all opportunities to raise the issue of healthy behaviours with their clients, provide easily accessible information about support services and ensure effective referral pathways are in place.**
- **Support preschools, nurseries, schools and Further Education settings to engage with and progress through the National Healthy School and Preschool Schemes.**

#### **❖ Engage wider organisations**

- **Although public sector organisations could be seen as the expected leaders for this work, all organisations and workplaces have a potential role to play even if initiatives need to be scaled to suit the size and business of the organisation.**



## Chapter 8

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Links to key documents and web resources have been included throughout the body of the report and in the reference section. If any further information is required regarding any sources used please contact the Public Health Team on 01685 351440 or email [diane.gibbons@wales.nhs.uk](mailto:diane.gibbons@wales.nhs.uk)